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ABSTRACT

This summary deals with the major results elicited from six reports concerning two research projects entitled "Non-Subject-Specific Goals for University Education" and "Student Democracy--Co-Planning at Different Educational Levels." The reports include the following: (a) "Debate Analyses as Goal-Seeking Instruments," (b) "Attitudes towards School Democracy among School Leaders: An Explorative Study," (c) "Cooperation between Teachers and Student Teachers in Teacher Training: Some Data on Opinions," (d) "Opinions on Cooperation within the Teacher Training Sector: A Study of the Development During a Few Terms," (e) "The Attitude of Student Teachers to Their Training Situation: A Study of the Development of Attitudes During the First Term," and (f) "The Relation between Attitudes towards School Democracy and Certain Personality Characteristics." The summary contains seven sections which include the following: background; equality and democracy as educational goals; the emotive and descriptive meaning of the concept of school democracy; democracy in teacher training; some studies of opinions; development of attitudes in questions concerning teacher training during the first term; relations between attitudes towards school democracy and certain personality characteristics; and final comments. The original report(s) on which each section is based is stated at the beginning of the section. (Author/JS)

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STUDIA PSYCHOLOGICA ET PAEDAGOGICA
SERIES ALTERA XXIII

PEKKA IDMAN

Equality and Democracy
Studies of Teacher Training

U.S. DEPARTMENT OF HEALTH,
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Malmö, April 1974.

Pekka Idman

Introduction

The present summary takes up some of the main results from six separate reports from two research projects, "Non-subject-specific goals for university education" and "Student democracy — co-planning at different educational levels". The six reports are the following:

1. Idman, P. Debattanalyser som målsökningsinstrument /Debate analyses as goal-seeking instruments./ *Pedagogisk-psykologiska problem* (Malmö School of Education), No. 235, 1974.
2. Idman, P. Inställning till skoldemokrati bland skolledare: En explorativ studie. /Attitudes towards school democracy among school leaders: An explorative study./ *Pedagogisk-psykologiska problem* (Malmö: School of Education), No. 120, 1970, Rev. ed.
3. Idman, P. Samverkan mellan lärare och lärarkandidater i lärarutbildningen: Några opinionsdata. /Cooperation between teachers and student teachers in teacher training: Some data on opinions./ *Pedagogisk-psykologiska problem* (Malmö: School of Education), No. 132, 1971, Rev. ed.
4. Idman, P. Samverkansopinioner ifrån lärarutbildningen. En studie av opinionsutvecklingen under några terminer. /Opinions on cooperation within the teacher training sector: A study of the development during a few terms./ *Pedagogisk-psykologiska problem* (Malmö: School of Education), No. 180, 1972, Rev. ed.
5. Idman, P., Björk, K. & Streimer, I. Lärarkandidaters inställning till sin utbildnings-situation: En studie av attitydutvecklingen under den första terminen. /The attitude of student teachers to their training situation: A study of the development of attitudes during the first term./ *Pedagogisk-psykologiska problem* (Malmö: School of Education), No. 182, 1972, Rev. ed.
6. Idman, P. Relationer mellan attityder till skoldemokrati och vissa personlighets-karakteristika. /The relation between attitudes towards school democracy and certain personality characteristics./ *Pedagogisk-psykologiska problem* (Malmö: School of Education), No. 181, 1972, Rev. ed.
(The tests used in the study presented in report 6 have been collected in a test appendix:
Idman, P. Skoldemokratiattityder och personlighetsdrag: Ett testbatteri. /Attitudes towards school democracy and personality traits: A test battery./ *Testkonstruktion och testdata*, No. 16, 1973.)

The summary has been structured in the following way:

- (1) Background
 - (a) Efforts for democratization during recent years: A short history
 - (b) Democratic forms of work and attitudes: A selective survey of research
 - (c) Goals for higher education
- (2) Equality and democracy as educational goals
- (3) The emotive and descriptive meaning of the concept of school democracy

- (4) Democracy in teacher training: Some studies of opinions
- (5) Development of attitudes in questions concerning teacher training during the first term
- (6) Relations between attitudes towards school democracy and certain personality characteristics
- (7) Final comments

The original report(s) on which each major section is based is stated at the beginning of the section in question.

Some of the major problems studied in the project, "Student democracy — co-planning at different educational levels," are outlined by Bjerstedt (1968). Two essential questions concerning democracy in teacher training that were studied were the following:

- (1) How do the parties concerned react — cognitively and emotionally — to existing regulations and the actual present-day situation? To what extent are people aware of (have a correct cognitive image of) current norms and the actual situation? To what extent are they satisfied or dissatisfied with existing regulations and the present-day situation?
- (2) Are there any manifest relations, which are of importance for an understanding of the social-psychological dynamics, between actual patterns of interaction, opinions and attitudes on the one hand and certain personality characteristics of the student teachers on the other?

The empirical studies on which the present summary is based were conducted during the years 1969—72.

Section 3 deals with a group of school leaders' interpretation of the concept "school democracy", and the distinction between an emotive and a descriptive meaning of this concept is discussed here.

In section 4 an account is given of opinion studies concerning cooperation in teacher training. The main study was carried out in 1969. In 1970 and 1971 follow-up studies were conducted, for the purpose of getting some idea of the "stability" of the opinions.

Section 5 discusses a special study, which aims at exploring whether negative attitudes develop during the very first term of the teacher training towards the training and student council activities.

The second question mentioned above is dealt with in section 6, in which an account is given of relations between attitudes towards school democracy and certain other personality characteristics.

The significance placed on "equality" and "democracy" by those debating goals in the Swedish daily press and journals during the years 1967—69 is discussed in section 2. This part-study is included in the project, "Non-subject-specific goals for university education", the purpose of which is to analyse non-subject-specific goals for university education — including existing opinions on the specification of sub-goals in order of priority and practicability (cf. Bjerstedt, 1970).

1. Background

1.1 Efforts for democratization during recent years: A short history

In the decades following the Second World War, there was a noticeable increase in the number of students participating in higher education in the West. At the same time, the Cold War was becoming less icy. Groups at the universities started to criticise their own social systems, with the result that the "unpolitical" nature of the universities began to fade (Tarschys & Tham, 1967, p. 7 ff.; Dahlström, 1969).

In the autumn of 1964, various political groups at the University of California, Berkeley, demanded the right to collect money and speak freely on the campus, which they were denied. The passive resistance with which the students reacted to this refusal led to police intervention. On one occasion, 590 sit-striking students were arrested within the boundaries of the university, which had previously been extra-territorial ground for the police. This was the first fumbling introduction to what later became known as the "student revolt" (Feuer, 1965, p. 436 ff.; Lorenz, 1968, p. 21 ff.). During May and June of 1968, it culminated in the French May revolt, but by the autumn of the same year, the rebellious students in Europe had split up and diminished in strength (Fleming & Aberg, 1970, p. 15).

One common feature of all the student movements in the different countries was the strong criticism of the United States war in Vietnam. The conflict there was seen not as a fight between "the communist system" and "the free world", but as a small country's struggle for independence. The students demonstrated their support for the oppressed peoples of the Third World and for their fight for worldwide democracy against imperialism and colonialism (Seale & McConville, 1968, p. 35; Bergman, Dutschke, Lefèvre & Rabehl, 1968, p. 24 ff.).

On the national level, much of the criticism was directed at what the students felt to be an adaptation of the university to the demands of business and industry. It was said that the critical role that the universities should have had was impossible to maintain when they were integrated into a society, the hallmarks of which were more and more coming to be bureaucratization and technocratization.

In Western Europe, the governments in the various countries were trying to deal with the increased numbers of students by reorganizing university education, wherewith terms such as "purposefulness", "rate of study" and

"compulsory termination of unsuccessful studies" were the passwords. France produced the Fouchet plan, Italy the Gui plan and Sweden UKAS, all of which led to sharp protests, so that in the end the first two were never materialized and UKAS was revised so thoroughly that some aspects of it were unrecognizable (Brandell, 1969).

Together with the criticism of the autonomy and centralized government of the universities, there was also criticism of their internal democracy. There was opposition to the hierarchical structure of the universities, to the "rule of the professors", and dissatisfaction was also expressed with the content of the teaching and the unbalanced social recruitment of university students. The right to participate in decision-making was demanded and unlimited freedom of political action (Jacobsson & Hildebrand, 1969).

The students were given ideological support by, among others, the German-American sociologist and historian, Herbert Marcuse and his theories on the "one-dimensional", "repressive" society, which manipulates its opinions with a mixture of violence and welfare (Jacobsson & Hildebrand, 1969; Marcuse, 1968 a; Marcuse 1968 b, p. 37 ff.; also Wolff et al., 1968, p. 100 f.).

In Sweden too there was a powerful expansion during the 1960's in the number of students at the universities particularly in the unbarred faculties. (Statistisk årsbok, 1965, Table 349, p. 303; Statistisk årsbok 1970, Table 348, p. 312.)

In order to deal with the problems of long study times and unplanned studies, UKAS (the University Chancellor's Office's working party on fixed courses of study etc.) was appointed in February 1966. The group's task was to reform the education given by the Faculties of Arts and Sciences at the universities, in order to reduce the community's costs per student and examination. Fixed courses of study and an increased rate of study became the key-words in the work of the UKAS group (cf. Stenius-Aschan, 1968, p. 15 ff.).

Like similar plans on the continent, UKAS was received with strong criticism, above all from the students, and a large part of the fight against UKAS came to be coloured by the general radical movement among students on the continent.

The criticism of UKAS came from many quarters and was directed at many of the goals implied by the proposals of UKAS and the entire system of values behind it. As a result of this criticism, coming according to the authorities mainly from the Swedish National Union of Students, UKAS was modified to something that became known as PUKAS and when this was painlessly introduced in the autumn of 1969, the activities of the non-organized student movement came to an end, for this time (Fleming & Åberg, 1970, p. 31 ff.).

During the resistance to UKAS, organizations such as the Swedish National Union of Students and the Swedish Social-Democratic Student Union achieved a large measure of influence, through a combination of the weight of informed statements and a readiness in certain groups of members to make use

of agitation of a kind that is usually considered less acceptable (Asplund, 1969, p. 264 ff.).

During the autumn of 1967, the Ministry of Education and the National Board of Education discussed the possibility of creating a more far-reaching democracy in the schools. One result was that in February 1968, what was known as the SISK group was appointed to investigate cooperation in schools. The most important tasks of this group were outlined by the Minister of Education at that time in an administrative note issued in May 1968. The note commissioned the National Board of Education to investigate three different problem areas: general working atmosphere, student welfare and school democracy (Sköläroverstyrelsen, 1968).

The appointment of the SISK group and the administrative note played an important role and led to a general burst of activity on the question of cooperation. From the point of view of time, the note coincided with the culmination of the "student revolt".

Experimental activities with increased student influence were started in the compulsory schools in 1969, including experiments with what were called cooperation committees (Lagerbäck, 1971).

In an administrative note dated July 17, 1968, the Office of the Chancellor of the Swedish Universities was empowered to initiate experimentation with new forms of cooperation between students, teachers and other staff at universities. The Chancellor's Office started experiments during the spring of 1969 and these experiments are still underway. At first the experimentation was mainly at departmental level. The students were given approximately equal representation with the teachers, and the sphere of authority of the departmental body was varied mainly within the framework of four models. The experiments were gradually extended to include other bodies at the universities as well.

Experimentation with new forms for cooperation within teacher training was not started until January 1972. Opinion surveys conducted among teachers and student teachers, which are summarized below, form to some extent the basis for the organization of the experimentation. The present summary does not take up these experiments, the preliminary results of which are reported in Idman (1972 c).

In 1968 the teaching training sector was reformed. In connection with this reform, the School of Education Act was passed, the tenth paragraph of which states the following:

"The training given at the Schools of Education is intended to give the students such knowledge and skills as are necessary for them as teachers to be able to contribute actively to the realization of the goals of the school level for which they are being trained."

In a school society in which new curricula and organizational changes follow closely upon each other's heels, great demands are made on the ability of the individual teacher to adapt to new situations. The school's new view of the pupils has probably been difficult to accept for some teachers, who were trained long before concepts such as "school democracy" were

discussed. Here teacher training should probably have a very important role to play in influencing attitudes.

Democracy in teacher training can be seen both from the aspect of general democracy and from an educational point of view. Like other students, the student teachers have a self-evident right to have influence over their training situation. The experiences of democratic forms of work that the student teachers receive during their teacher training will probably also serve as an example and influence their attitudes towards different forms of cooperation in their future work. Influence can be asserted both directly in the teaching process and through elected representatives in a system of committees and councils. Despite the fact that the large teacher training unit should make it possible for more than a small proportion of the student teachers to participate as representatives in a representative system, a functioning democracy with effective feedback mechanisms should be able to give the individual students a positive experience of concrete co-influence.

If the schools of education are to be able to fulfil the objective set up in § 10 of the School of Education Act, it would appear to be a necessary but not sufficient prerequisite that the representative system should function well. In addition direct influence in the teaching process together with systematic education and training in democratic working forms should be of great importance.

If the above-named conditions are produced, it is a reasonable hypothesis that the teacher training should be able to contribute actively to realizing the democratic ideals of the society and the school. If the teacher training does not fulfil these requirements, however, there is a risk that it will have an inhibiting influence with negative effects on the school system.

According to this line of argument, teacher training plays a very important role for the democratization of the school. Hence, questions of great theoretical and practical interest are: How does the teacher training sector utilize the opportunities offered to accomplish the change in attitudes that is necessary if many of the school's goals are to be realized? Are new methods of cooperation tried out within the teacher training, methods which, if they prove to function well, could also be tried out in the compulsory schools? Does the training create in the new generation of teachers an enthusiasm for the democratic objectives of the school?

1.2 Democratic forms of work and attitudes: A selective survey

Democracy can be looked at from different aspects. The aspect that has been particularly emphasised here is the actual influence, which should be seen partly as the influence that the student teacher himself wishes to have over his training situation and partly the influence that he is prepared to give to others, to his teachers during the training period and to his pupils when he has completed his training. A democratic attitude should in our opinion imply a balance of influence in the individual's pattern of attitudes, i.e. not

only refer to the influence that one wishes to assert oneself, but also to the influence that one is prepared to concede to others.

In a series of experimental investigations, Lewin, Lippitt and White (1939) studied the influence that different patterns of leadership had on groups of boys during leisure activities, with regard to (1) the attitude of the boys towards each other and towards the leaders, (2) production results and (3) aggressive actions.

The three patterns of leadership that were applied in the experiment were called "democratic", "laissez-faire" and "authoritarian".

A diagrammatic description of the three styles is given in Box 1 (cf. Lewin, Lippitt & White, 1939, p. 273).

Some of the main results from Lewin, Lippitt and White's investigations (cf. also Lewin, Lippitt & White, 1939, pp. 298—299) were the following:

- (1) Of 20 boys, 19 declared that they preferred the democratic leaders to the authoritarian ones.
- (2) The "we-feeling" developed most strongly in the democratic groups.
- (3) Quantitatively most was done in the authoritarian groups, qualitatively most was done in the democratic groups (thus answering one starting question put by the investigators: "Is not democratic group life more pleasant, but authoritarianism more efficient?"; cf. Lewin, Lippitt & White, 1939, p. 271).
- (4) The boys in the groups with authoritarian patterns of leadership tended to develop two alternative reaction behaviors, which marked the group as a whole. While some groups became aggressive and rebellious, others became apathetic and dependent.
- (5) The aggressivity became less in the democratically-led groups than in the authoritarian ones with a rebellious attitude.
- (6) It often happened that individual group members were made scapegoats and were bullied in the authoritarian groups with a rebellious attitude.

If the results from these studies are compared with the goals expressed in the curricula for the compulsory school and the upper secondary school, there is reason to assume that goals such as "ability to cooperate", "independence" and "critical thinking" are best promoted by a democratic teacher.

The individual student teachers can also be assumed to show great variation in their disposition for shouldering a democratic teacher role. One important task in teacher training could be to try as far as possible to reduce these differences.

In Bjerstedt (1968) one of the purposes of the project on student democracy is said to be study relations between attitudes and opinions on school democracy on the one hand and certain background and individual variables on the other. Considering this project goal (i.e. a deeper understanding of school democracy and the concept of authority linked with it) it could be of interest to study the relation between attitudes towards school democracy and attitudes towards questions that are fundamental to the total picture of attitudes, such as rigidity-flexibility.

Box 1. Description of three patterns of leadership according to Lewin, Lippitt and White.

Authoritarian	Democratic	Laissez-faire
1. All determination of policy by the leader.	1. All policies a matter of group discussion and decision, encouraged and assisted by the leader.	1. Complete freedom for group or individual decision, without any leader participation.
2. Techniques and activity steps dictated by the authority, one at a time, so that future steps were always uncertain to a large degree.	2. Activity perspective gained during first discussion period. General steps to group goal sketched, and where technical advice was needed the leader suggested two or three alternative procedures from which choice could be made.	2. Various materials supplied by the leader, who made it clear that he would supply information when asked. He took no other part in work discussions.
3. The leader usually dictated the particular work task and work companions of each member.	3. The members were free to work with whomever they chose, and the division of tasks was left up to the group.	3. Complete nonparticipation by leader.
4. The leader was "personal" in his praise and criticism of the work of each member, but remained aloof from active group participation except when demonstrating. He was friendly or impersonal rather than openly hostile.	4. The leader was "objective" or "fact-minded" in his praise and criticism, and tried to be a regular group member in spirit without doing too much of the work.	4. Very infrequent comments on member activities unless questioned, and no attempt to participate or interfere with the course of events.

The concept of rigidity-flexibility has long been discussed in Swedish and international research, sometimes under different names, but with the same implications as it is given here. Thus as early as the beginning of the 1930's it was maintained that a rigidity-flexibility factor existed, was part of all human behavioral processes and was present in all people, though to varying degrees. It was said to be that quality, which makes our perception of reality stable.

It had a decisive effect on different processes, by having a stabilizing function — i.e. it produced in the individual a similar pattern of reaction, which came into action each time the individual found himself in a certain situation. According to this theory, high stability in this sense was an obstacle to the individual's ability to adjust quickly to changes in his environment.

The theory on the rigidity-flexibility factor's existence and essential function did not remain unchallenged, however. Its critics drew attention to the fact that the theory was based on studies with too few tests and inadequate subject samples. Among the researchers who made these criticisms at an early stage were Jasper (1930), Burri (1935) and Shevach (1936).

Cattell (1935) did not deny the existence of the rigidity-flexibility factor as such, only the idea that it was present in all mental processes. In this context, Cattell stressed the important role played by previous learning.

One of the characteristic features of this early research and debate on the rigidity-flexibility factor is that the research was not only based on too few tests and too small samples, as was mentioned above, but also that the proponents of the theory mainly used motor, sensory and associative methods in connection with neurophysiological theories.

One of the results of this criticism made during the 1930's was that the next decade's researchers went on to work with more complicated tests on larger samples. In these experiments, carried out during the 1940's, the results were on the whole unsuccessful: as a rule these new tests could not prove even the existence, much less the dominant role, of a rigidity-flexibility factor.

This trend, however, did not alone cause the research debate on the factor in question during the 40's. Cattell — whose denial of the factor's ubiquitous presence was mentioned above — stood by his recognition of its existence and importance and defended a continuation of the research in order to reach greater clarity on the subject.

A new approach to the problem was introduced by what was known as the California study, presented in 1950 in a comprehensive work by Adorno, Frenkel-Brunswick, Levinson & Sanford, called "The authoritarian personality". Here the narrow motor-sensory orientation was replaced by one with a more psychoanalytic stress. At the same time Adorno and his colleagues tried to show a connection between rigidity-flexibility and certain political and social attitude complexes in the persons studied. Using an extremely comprehensive apparatus of initial hypotheses and tests constructed to prove them — which were subjected to considerable revisions as experience was gained during the progress of the work — a number of different research instruments were created to produce evidence of this connection. The California group asserted that a clearly demonstrable relation exists between an authoritarian, anti-democratic type of personality and rigidity.

The merits of the California study cannot be ignored. Among other things, it has in the personality analyses and in the use of the instruments on different experimental groups, drawn attention to a number of factors that influence the development of personality, such as home environment, child upbringing, educational level, social and economic environmental conditions. Among the

instruments used, it is worth mentioning the "F scale" (intended to measure potential authoritarianism, but in particular fascism — hence the name F scale), the Ethnocentrism (E) scale and the Anti-Semitism (A-S) scale. The investigations were carried out both with questionnaires and via interviews with individuals who had already gone through tests with questionnaires. The groups studied — several thousand individuals altogether — contained in relation to the total population an unproportionally high number of students, the majority from the west coast. Apart from students, however, members of church and trade union organizations were tested, and in addition a group of patients at a psychiatric clinic and a group of prisoners at the San Quentin prison. The writers claimed that their initial hypotheses — with some small exceptions — had been verified.

It is perhaps not surprising that the study met with what was partially very sharp criticism. This was not directed at the general ideological values that had played such an important part in forming the study's basic hypotheses and consequently for the study as a whole; it attacked instead the methods used in the study and also partly the validity of the instruments for the stated objectives. In 1954 Hyman & Sheatsly produced such a critical examination and their example was widely followed. Thus in "Psychological Bulletin" Titus & Hollander (1957), to take one example, published an essay: "The California F scale in psychological research: 1950—1955".

Titus & Hollander give a valuable summary of what can be called the early criticism of the work of Adorno and his colleagues. They start by establishing that:

"By applying the tools of 'depth psychology' to the study of ideology, this work opened the way for a substantive integration of personality dynamics with social behavior Probably no other single development in recent years has stimulated so much thought and investigation . . ." (Titus & Hollander, 1957, p. 47).

They go on to quote several research workers, i.a. Christie & Garsia (1951) and Cohn (1952).

Christie & Garsia (1951) compared reactions to the F scale expressed in the answers received from a group of students at the University of California, probably rather similar to the corresponding subject samples of the Adorno group, with corresponding reactions from a group of high school students in an unnamed town in the South-West of the United States. Davidson & Kruglov (1953) used the F scale on an extensive sample of students in New York City. In both these cases the results did not agree with those obtained by the Adorno group. The explanation has been sought in the influence — not taken into account by the Adorno group — of the environment of different sub-cultures. The results from the F scale thus did not apply generally.

Cohn (1952) directed very detailed and sharp criticism at the suitability of the F scale for measuring prejudice/authoritarianism. He shows that the F scale correlates with intelligence, which in his interpretation means that more intelligent people can penetrate the implications of the scale and de-

liberately answer in an "acceptable" or "correct way — i.e. as¹ desired by the researchers. His conclusion is that the F scale is open to faking.

Altogether Titus & Hollander investigated over 60 studies concerning the F scale from the period 1950—1955. Their conclusion is that:

"Today, although much work has been done using the F scale, one might reasonably hesitate to recommend it as a 'practical' instrument in applied settings . . . Perhaps the greatest need . . . is for evidence regarding its behavioral implications . . ." (Titus & Hollander, 1957, p. 62.)

As has been shown above, it is mainly the F scale that has been criticized; this is perhaps because the Adorno group does undoubtedly emphasize it as being essential to the entire problem complex and because it appears to offer points for attack. Rokeach ("The open and closed mind", 1960) also dealt critically with the F scale. He states that

"the F scale had a twofold purpose when it was constructed: it was designed to be used as an indirect measure of prejudice without mentioning the names of any specific minority group; and it was designed to measure underlying personality predispositions toward a fascistic outlook on life . . . The scale became known not only as the 'fascism scale' but also as the 'authoritarian personality scale' . . . this gave rise to a certain amount of conceptual confusion . . ." (Rokeach, 1960, p. 12-13.)

Rokeach states that

"it becomes embarrassing to point to persons who seem to be authoritarian and intolerant but are not fascistic or anti-Semitic, or politically conservative. Authoritarianism and intolerance in belief and interpersonal relations are surely not a monopoly of Fascists, anti-Semites, Ku Klux Klanners and conservatives" (Rokeach, 1960, p. 13).

He continues

" . . . we should pursue a more theoretical ahistorical analysis of the properties held in common by all forms of authoritarianism regardless of ideological, theological, philosophic, or scientific content." (Rokeach, 1960, p. 14.)

For this purpose Rokeach constructed in the work named above an instrument that was intended to be used for measuring all forms of authoritarianism, with leanings to the right, left or "middle". He called it the Dogmatism scale. His main idea is that social or ethnic prejudice is a sociological phenomenon. In order to free another new measuring instrument as far as possible from environmental influence, he started by creating an artificial environment, what he calls

"a miniature cosmology, a miniature belief system that will be at odds with the one we employ in everyday life" (Rokeach, 1960, p. 171).

This environment, which is completely separated from reality, was designed as an imaginary world with its own natural laws, inhabited by a little being by the name of "Joe Doodlebug". By using this imaginary world as a proposed environment, Rokeach carried out a series of tests, based on "Joe Doodlebug's" actions in following the natural laws of his world. According to Rokeach, these tests demonstrated a clear difference between rigidity and dogmatism:

" . . . the first refers to the resistance to change of single beliefs (or sets or habits), and the second refers to the resistance to change of systems of beliefs" (Rokeach, 1960, p. 183).

Further, Rokeach's intention was to be able to use his instruments, especially the Dogmatism scale, to prove that the F scale only measures an authoritarian conservative attitude ("fascism"), while in reality there also exist a "left" and "middle" authoritarianism — in other words, "authoritarianism" is a general concept, which can appear within the framework of all shades of opinion.

A summarizing discussion, in some cases critical of both the California group and Rokeach, is to be found in Roger Brown's "Social psychology" (1965). Starting from the fact that among the coding categories used by Adorno et al. in the interviews in "The authoritarian personality", there is one that has been called Rigidity contra flexibility, he analyses the rather varying — or at least nuanced — content, which the term rigidity is given by researchers. With regard to the California group, he declares that their use of the term implied a certain lack of clarity: on the one hand they appeared to have worked with rigid as meaning prejudiced, intolerant, on the other hand, they seemed to have assumed that a prejudiced person is rigid in "a somewhat different but related sense." (Brown, 1965, p. 506.) Brown continues:

"We are not told in 'The Authoritarian Personality' what cues coders were instructed to use in rating for rigidity . . . The interview results are not good evidence that prejudiced subjects showed a pervasive cognitive rigidity." (Brown, 1965, p. 506.)

On the other hand, Brown clearly takes the side of the Adorno group against Rokeach. Thus he says:

"The best measure of authoritarianism is the F Scale. It is objective and quantitative and much easier to use than interview protocols or projective data" (Brown, 1965, p. 526),

which is an argument aimed directly at Rokeach.

Another important study is that published by Rubenowitz in 1963, "Emotional flexibility-rigidity as a comprehensive dimension of mind". By way of introduction, it gives an account of the research on rigidity/flexibility and related concepts that has — with varying terminology and methods — been conducted during recent decades. Spearman's "perseveration" (p) factor, Walker et al.'s, "disposition rigidity", the "s" test etc. are described, before he gets to the new era within the research, which he thinks starts with the California group's "The authoritarian personality".

Rubenowitz formulates his main hypothesis:

"In adults a general factor of flexibility-rigidity can be identified, a factor which accounts for a considerable part of the variance in thinking, attitudes and displayed behaviour." (Rubenowitz, 1963, p. 45.)

Among the instruments used in his study were the California F scale and Rokeach's Dogmatism scale, both somewhat changed to suit Swedish conditions, plus Himmelstrand's L scale for child upbringing. It is said about the last-named scale that

"it seemed . . . to be a suitable measuring instrument to test the assumption that people who have been subjected to a harsh childhood training will develop rigid personality characteristics during adulthood and . . . plead for strictness and discipline in child care." (Rubenowitz, 1963, p. 115.)

The results of Rubenowitz's studies support the main hypothesis concerning a general flexibility-rigidity factor (cf. above).

The question of the extent to which the individual's tendency to acquiesce influences his test results is important not least for assessing the instruments used by the California group, particularly the F scale. It has been taken up by Gage, Leavitt & Stone (1957). The article is "directed against the argument that the California F (predisposition to fascism) scale and similar inventories have their validity lowered by their loading with acquiescence set." (Gage et al., p. 98.)

The criticism of the F scale is then summarized in three main categories: "(a) the F scale consists entirely of 'negative' statements, i.e., statements that, when agreed with, reflect authoritarian attitudes; (b) the tendency to agree with ambiguous and unstructured statements has high internal consistency and generality over tests of markedly different content; (c) the F scale, and other inventories of attitudes about social issues and interpersonal relationships which employ agree-disagree items, are significantly loaded with irrelevant variance in acquiescence tendency." (Gage et al., p. 98.)

After referring to critics, including Cohn and Bass, who consider that they have empirically proved the legitimacy of this criticism, the Gage group goes on to say that they have obtained similar results in an independent study conducted at the University of Illinois with 118 students (Gage et al., p. 98). There they found that the tendency to acquiesce really is general in considerably different types of test content.

The Gage group goes on to say, however, that this information can be interpreted in two ways:

"either (a) that acquiescence is psychologically irrelevant to the authoritarian attitude measured by the F scale, or (b) that acquiescence is part and parcel of the authoritarian attitude. The latter position, developed by H. J. Leavitt and others, is that which we shall adopt, extend, and further test in the remainder of this study." (Gage et al., p. 99.)

An account then follows of the tests carried out by the group, to verify, among other things, the hypothesis that "negative items have greater validity than positive items for the measurement of authoritarianism" (Gage et al., p. 100). The study produced the result that "the score based only on negative items is more valid than the entire inventory" (Gage et al., p. 101).

Comparisons are then made with similar studies and findings by Rundquist, Cronbach and Crutchfield and with the research carried out by Ancona; the conclusion is that the results of all of them confirm the hypothesis that is put forward by the Gage group. The group concludes its opinions thus:

"... the F scale, ... and similar instruments are advisedly constructed primarily of 'negative' items. The psychological meaning of acquiescence resembles that of authoritarianism, conformity, low ego strength, and low intelligence." (Gage et al., p. 103.)

Another interesting study of the problem of acquiescence is the paper mentioned by Gage et al., a paper written by Leavitt, Hax & Roche, 1955. The Leavitt group describes its own experiments with reformulation of the F scale, which is said to consist entirely of positive items. Leavitt and his

colleagues reformulated half of the items on the F scale so that disagreement now could be considered an indicator of authoritarian attitudes. Together with the unchanged items the reformulated ones were used to test five independent groups of individuals.

The Leavitt group has summarized the conclusions it has drawn from its investigation thus:

"In a sense, these findings both offer support for and cast doubt upon the F scale. They support the empirical argument that the all-positive F scale is more discriminating and perhaps more valid than it would have been if it included both kinds of items . . . Our own current belief is that the F scale may well differentiate between personalities along a dimension the authors have labeled authoritarianism." (Leavitt et al., 1955, p. 220.)

According to the Leavitt group, however, this depends more on luck than on intention or skill:

"That differentiation, however, seems in good part attributable to the lucky fact that some people not only tend to hold certain views about the world but also tend to agree with things said authoritatively. The F scale happens to permit them to do both thereby allowing them to differentiate themselves more distinctly from other groups . . . a portion of the discriminatory power of the F scale derives from its form rather than its content." (Leavitt et al., 1955, pp. 220—221.)

Since in our empirical studies we have, for example, in the choice of tests largely made use of the studies from the fifties and sixties reviewed here, we have chosen not to take up a discussion of later research in this context.

1.3 Goals for higher education

As a result of the increased number of students at universities and the general restrictiveness that this led to on the part of the state authorities (cf. e.g. UKAS), an intensive if not always illuminating debate arose on the goals for higher education.

"In the nineteenth century's emerging competitive-capitalistic society, an ideology developed around the purposes of the university, which emphasized its independence in relation to economic interests. The university was not to serve the economic profit-making, but to serve the search for objective truth. Its task was concerned with the essence of society and nature or — as it was later expressed in less idealistic terms — free research and education. By retaining a relative degree of independence from political and administrative state bodies, the activities of the university were authorized to be untied and 'objective' (Johansson, 1973, p. 37).

The increased flow of students to the universities led, as was shown above, to the free status of the university being questioned and to the government authorities placing more weight on effectivity criteria. This was felt by the students to be a one-sided adjustment of the university to the demands of business and industry and they considered that the critical role of the university would be lost through integration with a bureaucracy-ridden and technocratic society.

The directives given to the commission appointed in 1965 to investigate university education (UPU) and to the 1968 educational commission do not take up questions concerning goals to any great extent. The former was

commissioned to investigate the organization and methodics of academic teaching and the degree system, while the latter was to investigate the dimensions, structure, organisation and localization of post-secondary education. UPU completed its report in 1970 and U68 in 1973. Probably influenced by the criticism of UKAS, the two commissions take up their final reports not only what was laid down in their directives, but also questions of goals. In addition U68 published in 1969 a paper with the title, "Goals for higher education".

In UPU's final report (Academic teaching), it is said about goals that: "When U68 started work, the Commission was confronted immediately with questions that were also of great importance for UPU. This applies primarily to the problems concerning the goals of higher education, whereby it is mainly the overall goals that are meant. When in its report UPU takes up the overall and long-term goals of academic education, this is done only to clarify certain promises for the further arguments of the commission. The intention has not on the other hand been to try to formulate standpoints of a kind that could anticipate the political debate and the government authorities' decisions on the questions involved. Since U68 is linked with a reference group with representatives of the political parties, U68 and its reference groups present a more suitable forum for discussion and the adoption of standpoints on the question of goals than UPU. UPU has felt free, however, to attack the problems from pedagogical points of view, although in this the stress has come in a natural way to be placed on more immediate goals."

UPU discusses in relative detail goal questions in the goal categories "vocational training", "general education" and "personality forming", but only makes proposals regarding further work to be done on the lines outlined in the commission.

U68 gives in its final report (1973) its views on the goals of higher education under the headings "personality development", "welfare development", "democracy", "internationalization" and "social change". As was mentioned above, the directives to the commission did not state that U68 should take up the question of goals. In motivating the fact that it has nevertheless dealt with goal questions, U68 points out that they are to give a background to the proposals of the commission concerning the dimensions and localization of the education, the organization of studies, the rules for acceptance for higher education, the forms of student grants and the departmental organization of the education.

Like UPU, U68 appears to wish to add points of view on goals for higher education and to a lesser extent make suggestions for a conclusive document on goals.

The debate on goals for higher education has been conducted, apart from in the government commissions named above, also in books (cf. e.g. Feuer, 1965; Fleming & Aberg, 1970; Stenius-Aschan, 1968 and Philipson & Hallberg, 1969), at meetings and demonstrations, in the daily press and in the student press. It is naturally difficult to say what relative importance these various expressions of opinion have had for the planning of higher education. There can be no doubt, however, that they have had considerable influence. The newspaper debate, which is of most immediate interest in the present

summary, has had contributions from prominent student politicians, teachers, educational planners, officials in the school sector and members of the UPU and U68 commissions. Mutual influence among these persons must have been inevitable. The effects on the opinions of a wider public are more difficult to assess. What is more essential than the effects on opinion is, in this context, the insight and extensive knowledge of goal questions possessed by these debaters.

The main question concerning goals in this summary is: how important are equality and democracy considered to be as educational goals for higher education?

2. Equality and Democracy as Educational Goals

The summary is based on the report:

Idman, P. Debattanalyser som målsökningsinstrument. /Debate analyses as goal-seeking instruments./ Pedagogisk-psykologiska problem (Malmö: School of Education), No. 235, 1974.

2.1 Introduction

As a result of the increased flow of students to higher education, the authorities in the West started during the latter part of the 60's to place increasing emphasis on effectivity criteria (cf. above p. 11), and the university's function as a source of professional training was stressed. The university was now to serve economic interests and not only "the search for the objective truth". The academic tradition belittled the importance of professional training goals and put forward instead goals such as "culture" and "personality development". Bjerstedt (1970) discusses the relation between these goal areas and says, among other things:

"Now perhaps it is more often said to be the rapid development of society that makes it meaningless to place too much weight on specific details of knowledge; what one instead wishes to encourage is a state of preparation for the future, including qualities such as a critical mind, sensitivity to problems, flexibility and creative ability. Some debaters would in addition like to include in the catalogue of goals words such as social commitment, ability to participate in democratic teamwork and international co-responsibility. How great is the actual agreement on these non-subject-specific goals? Although, of course, nobody wants to stand up and say the opposite (that the university should encourage an uncritical mind, rigidity etc.), opinions are divided over how these goals should be given priority. . . . There can be a risk that the behavioral scientist chooses what is easy rather than what is important, when he takes his place as an educational technologist. It is simpler to illuminate specific job training and points of view concerning specific subjects on the whole, and it can be tempting to push aside the non-subject-specific goals, as being 'unrealistic' . . . It would be admitting defeat in advance . . . not to penetrate the area further. It would also be unwise from many points of view not to investigate more closely an area which produced such violent commitment in some of the avant-garde debaters within the international student movement . . ."

2.2 Purpose

As part of the project, "Non-subject-specific goals for university education" (within which goal analysis studies of common goals for university education are made) a sub-study called "Debate analyses as goal-seeking instruments" was carried out. The aims of this sub-study were to make use of a systematic analysis of leading articles, cultural and debate articles in a sample of Swedish daily newspapers and in the student press during the period 1967—69, in order to identify (1) existing goals and (2) the evaluation attached to these goals (positive, neutral, negative). In the present analysis a study has been made of the weight that the people debating goals wish to place on different types of goals for university education, and at the same time the goal relations that Bjerstedt (1970) discusses are taken up. One of the main questions in the present summary is: How essential are "equality" and "democracy" considered to be as educational goals — the goal areas which form the basis for the questions that have been dealt with in a number of empirical studies within the teacher training sector and which are summarized below.

2.3 Procedure

Factors that were taken into consideration during the planning and execution of the investigation included (a) choice of duration of period to be studied, (b) choice of publications, (c) choice of type of articles (leading articles etc.), (d) selection of articles with certain types of content (themes), (e) consideration of criteria for selection of articles, (f) method for analysis of the selected material and (g) processing.

2.3.1 Choice of period to be studied

The choice of 1967 as the beginning of the period followed from the fact that before UKAS was handed over to the Office of the University Chancellor in February 1968, the debate in the press on higher education and its objectives had been quite limited. During 1969 the debate on higher education diminished both in Sweden and internationally. Naturally UPU's report and U68's debate publications and its final report in 1973 both gave rise to discussion.

The spread of the articles (selected according to the final criteria, cf. section 2.3.5 below) over the three years analysed is seen from Table 1.

Table 1. Spread of the articles over the three years analysed.

Year	Articles	%
1967	41	12
1968	165	49
1969	131	39

The interest in questions concerning goals increased strongly during 1968, as expressed in the number of articles. Almost half the articles are from this year, while only 12% are from 1967. During 1969 also, the goal questions attracted a relatively large amount of interest.

2.3.2 Choice of publications*

When choosing daily newspapers, we were guided by the political colour, the size of the circulation and regional connections, trying to cover some of the main journals of the major political parties in Sweden. When it came to the student press, we chose to include both the official organ of the Swedish National Union of Students and the local university press.

Table 2. Newspapers included in the investigation, information as to size of circulation, the newspaper's political colour and number of issues per week.

	Circulation first six months 1968	Political colour	Issues per week
Svenska Dagbladet (SvD)	164 600	Con.	7
Aftonbladet (AB)	430 900	Soc.Dem.	7
Dagens Nyheter (DN)	420 300	Lib.	7
Göteborgs Handels- och Sjöfartstidning (GHT)	61 700	Lib.	6
Skånska Dagbladet (SkD)	37 700	Centre	6

(Furhoff & Hederberg, 1968, p. 209—213.)

The Communist party is not represented as the goal questions were only discussed to a negligible extent during this period in their largest newspaper, Ny Dag, which in addition is published only once a week.

In order to shed further light on the sample of newspapers named in Table 2, we give below some facts on the political colour of the daily press:

Table 3. Daily press in Sweden divided according to political colour in 1968 in percentage of total circulation.

Political parties	%
Conservative party	18.9
Independent Liberal	5.2
Centre party	3.1
Liberal party	48.0
Social Democrats	20.6
Communists	0.1
Others	4.1
Total	100.0

(Svensk politik, utlandsk politik, 1971, p. 8.)

As can be seen from the table above, the Communist party's share of the total circulation is very small.

We do not wish to try to achieve with these figures an illusion of strict objectivity. The selection of newspapers could naturally have been done in another way. Even though the purpose of the investigation is not to generalize the results to the entire Swedish daily press, we are nevertheless of the opinion that the newspapers analysed reflect and contain the essential points of the goal debate that has been conducted during these years.

Table 4. Student publications included in the study.

Publication	Represents
Studenten	Swedish National Union of Students
Gaudeamus	Stockholm Students' Union
Lundagård	Lund Students' Union
Ergo	Uppsala Students' Union
Gotheborgske Spionen (GS)	Goteborg Students' Union
Vertex	Umeå Students' Union

The student papers are not tied to any political party. They are not usually published during the summer months and in some cases not in January either. The issues per year vary for the different papers between 8 and 20. In addition to these more official student papers, a large number of "occasional" sheets were published by various action groups during the period studied. Since any systematic collection of these sheets, which are interesting both in themselves and with regard to the goal problems, would encounter great difficulty, we have chosen to exclude them completely.

2.3.3 Choice of type of articles

It was decided that only leading articles, cultural and debate articles should be analysed. By leading article is meant an article, normally unsigned, placed on a particular page every day, in which the editorial staff tries to guide the readers in a particular question. By cultural or debate article is meant an article which expresses the opinions and evaluations of one or more writers on a particular question and which is usually placed on (a) specific page(s) in the newspaper.

News articles and readers' letters were hereby excluded. We have not investigated how far these deal with goal questions. It seems less likely, however, that the qualified expert opinions, which we wish to study primarily, are expressed to any extent in such articles.

2.3.4 Selection of articles with certain type of content

When the various choices named above had been decided upon, a number

of content categories were set up, following a preliminary investigation. From these categories, called themes below, was to be made the final extraction.

The content categories (themes) are not exclusive. The purpose of having these themes is to be able to present articles and analyses under relatively homogeneous categories. This means that in occasional cases there can be some question as to which theme an article should be placed under. If this is put into relation to the purpose of the investigation, however, one finds it does not cause any invalidity. The division into themes should be seen primarily as a service to the readers.

The themes under which the material will be presented are the following:

Theme 1: *UKAS*. The working party of the Office of the Chancellor of the Swedish Universities for fixed courses of study at the university. The group was given the task of reforming the education given at the universities' faculties of Arts and Science, in order to reduce society's costs per student and course. UKAS was subjected to extensive criticism which, among other things, called for a debate on goals and prerequisites.

Theme 2: *U68 (goal debate)*. The 1968 educational commission which was given the task of investigating the dimensions, structure, organization and localization of post-secondary education. This theme mainly contains reactions to a debate book published by U68.

Theme 3: *The expansion of the number of students at the universities (the educational explosion)*. During the 1960's the number of students at above all the unbarred faculties had greatly increased. The supply of graduates was greater than the demand, which naturally created serious problems in many quarters. Under this theme these problems are discussed and alternative solutions suggested.

Theme 4: *Democracy and equality within the academic educational system*. This encompasses articles related to questions that came to the fore in the student revolt of the 1960's and to the experimentation started in 1969 with new forms of cooperation between students, teachers and other staff at the universities.

Theme 5: *The party politicalization of the students' unions and the Swedish National Union of Students: the tasks and working methods of the students' unions*. Here we take up the politicalization of the students' unions, the students' unions' spheres of authority, the students' lack of commitment in student matters etc.

Theme 6: *Research training and research at the universities*. Here it is above all basic research contra applied research that is discussed. The working conditions of the researcher, the financing of research and researcher training are also taken up in the discussion.

Theme 7: *Consumers' influence on higher education: academics and the labour market (unemployment)*. This theme borders to some extent on Theme 3, the educational explosion. Here, however, above all the advantages and disadvantages of profession-oriented contra general education are discussed. The growing unemployment among graduates makes it necessary for them to seek other areas of employment. Practical training during education is also discussed here.

Theme 8: *Teacher training and university education*. It is above all the short training given to secondary school teachers that is discussed here. Certain problems

in university teaching are also taken up, namely the teachers' lack of training and the fact that teaching ability is not counted as a merit.

Theme 9: *The student's situation (financial problems, isolation, interrupted studies etc.) and study guidance.* This deals in particular with the high frequency of interrupted studies and some of the reasons for this, such as inadequate information and study guidance, a lack of purposefulness in the studies, isolation from other groups in society and the grants and study-loan system.

Theme 10: *University policies and the university of the future.* Here is discussed among other things the consequences of the extension of the "affiliated" universities and a new university policy. A growing number of graduates must seek "new" areas of employment, which necessitates reorientation in many respects, but which can also open up completely new opportunities for Society, working life and the students. The position of academics in society and the gaps between different groups in education are also discussed. Further, there is some discussion of our present educational system, which has been adapted to collective needs and which is considered to "forget" the creative talents.

The number of articles analysed is 337 and they are divided between publications and themes as shown below.

Table 5. The division of the articles between publications and themes.
(For abbreviations, cf. Tables 2 and 4.)

	1	2	3	4	5	6	7	8	9	10	Total
SvD	18	3	1	6	2				2	3	35
AB	8	3	1	6	2					1	21
DN	26	10	4	8			2		3	4	57
GHT	12	2	2	8	4	7	6	6		3	50
SkD	5		2	4			4			2	17
Lundagård	7			1	4		1			1	14
Gaudeamus	12			2							14
Ergo	6			1				1			8
Studenten	16	18		1	1		1		1	1	39
GS	15	6		30	1	3	9				64
Vertex	7	2		6	2		4				18
Total	132	44	10	73	16	10	24	7	6	15	337

Table 5 shows that Theme 1 has a dominant position as far as the number of articles is concerned. This is not surprising, since the UKAS group, without itself attacking the goal questions to any great extent, initiated the debate that followed during the latter half of the 1960's. Like Theme 2, Theme 4 also encompasses a relatively large number of articles, which is not particularly surprising, either, considering the significance that questions concerning democracy and equality had during this period. With regard to Theme 2, U68's debate book, "Goals for Higher Education", produced the first conscious effort to start a debate on the goals for higher education.

The spread of the articles between the publications is more even, with a

somewhat greater number of articles in the daily press than in the student press. The exception is *Göteborgske Spionen*, which showed great interest in the questions of democracy and equality in particular.

2.3.5 *Consideration of criteria for selection of articles*

A criterion for the selection of articles that has not yet been discussed is that they should express one or more goals for higher education. Deciding whether that is or is not the case can involve great difficulties. We quote here a few points of view expressed by Philipson & Hallberg (1969, p. 11):

"We believe that one important cause of the lack of a concrete debate on the establishing of goals is that a debate of that kind requires a consistent and well-planned organization if it is to be meaningful. This is because the goals for higher education consist of a large system of mutually interacting factors. Higher, more general, goals influence the forming of goals on lower levels. It is also necessary to differentiate carefully between what are goals in the strict sense of the word and what are means towards realizing the goals. Goals and means cooperate, namely, so that the goals provide prerequisites for means, which in their turn can give rise to new goals."

When selecting the articles, we have been faced with difficult problems, directly connected with the goals-means argument given above. In order to reduce the subjective element in the selection, we have demanded that the goal must be explicitly expressed (and we have carried out subjectivity controls; cf. below). The various steps that we have followed in the process of selection are thus the following:

The article must

- (1) be from the period 1967—69
- (2) be taken from one of the 11 publications given in Table 5
- (3) be able to be referred to one of the ten themes described above
- (4) contain reference to at least one goal for higher education

2.3.6 *Method for analysis of selected material*

Our original intention was to use some conventional content analysis method, i.e. choose and adapt an existing category schedule and code the articles in accordance with it. After an analysis of various models for text analysis (e.g. Holsti, 1968), a preliminary code schedule was constructed with some association to Høyer's binary and polynary models (Høyer, 1965). This method of categorizing proved to function less well, however, partly because of the goals-means problems discussed above and partly because the ironic style used by some writers does not provide a suitable material for this kind of quantitative analysis.

In order that we might study the problems outlined above, we have carried out the following:

- (1) Categorization of the articles with respect to the types of goal mentioned. All 337 articles have been assessed with regard to the types of goal mentioned.
- (2) Categorization of the writer's evaluation of the goals. An assessment has

been made of the extent to which the goals have been evaluated positively, negatively or not been given either a positive or negative evaluation by the writer in question.

Since this type of content analysis has many subjective aspects, a number of subjectivity checks have been carried out on e.g.:

- (a) the choice of articles
- (b) the coding of the articles (goal category and evaluation).

2.4 Coding schedule

When it comes to dividing up the goals of educational policy, Johansson (1970, p. 8), for example, structures them into

- (a) Individual-oriented goals (that should fill the needs of the individual)
- (b) Society-adapted goals (that should correspond to the needs of the present society)
- (c) Social-change goals (that should contribute to easing the way for new and presumably better conditions in society)

With regard to these three goal categories, Johansson (1970, p. 9) says:

"Objectives of the three kinds mentioned can be said to harmonize with each other. Individual-oriented and social-change objectives are most often thought of as being in harmony — the school is to create the prerequisites for 'social development based on the citizens' own insight and consent' — SOU 1948:27. Most conceptions of what good social conditions are include the satisfaction of the needs of the individual. But if some needs are regarded as being formed by the present society but incompatible with the society one wishes to create, a number of conflicts become obvious. Conflicts between individual-oriented and social-change objectives on the one hand and society-adapted objectives on the other are equally obvious. What has above all stood out in the discussion in Sweden from the 40's onwards is, however, that either little attempt has been made to draw attention to, or efforts have been made to smooth over, such goal conflicts. Even if the needs of the individual, present-day society, and our future society do not coincide, they are thought of as being able to be easily combined. The hallmark of society is thought of as being harmony rather than conflict — no striking antagonisms between individual-oriented and society-adapted objectives — and is assumed to be capable of being changed by means of gradual reforms rather than by revolutionizing conversions — no striking antagonisms between society-adapted and social-change objectives."

UPU (1970) states that U68 is a more suitable forum for discussion and forming opinions on overall goals than UPU, while at the same time considering itself able to contribute points of view on more immediate goals. On UPU's views on the "more immediate goals" it is said (UPU, 1970, p. 20): "According to UPU, the purpose of all higher education is firstly, to give the students professional training, secondly to give them some degree of general education and thirdly, to influence the development of their personalities in a desired direction."

Finally U68 discusses the goals of higher education under the headings "personality development", "welfare development", "democracy", "internationalization" and "social change".

The goals of the community and the goals of the school can naturally not be regarded separately in isolation. What is often lacking, however, or is given inadequate treatment, is the overall political goals.

Prior to drawing up a coding schedule, we have tried to find a common structure in the views of the different commissions on goal questions.

In this we have worked from the structure presented in Johansson (1970) and in UPU (1970). We differentiate between "overall goals" and "individual-oriented goals". We are well aware that there are no clear boundaries here and that completely different points of view can be put forward on how these goals should be structured.

Another factor that has had an effect on the structure we have chosen, especially on the categories under personality-forming goals, is naturally the character of the material analysed.

Box 2. Coding schedule for categorization of goals.

OVERALL GOALS

1. Society-adapted goals
2. Social-change goals
3. Democracy
4. Equality

INDIVIDUAL-ORIENTED GOALS

Personality-forming goals

1. Self-realization
2. Critical thinking
3. Independence
4. Ability to cooperate
5. Creativity
6. Political commitment
7. Social responsibility
8. International commitment
9. Others

General educational goals

1. General education
2. General scientific education

Professional training goals

1. Professional training
 - a. unspecified
 - b. flexible
 - c. specialized
2. Training adapted to labour market
3. Recurrent training

When it comes to society-adapted goals, these are based on prognoses rather than programs, while the social-change goals regard education as an important means of changing society. Democracy and equality can be seen as overall goals for both society at large and the educational system.

As far as the individual-oriented goals are concerned, we regard primarily the personality-forming goals but also the general educational goals as being non-subject-specific, while the professional goals rather represent the specific subject goals.

With regard to the relationship between individual-oriented goals and society-adapted or social-change goals, we refer to the discussion by Johansson (1970).

2.5 Coders' agreement

2.5.1 Selection of articles

In order to check the extraction instructions and the selection of articles based on this, an independent helper extracted a control selection from a two-month period for all the Jaily newspapers. Comparisons of the original sample and the control sample showed a 95% agreement.

2.5.2 Coding of articles

A sample of 38 articles were sent by registered mail to those who had written them, or in the case of unsigned articles to the newspaper in question. Attached to the article was a statement of the goals and evaluation tendency identified in it. The accompanying letter to the writers of the articles said: "Since the risk of subjectivity in the interpretation of the writers' opinions has been judged as great, we would be very grateful if you, as the writer of an article included in this study, would assess how far we have correctly categorized goals and evaluations." Eleven article writers answered in writing, and it then emerged that they on all essential points judged the interpretations to be correct. Although answers were only received from one-third of the writers, the check indicates that the articles chosen have been coded correctly.

2.5.3 Coding of articles by an independent coder

A sample of 38 articles was check-coded by an independent coder with regard to (a) existing goals and (b) the evaluation of them.

Table 6. Check-coding of 38 articles by an independent coder.

	Number of goals
Coder 1	61
Coder 2	65
Common for coders 1 and 2	54

All 54 of the common goals have been evaluated in the same way.

The subjectivity checks that have been carried out show a, for our purposes, satisfactory degree of objectivity with regard to (a) selection of articles, (b) identification of existing goals and (c) statements on evaluation tendencies.

2.6 Results

2.6.1 Categorization of goals according to themes and publications

Tables 7 and 8 describe the distribution of articles and goals. It can be seen from these which themes and dominate the analysed material.

Table 7. Summary of the theme distribution (Number of articles, goals and number of goals in relation to the numbers of articles).

Theme	Articles	Over- all goals	Person- ality forming goals	General educa- tional goals	Profes- sional training goals	Total goals	Goals/ article
1. UKAS	132	87	61	6	86	240	1.8
2. U68	44	49	60	6	33	148	3.4
3. Educational explosion	10	4	2	-	4	10	1.0
4. Democracy and equality	73	78	11	1	14	104	1.4
5. Party politi- calization of students' unions	16	11	11	-	1	23	1.4
6. Research and research training	10	4	8	2	9	23	2.3
7. Consumers' influence	24	6	10	3	26	45	1.9
8. Teacher training	7	3	1	-	4	8	1.1
9. Students' situation	6	2	2	-	2	6	1.0
10. University policies	15	8	14	1	8	31	2.1
Total	337	252	180	19	187	638	1.9

Table 7 shows that:

- (1) the average number of goals per article is 1.9;
- (2) the distribution of articles, goals and goals per article in the various themes is uneven.

(3) the dominant themes with regard to the number of articles and goals are 1 (UKAS), 2 (U68 on the goal debate), 4 (democracy and equality within the academic educational system) and 7 (the influence of the consumers on higher education; academics and the labour market). With regard to the goal density, the dominant themes are 2, 6 (research and research training) and 10 (university policy and the university of the future). With the exception of theme 4 (democracy and equality) the analysed themes contain a considerably greater number of individual-oriented goals than overall goals.

These results were what was to be expected, considering on the one hand the historical events of the period analysed and on the other the commissions on the universities that from the point of view of goals were of particular interest just then.

Table 8. Summary of distribution over publications (number of articles, goals and number of goals in relation to the number of articles).

Publications	Articles	Over- all goals	Persona- lity forming goals	General educa- tional goals	Profes- sional training goals	Total goals	Goals/ article
Svenska Dagbladet	35	24	13	3	15	55	1.6
Aftonbladet	21	27	8	-	5	40	1.9
Dagens Nyheter	57	30	34	5	39	108	1.9
Göteborgs Handels- och Sjöfartstidning	50	29	18	5	21	73	1.5
Skånska Dagbladet	17	11	6	1	10	28	1.7
Lundagård	14	7	8	1	9	25	1.8
Gaudeamus	14	18	8	-	6	32	2.3
Ergo	8	6	2	-	6	14	1.8
Studenten	39	38	42	4	35	119	3.1
Göteborgske spionen	64	47	33	-	30	110	1.7
Vertex	18	13	9	-	12	34	1.9
Total	337	250	181	19	188	638	1.9

Table 8 shows that:

- (1) the distribution of articles, goals and goals per article in the various publications is uneven;
- (2) the publications that dominate as far as the number of articles and goals are concerned are Dagens Nyheter, Göteborgs Handels- och Sjöfartstidning, Studenten and Göteborgske Spionen. Aftonbladet and Gaudeamus treat the overall goals comparatively frequently but the professional training goals comparatively less frequently.

discussed the relation between society-adapted goals and social change goals which may be regarded as a reluctance to see the goal questions in a larger social perspective. An alternative interpretation may be that the importance given to goals like equality and democracy is implicitly aimed towards social change.

2.6.3 Evaluation of goals

Here a study has been made of the evaluation that the writer in question has given the identified goals. For this an assessment has been made of the extent to which the goals have been evaluated positively, negatively or not been given either a positive or negative evaluation. It should be pointed out here that ironic points of view occur, but that the independent coder has on the whole been able to distinguish between ironic and non-ironic presentations.

Table 10. Evaluation of the goals in the main categories (in absolute figures and percentages).

	Pos.	Neg.	Non-ev.	Total
Overall goals	217	20	15	252
%	86.1	7.9	6.0	100.0
Personality-forming goals	170	4	6	180
%	94.5	2.2	3.3	100.0
General educational goals	17	1	1	19
%	89.5	5.3	5.3	100.1
Professional training goals	133	32	22	187
%	71.1	17.1	11.8	100.0
Total	537	57	44	638
%	84.2	8.9	6.9	100.0

As can be seen, the writers of the articles have evaluated the goals expressed in about 93% of the cases. The positive evaluations have a completely dominant position. Only in about 7% of the goals no evaluation has been expressed.

The personality-forming goals have the highest percentage of positive evaluations and the professional training goals the lowest. It should be noted, however, that here too the positive evaluations have a clear majority.

A study of the subcategories reveals that it is above all the society-adapted goals that contain most negative evaluations within the overall goals. If Tables 7 and 8 are compared, one finds, for example, that themes 1, 2 and 4 and the publications *Dagens Nyheter*, *Göteborgs Handels- och Sjöfartstidning*, *Studenten* and *Göteborgske Spionen* have provided the majority of the goal statements analysed. Therefore, great importance should be attached to these themes and publications when the analyses presented are discussed.

2.7 Final comments

Under the heading "Overall goals", the category schedule has two categories, "society-adapted goals" and "social-change goals". These goals have, as we have already mentioned, not been dealt with to any great extent by those debating the goals. In addition to the democracy and equality goals, a large number of the goals that are dealt with under, for example, individual-oriented goals, can be regarded as being fundamental and a necessary prerequisite for individuals working to change society. One goal which has often been mentioned in this debate is critical thinking. From a logical point of view, it is probable that this particular critical ability is an essential prerequisite for achieving the "better society" to which Johansson (1970) refers. Under overall goals, democracy and equality have formed the most dominant goal areas. Between these overall goals, which dominate in this goal debate, and certain personality-forming goals, there is a clear connection. Many of the personality-forming goals probably are necessary prerequisites for the individual to be able to function in a democratic society, regardless of how this is defined. Insight into the functions of the present-day society is necessary if one is to be able to act as a citizen in a development aiming at changing the present society.

3. An Emotive and Descriptive Meaning of the Concept of School Democracy

The summary is based on the report:

Idman, P. *Inställning till skoldemokrati bland skolledare: En explorativ studie. / Attitudes towards student democracy among school leaders: An explorative study. / Pedagogisk-psykologiska problem (Malmö School of Education), No. 120, 1970.*

3.1 Introduction

There appears to be a difference in the views expressed on the one hand in the curriculum and on the other in the Education Act and the school statute. The latter stress politeness and respect and set up the goals of the school as being primarily the acquisition of knowledge and only secondarily personality training. The curriculum speaks of independence and cooperation and gives priority to the goals of the school in the opposite order, i.e. first personality training and then the acquisition of knowledge.

The traditional authority, as defined e.g. by Israel (1970), is based on the idea that order and discipline in the classroom is a prerequisite to the teaching. The teacher's authority is founded to a large extent on the formal position that he has and on his ability to make the pupils obey him. This type of authority motivates his measures by referring to his position in the hierarchy. The person who occupies a position as a superior can have expert knowledge, but the authority is based not on this but on the superior's position of power. It cannot be questioned. The traditional authoritarian does not need to defend himself against criticism. Criticism need not even be allowed. It can be brushed aside as unwarrantable, as a lack of respect, as a disciplinary offence. The traditional authoritarian can find support for his authoritarian behavior in the Education Act.

The other type of authority, as described by Israel, is what is called rational authority. This is based on the idea that the teacher's primary task is to create motivation in the pupils for taking an active part in the school work. The teacher's task then becomes less to play the role of the superior and more to be the expert and coordinator. The rational authority cannot found his authority on his position, but must rely on his qualifications. He must expose himself to criticism, and his qualifications can be questioned.

Since the curriculum and the Education Act appear to express partly differing views of the school, views that can satisfy both a traditional and a rational position of authority, it is only to be expected that teachers, pupils, school leaders, parents and others associated with the school also have differing views about the school's goals and about how the school's work can best be arranged.

3.2 Purpose

Among those active within the school, school leaders undoubtedly hold a key-position when the question of school democracy arises. Taking into consideration the factors mentioned above, we considered it to be of interest to study school leaders' interpretation of the concept of school democracy and their attitudes towards pupil participation. The following questions are among those dealt with:

1. which areas (amenities, order, working hours, economy, content of teaching and methods) are suited to cooperation,
2. the forms for this cooperation,
3. at which school levels these forms can be applied,
4. representation in students' council and cooperation committee and decision-making status for these bodies,
5. qualities that are essential for an individual to be able to function in a democratic society,
6. the extent to which the school today develops these qualities,
7. which activities can be assumed to promote the development of these qualities.

3.3 Procedure

3.3.1 Questionnaire

For the present purpose a questionnaire was constructed, which can be divided into three parts:

Part 1: In this the respondents are to answer questions concerning the areas suited to cooperation, the forms for this and the school levels for which the forms are suitable (cf. points 1—3 among the problems listed above).

The right of co-decision has been divided into five degrees, from an authoritarian to a democratic pole. The five degrees have here been designated as follows:

- I. *The autocratic form.* School leaders and teachers (in consultation or independently, depending on the nature of the matter) decide in accordance with what they think will best serve the interests of the categories concerned.
- II. *The advice form.* School leaders and teachers (in consultation or independently, depending on the nature of the matter) come to a decision, after having obtained advice from the categories concerned.

- III *Group representation.* All categories concerned are to have one vote each in a decision-making body.
- IV. *Representative democracy.* All categories concerned are to have the number of votes that corresponds to their numbers. Representatives for these categories make the decisions.
- V. *Referendum.* The opinion held by the majority of the individuals concerned is acted upon.

Of these five types of decision-making, representative democracy and referendum may appear to be totally unrealistic in a school situation. It should be remembered, however, which areas the respondents are to consider, e.g. amenities and order. It can be worthwhile here to quote the curriculum that was valid at the time when the investigation was carried out, in which it was said:

"It is in many cases natural to let the young people themselves take over tasks and duties affecting e.g. their welfare and leisure time and the promotion of a pleasant atmosphere in the classroom and the school." (1962 curriculum, p. 54.)

It has been taken for granted that the autocratic form is the most authoritarian and the referendum the most democratic. The distinction between representative democracy and referendum can perhaps give rise to discussion. In our opinion a referendum can imply — insofar as this form of decision-making is practicable from a technical aspect — a very important activation of the individual in the system, and that the decisions made by a referendum system are not simply representative for the representatives only, which can happen in a representative democracy.

Part 2: In this, the respondents are to answer questions about representation on the student's council and cooperation committee and the decision-making status of these bodies (point 4 in the list of problems given above).

Part 3: In this the respondents are to answer questions about what qualities are essential for an individual in a democratic society, the extent to which today's school develops these and the activities that can promote the development of these qualities (points 5—7 above).

3.3.2 *Groups studied*

The groups studied consisted of school leaders (directors of education, headmasters and directors of studies) in Malmöhus county in the spring of 1969.

The possibility of generalizing the results of the investigation to apply to school leaders in other Swedish counties must be said to be relatively good. In a study of tasks of a regional nature for school leaders, Alehammar (1969) reports that representatives of the County Education Boards and the National Board of Education have assessed Malmöhus county as being one of five counties, the situation pattern of which can be regarded as representing the country as a whole.

Two different ways of collecting the questionnaires have been used:

Group questionnaire: In this 63 school leaders participated. 40 (63%) of these were directors of education and headmasters, 23 (37%) directors of studies. This group of school leaders held appointments in the south and

eastern region of the county (Trelleborg, Ystad and the surroundings of these towns). There is no additional information concerning this group, since the respondents were anonymous. Only the questions in Parts 1 and 2 of the questionnaire were put to this group.

Postal questionnaire: 146 question forms were sent out and after reminders, 119 processable forms were received back. 81 (68%) of these have been answered by directors of studies and headmasters, 38 (32%) by directors of studies. This group of school leaders hold appointments in the remaining regions of the county. These questionnaires also contained the names of the respondents. In this way it was possible, with the help of the County Education Board, to obtain a certain amount of information about both the school leaders who answered the questionnaire and the group of 27 school leaders, who did not answer. This information covered: locality of school, type of appointment, size of school, school level(s) and sex.

3.3.3 Non-response

As has already been mentioned, a group of 27 school leaders did not answer the questionnaire. The non-response in the postal questionnaire consists of 18.5% of the total number of questionnaires sent out. If the group and postal questionnaires are counted together, the non-response is 13%. This last figure means that of the county's 209 school leaders, 182 answered the questionnaire.

The χ^2 calculations show that the non-response material in the postal questionnaire group does not deviate from the response data on the 5% level with regard to the background variables studied (i.e. that the non-response is random).

3.4 Results

3.4.1 Part 1: Areas for cooperation in school

The areas that are dealt with in this section are "amenities", "order", "working hours", "economy", "content of teaching" and "method of teaching". As far as "amenities" is concerned, about 60% consider that the two most authoritarian forms of decision-making should be employed in grades 1—6. The advice form is considered to be the most suitable decision form. About 20% consider, however, that group representation should be applied at this school level. At the other school levels the respondents are of the opinion that group representation is the most suitable form. Only a few percent have chosen representative democracy and referendum. With the exception of grades 1—6, only a negligible proportion of the respondents have considered that the autocratic form is suitable.

With regard to "order", the majority of the respondents are, as in the amenities category, of the opinion that the two most authoritarian forms should be used in grades 1—6. The advice form and group representation are the most-frequently chosen forms in the other school levels. With the exception of grades 1—6, the autocratic form has met with no sympathy.

When it comes to "working hours", the great majority of the respondents

have thought that the two most authoritarian forms should be used in grades 1—6. The advice form is that most often chosen for all school levels. Apart from the advice form, group representation has to a somewhat greater degree been preferred to the autocratic form for pupils above grades 1—6. Representative democracy and referendum have seldom been chosen.

On the question of "economy", the two most authoritarian forms of decision-making dominate.

With regard to "content of teaching" and "method of teaching", the advice form is that most chosen. Only a very small part of the respondents have chosen representative democracy and referendum.

The main results from Part 1 can be summarized as follows: The advice form, i.e. school leaders and teachers make the decision, after having listened to advice from the categories concerned, is the one most often chosen. Next comes the autocratic form, i.e. school leaders and teachers make the decision (without having obtained advice from the categories concerned). Group representation has also received relatively many votes while the two most democratic forms of decision-making, representative democracy and referendum, have not been very popular among the school leaders.

3.4.2 Part 2: Students' council and cooperation committee

This part consists of four part-questions. The respondents have been asked whether they think that the pupils at different school levels should be represented in the students' council and on the cooperation committee, and whether these bodies should have a certain decision-making status.

The main results from Part 2 can be summarized as shown below.

1. All consider that pupils in grades 7—9 and in the upper secondary school should be represented in the students' council, and almost all consider that these pupils should be represented on the cooperation committee.

Opinions on the representation of pupils in both bodies in grades 1—6 vary. Those doubtful and negative (ca 40%) to student representation have motivated this by saying that the pupils lack experience and maturity and that they are too young.

2. About 50% consider that the students' council should have a certain measure of decision-making status, when it is composed of representatives of the upper secondary school. The proportion of those positive to a certain measure of decision-making status for the students' council are 45%, 30% and 20%, when the council is composed of pupils from grades 7—9, grades 4—6 and grades 1—3 respectively. The areas within which the students' council can have the right to make decisions are said to be measures improving the amenities at the school and order.

3. About 55% consider that the cooperation committee should have a certain measure of decision-making status, when it is composed of representatives from the upper secondary school. The opinions are approximately the same concerning a cooperation committee with pupil representation from grades 7—9. When pupils from grades 1—6 are represented on the cooperation

committee, about 35% think that the cooperation committee should have some right to make decisions.

4. The respondents are consistently more positive towards student representation in the students' council than on the cooperation committee. Furthermore, the attitude towards student representation is more positive than the attitude towards decision-making status for the body.

3.4.3 Part 3: Democratic qualities and activities in school that can be assumed to promote them

This part was included only in the postal questionnaire and is intended to shed light on the respondents' views on three aspects:

1. personal qualities that are considered essential for an individual to be able to function in a democratic society,
2. the extent to which today's school develops these qualities in the pupils,
3. activities within the school that can be assumed to promote the development of these qualities.

The respondents were asked to give a number of qualities in an open question. In a second question, which had three fixed alternative answers, they were to state the degree of emphasis placed on the given quality (whether today's school develops the quality to a high degree, to a certain degree or not at all). In the open third question, the respondents were to state one or more activities that can be assumed to promote the development of the quality stated in the first question. In the questionnaire there was room to write down six different qualities with the associated questions about the degree of emphasis placed on the quality and activities that can be assumed to promote the quality.

The answers on the two open questions were categorized according to coding schedules, one for personal qualities and one for activities. In order to check the subjectivity in the coding, two independent coders have worked through the material. The main results of these controls were that even if there were some differences the ranking of the categories was the same for both coders.

The results from Part 3 can be summarized as follows:

1. Personal qualities that are considered essential for an individual to be able to function in a democratic society have been said to be primarily:
 - a. willingness to cooperate and ability to cooperate
 - b. consideration, tolerance, understanding
 - c. feeling of responsibility, good judgment and conscientiousness
 - d. ability to take initiative, independence, ability to make decisions, ability to adopt a standpoint.
2. Most of the qualities mentioned are thought to be developed to a certain degree in today's school. The following qualities are considered to be developed to a large degree:
 - a. knowledge
 - b. willingness to cooperate and ability to cooperate
 - c. energy.

3. The activities that have been given as promoting the development of qualities that are essential for an individual to be able to function in a democratic society are primarily activities in the categories labeled:

- a. "learning activities"
- b. "consultation activities"
- c. "group work".

4. Willingness to cooperate and ability to cooperate are thought to be developed best by group work and team work. Ability to adapt, helpfulness, flexibility are, after "learning activities", thought to be developed most by group work.

3.5 Final comments

Hård av Segerstad (1969) discusses "concepts" that have varying meanings for different people. A word such as "school democracy" is a typical example, in which the distinction between "emotive meaning" and "descriptive meaning" demonstrates two important sides of the same concept. Hård av Segerstad (1969, p. 3) expresses the difference in the following way:

"In a simplified form this means that for many people democracy has an attractive 'emotive meaning'. Emotionally, 'in principle', they are positive towards democracy and are agreed that it is something which should be preserved and developed. Thus even if democracy has an equivocal 'emotive meaning', varying ideas exist as to the implications of democracy, how democracy purely formally and in practice is to be defined. Democracy has no uniform 'descriptive meaning'."

In all probability it is the concept's "descriptive meaning" which is the most important when it comes to solving the cooperation functions at the schools. Empirical studies have not provided any evidence that teachers and headmasters deny the principle that pupils should be given co-influence and co-responsibility at their place of work, the school.

The first two parts of the questionnaire serve mainly to give us an idea of what has been called "descriptive meaning". When it comes to the qualities in Part 3 of the questionnaire, it is to a greater extent the emotive meaning that is taken up.

In the last case, when a request is made for personal qualities that are considered essential for an individual to be able to function in a democratic society, qualities are named, which witness to a positive "emotive meaning" in the concept of democracy: willingness to cooperate and ability to cooperate, consideration, understanding and tolerance, ability to take initiative, independence, ability to make decisions and ability to adopt a standpoint, to name the most frequent of them.

When, on the other hand, it is a question of putting the concept of school democracy into operation (in Part 1 of the questionnaire), it emerges that the consultation form and the autocratic variation are the alternatives most often chosen. Here we obviously find — on the descriptive level — a more reserved attitude in many of the respondents.

4: Cooperation in Teacher Training: Some Studies of Opinion

The summary is based on the following reports:

Idman, P. Samverkan mellan lärare och lärarkandidater i lärarutbildningen: Några opinionsdata. /Cooperation between teachers and student teachers in teacher training: Some data on opinions./ Pedagogisk-psykologiska problem (Malmö: School of Education), No. 132, 1971.

Idman, P. Samverkansopinioner inom lärarutbildningen: En studie av opinionsutvecklingen under några terminer. /Opinions on cooperation within the teacher training sector: A study of the development of opinions during a few terms./ Pedagogisk-psykologiska problem (Malmö: School of Education), No. 180, 1972.

4.1 Background

The introductory sections (cf. p. 14) discuss the role of teacher training in the school society and take up the question of democracy both from the aspect of general democracy and from an educational aspect. The following hypothesis is worth repeating: The democratic forms of work that the student teachers are given the opportunity of trying out during their teacher training will probably serve as examples and influence their attitudes towards different forms of cooperation in their future work. The most important questions behind the empirical studies presented below are then:

- (a) How does the teacher training sector utilize the opportunities offered for achieving the change in attitudes which seems necessary if many of the goals of the modern school are to be realized?
- (b) Does the teacher training create among the new generation of teachers an enthusiasm for the democratic goals of the school?

4.2 Opinions on cooperation 1969

4.2.1 Purpose

The purpose of the present investigation is to study what teachers and student teachers at the schools of education feel about a number of questions concerning, among other things, cooperation and influence one year after the 1968 School of Education Act had come into force.

4.2.2 Procedure

4.2.2.1 Questionnaire

A questionnaire was constructed, with a somewhat varying design for the sub-groups of the investigation. The questionnaire starts with questions about the respondents, such as school, line, term and sex for the student teachers.

In the student teacher questionnaire, these "background questions" are followed by questions concerning the student body. With the exception of these questions, the questionnaires for teachers and students are for the most part the same. These common parts of the questionnaire ask about:

- (1) experienced relations in cooperation
- (2) desired relations in cooperation
- (3) decision-making.

The majority of the questions have fixed or partly fixed alternative answers, while some questions are completely open, i.e. with no alternative answers.

The questionnaire was used both in group surveys and in postal surveys.

4.2.2.2 Groups studied

The target population consisted of teachers and student teachers at all the schools of education in the country. The groups surveyed consisted of a 10% random sample from this population.

Table 11. Distribution of groups studied over schools of education.

	Teachers		Student teachers	
	Number	%	Number	%
Stockholm	16	11	96	18
Göteborg	26	19	123	13
Malmö	14	10	98	17
Uppsala	6	4	46	6
Umeå	4	3	32	5
Linköping	6	4	48	6
Other towns	63	45	274	35
Not stated	5	4	-	-
Total	140	100	717	100

The schools named are those that in addition to class teacher training also offer subject teacher training. These schools also have affiliated research departments in education.

Table 12. The groups of teachers and student teachers studied at the schools of education: Distribution between sexes.

	Teachers		Student teachers	
	Number	%	Number	%
Men	102	73	220	31
Women	35	25	495	69
Not stated	3	2	2	0
Total	140	100	717	100

The table reveals that the majority of the teachers are men, while most of the student teachers are women.

4.2.2.3 Non-response

In order to investigate the response material's representativeness, χ^2 analyses have been carried out, in which the response and non-response data are compared in a number of background variables that are important for the study: for the student teachers, "sex", "line/term", "type of school" and "locality of school"; for the teachers, "sex", "subject", "type of school" and "locality of school". "Subject" has for the teachers been divided into arts, science, social and practical subjects.

Table 13. The number of persons selected for the experiment and the number of processable questionnaires received from the randomly sampled groups of teachers and student teachers from schools of education.

Survey groups	Size of survey group	Answers received		Non-response	
		Number	%	Number	%
10 % sample of all student teachers at schools of education in Sweden	957	717	74.9	240	25.1
10 % sample of all teachers at schools of education in Sweden	166	140	84.3	26	15.7

The χ^2 tests carried out show no significant deviations for non-response in relation to the data in the base variable "sex".

The base variable "term" has given a significant deviation in the student teacher group. The first term is under-represented in the non-response, while the second and third terms are over-represented. With regard to "locality of school", there is no significant deviation.

4.2.2.4 Some processing questions

The distributions for the questions that are common to both sample groups have been tested (t test) in order to investigate possible differences in the opinions of teachers and student teachers. These quantitative questions have in addition been analysed from the point of view of certain background questions (t test). For all the tests we have chosen a significance level of .05.

For the t tests that have been carried out on distributions over background questions with more than two categories, i.e. all except "sex", there is a "dependence". If the test is independent, the null hypothesis is rejected incorrectly about $.05 \cdot n$ times, in which n is the number of tests. With tests on the same groups, however, we do not know how often the null hypothesis is rejected incorrectly. It is more correct to use analysis of variance instead of t tests. We have tried out both methods on the questions to the respondents in the original samples of teachers and student teachers at the schools of education. The analyses of variance have been carried out with the standard program BMD07D (Dixon, 1967). Subsequently we have "manually" tried out contrasts with Scheffé's method (Winer, 1962, p. 88) for questions with significant F ratios. The analyses of variance resulted in a large number of significant F ratios. A significant F ratio implies that at least one "contrast" is significant. Scheffé's method is an extremely time-consuming procedure, and there was no standard program at the Computing Centre in Lund for this method of testing contrasts. Parts of the material have been both t analysed and variance analysed with subsequent "manual" contrast testing. Comparisons made have shown that the two methods have produced almost identical results with regard to "significances".

All the conclusions drawn in the following summary of results are based on significant t test values.

4.2.3 Results

Students' Union questions

The majority of student teachers do not participate in students' union elections. The "average" student teacher is personally acquainted with one elected representative in the union and has heard of three. Approximately 25% of the student teachers think that the contact between the student teachers and their elected representatives in the union is good, while about 40% think it is bad. Roughly half the student teachers are satisfied and half dissatisfied with the information they receive on the decisions taken by the students' union council. More than half the student teachers think that both teachers and student teachers have a positive attitude towards that part of the work of the students' union that covers administration. Half of the student teachers but only about 30% of the teachers think that a course on students' union issues should be included in the timeable. Only a small proportion of the two groups believe that the President and council of the students' union play an important role in the the decision-making at the school.

The student teachers have to a large extent a critical attitude towards the contact between individual student teachers and the elected representatives in the union and a critical attitude towards the information they receive about what the students' union council decides.

Cooperation functions (experienced relations)

The cooperation between the student teachers when it comes to acting together for a common end is felt by the student teachers to function "neither well nor badly". The cooperation between teachers and student teachers is felt above all by the teachers, but also by the student teachers, to work well. Three-quarters of the teachers and one-third of the student teachers consider that sufficient consideration is paid by the school authorities to the opinions of the teachers. The student teachers think that both the contact with the teachers and the contact with their fellow students is good. Roughly half of the student teachers consider that you "land in a lot of trouble if you try to change something you are dissatisfied with". The student teachers feel that they have relatively small chances of influencing what happens at the school, but that the teachers have a somewhat greater chance. Teachers and student teachers differ in their opinions on the amount of influence over the goals of the teaching that the student teachers have, but reveal a similar attitude towards a number of the goals for teacher training listed in the questionnaire. The student teachers are almost consistently dissatisfied with their influence within a number of areas, while the teachers to a greater extent consider that the student teachers have a satisfactory amount of influence.

In summary, the "close relations" seem to function well, while above all the student teachers feel dissatisfaction with their opportunities for asserting influence outside the small groups.

Cooperation functions (desired relations)

The majority of both teachers and student teachers consider that some form of general ballot should be introduced for more important questions affecting the school and a high proportion say that they would participate in such a ballot if it came into practice. Teachers and student teachers are relatively agreed that of twelve seats in a decision-making body, two should be allotted to the school leaders and two to the "other" staff. Opinions differ somewhat as to how the rest of the seats should be distributed. Both teachers and student teachers want the right to appoint the majority of the remaining eight seats. Both groups agree that when "choosing" a cooperation body at the school, a body with only advisory status is the least desirable alternative.

There are above all two points of interest that have emerged in this section, namely the strong interest in general ballots and the conviction that a cooperation body at the school of education should have decision-making status.

Decision-making functions

Both teachers and student teachers reveal a lack of "knowledge" of the existence of the councils and committees at the school of education. As a result, a very large proportion of the respondents do not know how the general faculty board ("lärarråd"), the President's board ("rektorsnämnd"), and the educational councils ("utbildningsnämnd") function. Compared to the teachers, the student teachers regard the various cooperation bodies at

the school as being less important. Both teachers and student teachers consider that the President plays the most important role in decision-making at the school. The student teachers and their representatives on the various bodies are considered by both teachers and student teachers to be of little importance.

The answers to the questions in this section have shown in particular that the majority of teachers and student teachers know little about the different cooperation bodies and "imagine" that the President, director of studies and the bodies in which these persons preside play a very important part in the decision-making at the school. The student teachers consider that they are excluded from the "established decision machinery".

Analyses of distributions for a number of sub-groups among student teachers

Analyses of the distributions in a number of questions divided into background variables have shown, among other things, that male student teachers are more dissatisfied than their female counterparts with some "students' union functions" and "experienced relations in the cooperation function".

The student teachers in their first term are more satisfied with the contact between student teachers and less satisfied with the contact with the teachers. As a possible consequence of this situation, they wish to have more student teacher representatives in a cooperation body at the school. The conditions may be the same for student teachers in the primary teacher course (P-course, grades 1—3) who, compared to student teachers in other courses, are less satisfied with some "students' union functions" and "experienced relations in the cooperation function". The student teachers in the P-course want proportionately larger student teacher representation in a cooperation body at the school.

The student teachers taking the course for subject teachers are in relation to the student teachers taking the class teacher courses more negative towards some of the "students' union functions" but more positive towards some questions in "experienced relations in cooperation functions". The student teachers in the subject teacher line are less positive than those in the class teacher lines to the most "far-reaching" model for a cooperation body at the school. The student teachers in the subject teacher line consider in relation to those in the class teacher line that the student teachers are of less importance and the teachers of more importance for decision-making at the school.

The student teachers taking the special teacher course stand out clearly as most positive towards "experienced relations in the cooperation function". They, as well as the student teachers in the subject teacher course, are less positive than the student teachers in the class teacher course towards the most far-reaching model for a cooperation body. The student teachers in the special teacher course, however, think to a lesser extent than student teachers in other courses that the student teachers are of little importance for decision-making at the school.

The student teachers at the schools of education for class teachers are

more positive towards "students' union functions". They are less satisfied with the function of the educational councils, and they consider that the educational councils are less important. They think to a greater extent than the student teachers at the other schools of education that the President's board holds a very important position. The student teachers at the schools of education for class teachers are less dissatisfied with their amount of influence.

The student teachers at the three largest schools of education (Stockholm, Göteborg and Malmö) are less satisfied with the cooperation between the student teachers when a combined effort is needed to carry through some demand. With the exception of the student teachers at the Stockholm School of Education, those at the schools of education for subject teachers differ from those at the schools of education for class teachers, with occasional exceptions, above all on the issue of "students' union functions", in that the students at the subject teacher schools are less satisfied with the conditions dealt with in this section.

The discussion is based on differences between distributions. When no mention is made of differences, it is a question of similarities, which (naturally) predominate. Irrespective of "sex", "school" etc. the student teachers at the Swedish schools of education displayed a relatively similar attitude towards most questions.

4.3 Studies of the development of opinion during a few terms

4.3.1 Purpose

In order to follow the development of opinion on the issues concerned (cf. 4.2.1 above), new measurements were carried out in 1970 and 1971 among the student teachers at the schools of education in Kristianstad and Malmö.

4.3.2 Procedure

4.3.2.1 Questionnaire

When the second measurement was taken in Kristianstad during the spring term of 1970, a questionnaire was used that was slightly modified compared to the one used in the investigation of 1969. On this second occasion in Kristianstad, the questionnaire did not include questions concerning the students' union. In addition a few other questions were also excluded. The immediate reason for these changes was that this second questionnaire was to be used not only in Kristianstad but also in another study with another purpose (cf. Part 6 below). When we compared the first and second studies, however, only identical questions were used.

For the second measurement in Malmö, the same questionnaire was used as in the 1969 study.

4.3.2.2 Groups studied

The groups studied consisted primarily of student teachers in the first year

of the class teacher lines at the schools of education in Malmö and Kristianstad. The first measurement was carried out in the spring term of 1969 at both schools and the second measurement in 1970 in Kristianstad and 1971 in Malmö. A further group is included, namely the student teachers who answered the questionnaire on both occasions at Kristianstad School of Education (this group is denoted in the following tables as "Kristianstad rep. meas."). This latter group, which consisted of students doing terms 1-3 in 1969 and terms 3-5 in 1970, is of particular interest for the study, since in their case one can speak of changes of opinion in a more direct sense.

Table 14. Size of groups analysed.

	1969	1970	1971
Malmö P_1+J_1	149	-	135
Kristianstad P_1+J_1	91	82	-
Kristianstad rep. meas.	111	111	-

P=Primary teacher course: training teachers for grades 1-3.

J=Junior teacher course: training teachers for grades 4-6.

The motive behind the choice of these groups for the study is that they were large enough to permit meaningful statistical analyses.

4.3.2.3 Non-response

For the non-response in the 1969 study, see Idman, 1971 a, in which it is shown that the non-response was slight among first-term students.

The non-response in measurement 2 is shown below:

Malmö P_1+J_1 31 (= 18.4 % of the total group studied)

Kristianstad P_1+J_1 14 (= 14.5 % of the total group studied).

Calculations of χ^2 show that the non-response material does not deviate from the response material with regard to "sex" and "line" at the 5 % level (i.e. that the non-response is in these respects random).

4.3.3 Results

As with the 1969 study, the following material is presented under four main headings:

- (1) Students' union questions
- (2) Cooperation functions (experienced relations)
- (3) Cooperation functions (desired relations)
- (4) Decision-making functions.

As has been seen above, distributions have been studied for two measuring occasions for three survey groups: (a) P_1+J_1 in Malmö, (b) P_1+J_1 in Kristianstad and (c) student teachers in Kristianstad who participated on both occasions.

The distributions for both measuring occasions have been tested for

significance with t tests. We have for all the tests chosen .05 as the significance level.

In a few cases the n figures are relatively small and for this reason the results in the questions concerned should be interpreted with caution.

Studies of the differences between student teachers in the first terms (1—2) and student teachers doing terms 3—5

Since mainly term 1 is included in the present study of the development of opinions, the results are given below of comparisons made in the 1969 study:

1. Student teachers in the two first terms were more satisfied with the cooperation between student teachers when some common demand was to be carried through.
2. The student teachers in the first two terms felt the contact with the teachers to be less satisfactory.
3. The student teachers in the first two terms were more positive towards their amount of influence over the disposition of rooms.
4. The student teachers in the first two terms of the primary teacher line considered to a lesser extent that one lands in "a lot of trouble" if one tries to change something one is dissatisfied with.
5. The student teachers in the first two terms of the primary teacher line "believed" more in the student teachers' influence on the goals and methods of the teaching.

In the section "Cooperation functions (desired relations)", it emerged that the student teachers doing terms 1 and 2 wanted, compared to those doing terms 3-5, more student teachers and fewer representatives of the rest of the staff in a decision-making body.

In the section "Decision-making functions", there were no significant differences between students doing terms 1-2 and 3-5.

We shall now go on to deal with the actual investigation, whereby it will be possible to place the comparisons between terms 1—2 and 3—5 presented above in relation to the results obtained here.

Students' Union questions

Since the present study was conducted only at the schools of education in Kristianstad and Malmö, a few points will be given here and in the following sections from the 1969 study concerning the state of opinions at these schools of education compared to the other schools in the country.

On students' union questions, the schools of education in Malmö and Kristianstad did not differ from the national sample in the study of 1969. These questions were taken up on the second measuring occasion in Malmö only.

On a number of points we have been able to show that the student teachers who participated in the 1971 study had a more positive attitude towards certain questions concerning the students' union, such as better contact with the elected representatives, a more positive attitude towards the administrative work of the students' union and less dissatisfaction with the information issued by the union.

The validity of these results has been confirmed by means of a number of informal interviews held both with individual student teachers and with representatives of the students' union which has become noticeably more active during recent years.

Cooperation functions (experienced relations)

In this section the schools of education in Malmö and Kristianstad differ on some points from the national sample in the 1969 study.

In the present study, we have shown that the first-termers in Malmö 1971 have a more positive experience of cooperation than corresponding students in 1969, who were in relation to the national sample more negative towards cooperation with the teachers.

The problems in Malmö 1971 were more confident that conflicts that arose could be solved than their counterparts were in 1969. In the 1969 study it emerged that the students in Malmö were more negative than the national sample and the students in Kristianstad more positive.

The evaluation of some training goals (included only in the Malmö study on the second measuring occasion) has shifted somewhat. More stress is placed on profession's training and intellectual training as educational goals in the 1971 study. This result appears to be in agreement with the way in which goal evaluation has developed at the universities during recent years. It must be emphasized, however, that the average differences in this study are very small.

The student teachers in Malmö were in 1971 less dissatisfied with their influence on the teaching than their predecessors had been in 1969. They are still not satisfied with the amount of influence they have, however. In the 1969 study the students in Malmö were more dissatisfied with the influence they had on the teaching than the national sample, while the students in Kristianstad were less dissatisfied with the influence they had on the teaching than the national sample.

Cooperation functions (desired relations)

In this section it is only the Malmö School of Education that differs from the national sample on a few questions in the 1969 study. The student teachers in Malmö were in 1971 somewhat less interested than before in the introduction of general ballots on more important questions at the school. In 1969 too the students in Malmö were less positive than the national sample to the idea of general ballots. This attitude, which appears to have been reinforced during the last few years can probably be explained by the size of the Malmö School of Education. It should be remembered, however, that the average attitude is still more positive than negative.

When a number of seats on a new cooperation body are to be allocated the teachers are "given" somewhat fewer in Malmö in 1971. In 1969 the Malmö School of Education differed from the national sample in "allocating" fewer seats in this cooperation body to the teachers.

Decision-making functions

In this section the schools of education in Malmö and Kristianstad differ only slightly from the national sample in the 1969 study. The student teachers in Malmö were in 1971 more satisfied with the educational committees than the student teachers in the 1969 study. One of the groups of student teachers in Kristianstad considers in the 1970 study that the President plays a more important part in the decision-making at the school than the student teachers had thought he did on the first measuring occasion. With regard to the other bodies and groups, no differences emerge either in Malmö or Kristianstad.

Final comment on the development of opinions

We have been able to show in a number of questions differences between the first and second measuring occasions at the schools of education in Malmö and Kristianstad. The difference between the two measuring occasions is greatest in Malmö and mostly in questions concerning the students' union and certain cooperation functions. The 1971 study in Malmö shows a more positive pattern of attitudes than that which emerged in the 1969 study.

In the account of the results given above, we have presented the main results for two groups in Kristianstad. There are only negligible differences between them. On the basis of this fact one can possibly express an assumption that the state of affairs is the same in the 1971 study in Malmö, i.e. that the results we have obtained for the first-termers are on the whole also valid for the students who have been there longer. There is no possibility of verifying this assumption, however.

In conclusion we wish to emphasize strongly that the main results obtained are that no very great changes of opinion can be established in the questions investigated during the period 1969—1971. On all essential points the results from the 1969 study appear also to be valid for the period 1970—71.

4.4 Final comments

Referring back to section 4.1, we can ask: Does the teacher training create in the new generation of teachers understanding and enthusiasm for the democratic goals of the school?

We would then like to point out that the majority of student teachers (and a large number of the teachers at the schools of education) were not aware of the existence of the committees and councils that came into being as stipulated in the School of Education Act, one year after the Act came into force. At the time of the study, the majority of the student teachers were dissatisfied with the amount of influence they had on the decision-making process at the schools.

Seen in this context, the answer to the question asked above must be no.

Dissatisfied with their influence over their own training and with no training in "democratic forms of work", the future teachers are not given the best qualifications for being able to fulfil the goals laid down in the curricula for the compulsory school for the development of school democracy.

The teacher training, in the form it had during the period 1969—71, can hardly be said to have made an active contribution to the realization of the school's democratic goals. There was a risk that the teacher training could have the opposite effect and create in the student teachers a negative attitude towards questions concerning cooperation.

5. The Development of Attitudes in Questions concerning Teacher Training during the First Term

The summary is based on:

Idman, P., Björk, K. & Streimer, I. Lärarkandidaters inställning till sin utbildningssituation: En studie av attitydutvecklingen under den första terminen. /The attitude of student teachers to their training situation: A study of the development of attitudes during the first term./ Pedagogisk-psykologiska problem (Malmö: School of Education), No. 182, 1972.

5.1. Background

It has been assumed that during the period of their training student teachers develop an increasingly negative attitude towards both the students' union and the training as a whole and that this negative development starts during the very first term of the training. We considered this to be an important area for investigation, in which better knowledge might be able to contribute to an understanding of the partly negative picture in cooperation questions that was revealed in section 4 above. Therefore an explorative study was conducted during the spring term of 1972, studying the development of attitudes towards the students' union and the training during the first term spent by student teachers at the schools of education in Malmö, Kristianstad and Kalmar.

5.2 Purpose

The investigation aims at shedding light on the following main questions:

- (1) What attitudes towards the students' union and the training do the student teachers report at the start of the first term (week 6)?
- (2) Do any changes in attitudes take place between this first measurement during week 6 and a repeated measurement in week 18?
- (3) Are possible changes in attitudes linked to one or more of the following problem areas? (a) Expectations of profession and training, (b) Information at the school of education, (c) Premises /availability, design, equipment/, (d) Fellow-students, (e) Teachers, (f) Teaching, (g) School leaders, (h) Students' union, (i) Accommodation and its location and (j) Attitude to the training situation as a whole.

5.3 Procedure

5.3.1 *Problem areas and instruments*

Starting from a number of the problem areas (including the teaching, students' union, fellow-students, teachers and premises) the problem field was divided into nine categories or apriori scales (a—i above). These were supplemented with the so called ATU scale (j) (cf. Jerkedal et al., 1966).

On the basis of the investigation categories named above, 82 items were constructed, formulated as statements with six alternative answers, ranging from a wholly positive to a wholly negative attitude. Experiences from earlier studies show that a neutral alternative answer, such as "neither positive nor negative", attracts many answers. Partly for this reason, the neutral alternative was excluded. (We are aware that there are also some reasons in favour of a neutral alternative and would be pleased to see a special method study made of this question in connection with a study of material of the type considered here.) In order to counteract the routine marking of answers, 15 items were negated. The questionnaire encompassed in addition to background variables, 82 items and the ATU scale. The same questionnaire was used on both the measuring occasions. Two sets of written instructions were drawn up for the questionnaire, one for each measuring occasion.

5.3.2 *Population and groups studied*

The groups studied consisted of all the student teachers who started their training in the spring term of 1972 in the courses for preschool teachers, primary teachers and junior teachers in Kalmar, Kristianstad and Malmö, a total of 415 persons. The distribution of the individuals over schools of education and courses is shown in Tables 15 and 17 below. There is no course for preschool teachers in Malmö.

The groups studied consist of a non-random sample of the population schools of education in Sweden. Even though this limits the possibility of generalizing the results, the three schools studied should be able to represent (a) large schools of education (Malmö) and (b) small schools of education (Kristianstad and Kalmar). For the representativity of the schools of education in Malmö and Kristianstad in similar questions, see Idman (1971 a).

5.3.3 *Timetable*

The investigation was carried out on two occasions during the spring term of 1972 with identical measuring instruments. The questions on background variables were given only on the first occasion.

The first measurement was taken in week 6. By this time the class groups had taken their final shape. A second measurement was made in week 18.

5.3.4 Groups studied and non-response

The groups studied consisted of 415 individuals, 364 of whom answered the first questionnaire, T1. The distribution of the individuals and of the non-response over the different schools of education is shown in Table 15.

Table 15. Distribution of respondents and non-response over schools of education (Tot-T1)

School	Total	T1	Non-resp.	%
Kalmar	147	143	4	2.7
Kristianstad	104	98	6	5.7
Malmö	164	123	41	25.0
Total	415	364	51	12.3

The non-response between T1 and T2 (second measurement) was 35 individuals (cf. Table 16). Most of these 35 people had handed in the questionnaire at T2, but since they had not given their names, the code number could not be identified and the questionnaire could not, therefore, be processed.

Table 16. Distribution of respondents and non-response over schools of education (T1-T2).

School	T1	T2	Non-resp.	%
Kalmar	143	136	17	11.9
Kristianstad	98	93	5	5.1
Malmö	123	110	13	10.6
Total	364	329	35	9.6

The distribution of the individuals and of the non-response from the different training courses is shown in Tables 17 and 18.

Table 17 Distribution of respondents and non-response over training courses (Tot-T1).

Course	Total	T1	Non-resp.	%
Primary	120	111	9	7.5
Junior	209	169	40	19.1
Preschool	86	84	2	2.3
Total	415	364	51	12.3

Table 18. Distribution of respondents and non-response over training courses (T1-T2).

Course	T1	T2	Non-resp.	%
Primary	111	105	6	5.4
Junior	169	144	25	14.8
Preschool	84	80	4	4.8
Total	364	329	35	9.6

The distribution of the non-response over schools and courses is shown in Table 19.

Table 19. Distribution of non-response over schools and courses (Tot. T1).

Course	Malmö	Kalmar	Kristianstad	Total
Primary	8	1	-	9
Junior	33	1	6	40
Preschool		2		2
Total	41	4	6	51

The non-response is obviously greatest in Malmö and in the junior teacher course.

5.3.5 Processing methods and levels of significance

The significance level chosen in the study for both χ^2 tests and analysis of variance is 5%. In the interpretation of the factor analyses a loading of .30 has been chosen as the bottom limit.

The following standard programs have been used (cf. Dixon, 1967, 1970).

Analysis of variance: BMD 07 D

Factor analysis: BMD X 72

Component analysis: BMD X 72

In the calculation of omega squares (Hays, 1969, pp.382—384), the estimated values have been used, since the investigation can be said to involve a sample from a larger population. In evaluating the square values, the following values have been applied:

.00—.04=low, .05—.09=medium, .10—1.00=high.

Significances with low omega squares have not been taken into consideration in the interpretation of results.

5.3.6 Presentation of apriori scales

As has been mentioned earlier, nine apriori scales were constructed on the basis of the students' unions' list of problem areas. These were supplemented with an ATU scale, to provide a comprehensive pattern of attitudes. The scales received the following designations and content:

Expectations of profession and training

This scale is composed of items intended to measure the following.

Attitudes towards one's own training with regard to:

- choice of profession
- objective influence
- relations teacher-student
- compulsory attendance
- teaching in school subjects

Attitudes towards future profession with regard to:

- tasks
- pupil contacts
- disciplinary questions
- function of school
- development of school

Information

This scale is composed of items intended to measure the attitudes to:
information from school leaders
information from teachers
information regarding literature and examinations.

Premises

This scale is composed of items intended to measure the attitudes to:
classrooms and lecture rooms
students' union facilities
canteen facilities
library
leisure facilities
means of communication between rooms.

For each of the different types of rooms, the attitude to design, accessibility and equipment has been investigated.

Fellow students

This scale includes items intended to measure the attitudes towards the following areas:
contact with students in teaching group
contact with students at school
contact with students outside school
contact with students of opposite sex
anonymity in relation to teachers
anonymity in relation to fellow students
importance of students' union for contacts between students.

Teachers

Items in this scale are intended to measure the attitudes towards:
teachers' qualifications
teachers' teaching methods
quality of teaching
possibility of influencing the teaching
teachers' attitudes towards school democracy
individual tutoring
cooperation and relationship teacher — student.

Teaching

Items in this scale are intended to measure the attitudes towards:
tests
marks
balance of theory and practical training
teaching methods
pace of teaching
usefulness of different parts of teaching
burden of work.

School leaders

Items in this scale are intended to measure attitudes towards the school leaders with regard to:
school democracy
help
confidence

Students' union

Items included in this scale are intended to measure the attitudes towards the students' union with regard to:

- information
- students' union officials
- membership of union
- union fees and their usefulness
- social significance of union
- own involvement in union activities
- union democracy
- confidence in union leaders
- relationship to organization on national level.

Living accommodation and its location

Items in this scale are intended to measure the attitudes towards:

- living conditions
- location of school of education.

5.3.7 Factor analysis of apriori scales

The purpose of the factor analysis was to check the composition of the apriori scales and whether the scales were one-dimensional. For this the standard program BMD X 72 (Dixon, 1970) was used (principal axis solution with varimax rotation). The communality value of a variable was estimated with the square of the multiple correlation coefficient between this variable and other variables. In the analyses all the factors with positive eigenvalues were rotated. In these analyses we have taken into consideration factors with an eigenvalue larger than 1.

The factor analyses showed that the apriori scales could on the whole be retained in the continued analyses. The alterations that resulted from the factor analyses were (1) that the apriori scale "Premises" was divided into four separate part-scales, namely "Premises, total", "Premises, canteen facilities", "Premises, library" and "Premises, students' union facilities", and (2) that the apriori scale "Students' union" was divided into two part-scales, "Students' union, attitudes to union" and "Students' union, own involvement in union activities".

5.4 Results

5.4.1 Attitudes of student teachers to training and students' union at start of training (first measurement)

The new students have a positive attitude towards the areas referred to in all the apriori scales (Table 20). The most positive attitudes are those towards accommodation and its location, expectations of profession and training and the teachers. The lowest values are seen in the attitudes towards the students' union.

Table 20. Results on the apriori scales.

Scale	Mean	Dispersion	Relation fig.*	Number of items
Expectations	102.61	7.83	4.46	23
Information	24.90	5.34	4.15	6
Premises	67.02	11.46	4.19	16
Fellow students	35.36	5.12	3.93	9
Teachers	44.42	6.89	4.44	10
Teaching	63.87	7.56	3.99	16
School leaders	12.58	3.60	4.19	3
Students' union	57.69	10.05	3.85	15
Accommodation, location	9.97	2.46	4.99	2
ATU scale	34.85	5.02	5.81	6

* Relation figure=Scale mean divided by the number of items.

Maximum value=6, except for the ATU scale in which the max. value=7.

The results of the investigation as far as the apriori scales are concerned show that the attitude towards the teachers and the training is very positive in the beginning.

5.4.2 Analysis of background variables

By background variables is meant here among other things school of education, course of training, year of birth and sex. In order that we might study the importance of these background variables for the development of the student teachers' attitudes, one-factor analyses of variance were carried out in respect to the various apriori scales. The analysis was intended to illuminate (a) the importance of the background variables and (b) the proportion of the total variance that can be explained by the background variables. With regard to processing and level of significance, see section 5.3.5

The result of this part-study can be summarized as follows: At the start of the training (week 6) there was a tendency in the material with regard to the attitude to the schools of education. On the nine scales showing significant differences for the variable school of education, the material shows with one exception that the attitudes at the smaller schools of education were more positive than at the larger school. The only exception was the scale Accommodation and its location, where the Malmö students were more positive.

There was also a tendency in the courses of training, although not as pronounced as in the previous case. The students taking the preschool and primary courses were consistently more positive than their fellow students taking the junior school course. The preschool course showed the highest mean value in five of the seven comparisons.

A tendency could also be discerned in the age differences. In three of the four significant differences the oldest group was the most positive. Furthermore, there was a clear difference between the sexes. The female students proved to be the most positive on all the comparisons. No tendency could be discerned for the other background variables.

5.4.3 Studies of changes in attitude between the first and second measurements

5.4.3.1 Background

This section is intended to illuminate the main problem tackled by the study, namely whether the students develop negative attitudes towards the training and the students' union during their very first term.

The purpose of the previous steps in the processing was to establish the importance of the different investigation variables as causes of variation. The factor analysis was intended to test the apriori scales with regard to their dimensionality. As was pointed out earlier, the result of the analysis showed that the scales were one-dimensional with two exceptions: the scales Premises and Students' union. The result was then that the final analysis contained 16 scales.

The analysis of variance was intended, as was said earlier, to investigate the importance of the background variables and the proportion of the total variation that could be explained by the background variables.

The analysis resulted in two background variables, School of education and Course of training, proving to be strong causes of variation. These variables were included in the final analysis of variance. The third factor in the analysis of variance consisted of the two measuring occasions.

5.4.3.2 Design

Since only two of the schools of education, Kalmar and Kristianstad, have preschool courses of training, two separate analyses of variance were needed. The investigation is designed as a $2 \times 3 \times 2$ and $3 \times 2 \times 2$ factorial experiment as shown below:

	c ₁			c ₂		
	b ₁	b ₂	(b ₃)	b ₁	b ₂	(b ₃)
a ₁						
a ₂						
(a ₃)						

Factor A: school a ₁ =Kalmar a ₂ =Kristianstad a ₃ =Malmö	Factor B: course b ₁ =primary teacher course b ₂ =junior teacher course b ₃ =preschool teacher course	Factor C: measuring occasion c ₁ =measurement occasion 1 c ₂ =measurement occasion 2
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5.4.3.3 The attitudes of the student teachers on the two measuring occasions

The comprehensive pattern of attitudes reflected in the two measurements gave the following results.

The student teachers were *positive* to 11 of the 16 variables measured, namely:

Expectations of profession and training
Information
Premises, totally
Premises, canteen facilities
Premises, library
Premises, students' union rooms
Fellow students
Teachers
Teaching
Accommodation and its location
ATU scale

Attitudes close to the *neutral* value were found for the following variables:

Premises, recess rooms
School leaders

Students' union, totally

Students' union, attitudes towards union

Negative attitudes were only found for one variable:

Students' union, own involvement in union activities

Thus the new student teachers revealed predominately positive attitudes towards their training situation on the two measuring occasions.

5.4.3.4 Development of attitudes between measuring occasions 1 and 2

A *positive* development of attitudes did not occur in any of the 16 variables measured.

Neutral attitudes or non-uniform changes were found in the following variables:

Expectations of profession and training

Information

Premises, totally

Premises, canteen facilities

Premises, library

Fellow students

School leaders

Accommodation and its location

A *negative* development of attitudes could be established in the following variables:

Premises, students' union rooms

Premises, recess rooms

Teachers

Teaching

Students' union

Students' union, attitudes towards union

Students' union, own involvement in union activities

ATU scale

The development in individual items shows the same tendency as the scales. Out of a total of 107 items, 3 show no change, 30 show a rise in the mean value and 74 show a fall in the mean value.

However, as has been pointed out earlier, the mean value differences between the two measurements are small, consistently less than one step on the scale.

5.5 Final comments

The negative trend in the development of attitudes revealed by the results of the investigation partially confirms the assumption stated above (section 5.1). But the constant marked negative development that was predicted in that context has not appeared. On the other hand it must be established that a positive trend in the development of attitudes has not occurred on a single point.

Although the first-termers as a whole showed a positive pattern of attitudes, a negative development could be demonstrated within several important question areas. There is a possibility, however, which cannot be totally ignored, that when the training starts the student teachers have an unrealistically positive view of the education and that the shift from a very positive attitude towards the teacher training to a less positive one represents a more realistic, but still positive, view of the training.

The present part-study must be seen as being explorative. The period investigated (three months) is relatively short, and there is a real need for follow-up studies.

6. Relations between Attitudes towards School Democracy and Some Personality Characteristics

The summary is based on the following report:

Idman, P. Relationer mellan attityder till skoldemokrati och vissa personlighetskaraktistika. /The relation between attitudes towards school democracy and certain personality characteristics./ -Pedagogisk-psykologiska problem (Malmö School of Education), No. 181, 1973.

The tests used have been made available in a test appendix:

Idman, P. Skoldemokratiattityder och personlighetsdrag: Ett testbatteri. /Attitudes towards school democracy and personality traits: A test battery./ Testkonstruktion och testdata (Malmö: School of Education), No. 16, 1973.

6.1 Background

In the introductory sections, the ideal teacher from the perspective of the curriculum has been described as being democratic. The chances that the individual student teachers will fulfil this ideal role have been assumed to be varying. From a pedagogical point of view, it should be of great interest to try to reveal the nature of the differences in more detail.

The students who find it difficult to work in accordance with a democratic model are naturally those who primarily need training in a democratic teacher role. The question then is whether these difficulties are such that they can be influenced and changed in the desired way. If we are to be able to explore this question deeply, it is first necessary to identify the characteristic personality-traits that differentiate between individuals showing authoritarian and democratic behaviors.

Studies of in-service teachers provide in all probability a better chance of reliable results than studies of student teachers. The former can be systematically observed in genuine teaching situations. Results from similar observation studies can be related to pupil attitudes. Where student teachers are concerned, one is in principle limited to interview and test methods, i.e. to "reported" attitudes. This is also the totally dominant method for the measurement of attitudes. We shall not go into the methodological aspects in more detail here, but merely refer to the discussion on the problems of validity (cf. p. 73). We shall also link up with the discussion in section 3 above concerning the distinction between an emotive and descriptive meaning in concepts such as "school democracy".

In an earlier study, we have been able to show that teachers and student teachers have differing opinions in a number of questions concerning concrete cooperation and decision-making situations. When asked about "the meaning of the concept of school democracy", the respondents reveal a similar attitude, however. Attitudes towards school democracy are then perhaps best measured by concrete questions, related to the student teachers' actual situation. In order to obtain a measure of the "balanced pattern of attitudes" mentioned above, the questions should also concern the situation of other groups, in this case the teachers, other staff and the pupil.

We have described above (section 1.2) some empirical studies on the rigidity-flexibility complex. We concur here with Rubenowitz's main hypothesis, namely that "In adults a general factor of flexibility-rigidity can be identified, a factor which accounts for a considerable part of the variance in thinking, attitudes and displayed behavior". (Rubenowitz, 1963 a, p. 45). We include in the rigidity complex a general authoritarian disposition and associated emotional and social rigidity, tendencies towards anxiety, stereotyped behavior, political rigidity, authoritarian attitudes towards upbringing and to measures for dealing with disciplinary problems in school.

6.2 Purpose

The purpose of the present part-study is to study in this context (1) whether there is any relationship between attitudes towards school democracy as measured by the tests described below and a number of other variables within or closely connected with the area rigidity-flexibility, (2) which special tests or test factors that within the school democracy and rigidity-flexibility complex are responsible for the main part of the co-variance (on condition that relationships under point 1 above have been established).

6.3 Procedure

6.3.1 Investigations

Reports are given below of a preliminary investigation of the class teacher students at the schools of education in Malmö and Kristianstad and a main investigation of the class teacher students at the Malmö School of Education based on these preliminary studies.

The purpose of the preliminary investigation was to choose from a large number of tests those which appeared to be most important for the problem to be dealt with in the study.

The data included in the preliminary study in Malmö had been collected for other purposes by the Department of Educational and Psychological Research during the years 1967-69. In the preliminary investigation in Kristianstad which was carried out during the spring term of 1970, test data were collected by the author, and in this collection of data tests had been chosen with direct association to the rigidity-reflexibility theory.

Working on the basis of both the results from the preliminary study and continued theoretical studies, a new collection of data was carried out in the spring term of 1972 — called the main investigation below — among a sample of student teachers in the class teacher courses at the Malmö School of Education.

6.3.2 Measuring instruments

The tests used in the preliminary investigations at the schools of education in Malmö and Kristianstad can be grouped in the following way:

Table 21. Tests used in the preliminary investigations at the schools of education in Malmö (M) and Kristianstad (K).

Measuring instrument	School dem.	Rigidity-flexibility
1. E69 (Democracy in teacher training)	M	
2. Tk/SD 70 (Democracy in teacher training)	K	
3. SDS 70 (Democracy in school)	M + K	
4. R10F (Authoritarianism)		M
5. R10D (Dogmatism)		K
6. R10R (Behavior stereotypy)		K
7. R10I (Intolerance)		K
8. SAIDA (Child rearing)		K
9. LP (Politics)		K
10. EK 9 (Need-related preferences)		M
11. Present day issues		M
12. Disciplinary measures		M

(The brief labels given with parentheses in Tables 21 and 22 are used in order to give the reader some initial data of the kind of variables involved. For more precise and detailed information, however, see Idman, 1973 (a) and the discussion below, section 6.3.4.)

The tests used in the main investigation at the school of education in Malmö can be grouped in the following way:

Table 22. Tests used in the main investigation at Malmö School of Education.

Measuring instrument	School dem	Rigidity-flexibility
1. Hidden figures (Cognitive flexibility)		✓
2. SDS 70 (Democracy in school)	×	
3. Valind L. SK (Democracy in school)	×	
4. SD 72 (Democracy in teacher training)	×	
5. SAIDA (Child rearing)		×
6. MA/Sch (Child rearing)		×
7. Disciplinary measures		×
8. Cattell's 16 PF, O and Q4 (Anxiety)		×
9. R10D (Dogmatism)		✓
10. CMPS (Psychogenic needs)		×

6.3.3 Reliability and validity

Table 23 presents reliability data, part of which comes from our own calculations, in which the estimations have been made by means of Cronbach's alpha-coefficient (α_c) (Lord & Novick, 1968, p. 87—90) as the lowest estimate of the reliability, while others have been taken from test manuals, in which "split-half" and/or re-test coefficients are given.

Table 23. Reliability data according to Cronbach's alpha-coefficient for tests included in the main investigation and split-half and re-test coefficients for some tests in the preliminary investigation.

Test	No. of items	α_c	Reliability data		Source
			Retest	Split-half	
SDS 70	30	.91(.94)*			Own calc.
Tk/SD 70, F1	4	(.68)			"
Tk/SD 70, F2	2	(.77)			"
Vahnd L/Sk	18	.80			"
SD72	52	.89			"
SAIDA	24	.83			"
MA/Sch	35	.90			"
Disciplinary measures	42	.87			"
16 PF/O, Q4	25	.61			"
R10D, tot	45	.86			"
R10D, F1	11	(.66)			"
R10D, F2	5	(.29)			"
R10D, F3	7	(.58)			"
R10D, F4	8	(.67)			"
R10D, F5	5	(.32)			"
R10D, F6	8	(.58)			"
R10D, F7	4	(.75)			"
CMPS, F1	15		.82	.75	Manual
CMPS, F2	15		.77	.70	"
CMPS, F3	15		.82	.79	"
CMPS, F4	15		.78	.75	"
CMPS, F5	15		.78	.78	"
CMPS, F6	15		.86	.80	"
CMPS, F7	15		.94	.78	"
CMPS, F8	15		.56	.52	"
CMPS, F9	15		.79	.70	"
CMPS, F10	15		.85	.77	"
CMPS, F11	15		.83	.73	"
CMPS, F1	75		.85	.84	"
CMPS, F11	75		.89	.83	"
CMPS, F111	75		.84	.80	"
CMPS, F1V	45		.83	.75	"
CMPS, FV	60		.81	.82	"
R 10 R, F1	10	(.75)			Own calc.
R 10 R, F2	8	(.56)			"
R 10 R, F3	5	(.36)			"

Test	No. of items	α	Reliability data		Source
			Retest	Split-half	
R 10 R, F4	7	(.58)			Own calc.
R 10 R, F5	7	(.65)			"
LP, F1	8	(.02)			"
LP, F2	18	(.75)			"
LP, F3	9	(.40)			"
LP, F4	4	(.20)			"
LP, F5	5	(.37)			"
R 10 I	20	(.68)			"
R 10 F, tot	25			86	Manual
R 10 F, F1	10			72	"
R 10 F, F2	6			.82	"
R 10 F, F3	7			.74	"
R 10 F, F4	7			.48	"
R 10 F, F5	5			.49	"
EK 9, 1	80		.74	.74	Sundgren, 1967, p. 16
EK 9, 2		.78	.60	"	
EK 9, 3		.87	.74	"	
EK 9, 4		.74	.61	"	
EK 9, 5		.83	.76	"	
EK 9, 6		.86	.79	"	
EK 9, 7		.79	.78	"	
EK 9, 8		.83	.79	"	
EK 9, 9		.78	.84	"	
Hidden figures**	18	.82			Own calc.

* The results from the preliminary investigation are given in brackets.

** The test has a time limit of three minutes.

Table 23 shows that for the tests included in the main investigation we have calculated α , with the exception of CMPS. The reliability values for these tests are, with the exception of Cattell's part-scales 16 PF/O, Q4, fully acceptable.

Some of the reliability values from the preliminary investigations are remarkably low (cf. e.g. LP, F1). A possible explanation of these low values can be that the student teachers had to give their names in the preliminary investigation and some of the tests touch upon relatively "sensitive" areas.

The problem of validity has been touched upon in the introductory sections. The difficulty of finding empirical criteria in studies of student teachers has been pointed out. Further, the distinction between an "emotive" and "descriptive" content in the concept "student democracy" has been discussed. Some of the conventional rigidity-flexibility tests (e.g. R 10 F and R 10 D) would seem mostly to measure an "emotive" aspect of rigidity-flexibility.

In the absence of other validity data, we present here the results in which R 10 F is included in a factor analytical concept validation (Rubenowitz, 1963 b, p. 195 ff.). Table 24 lists the tests which in Rubenowitz's investigations produced the highest loadings on the rigidity-flexibility factor. When

selecting measurement instruments for the preliminary investigation, we were largely guided by these results. The main investigation includes R 10 D, which has together with R 10 F the highest loadings on the rigidity-flexibility factor. An abbreviated Swedish version of EPPS (EK 9) was used in the preliminary investigation. This test was exchanged in the main study for CMPS, which like EK 9 is based on the psychogenic needs in Murray's personality theory.

Table 24. Loadings on the flexibility factor for the F scale and certain other variables (Rubenowitz, 1963 b).

	Psych stud. n=172	Recruits n=241
Non-authoritarianism (R 10 F)	.67	.61
Non-dogmatism (R 10 D)	.66	.44
Tolerance (R 10 I)	.56	.44
Behavioural flexibility (R 10 R)	.51	.50
Socio-economic class (High scores for low class)	.46	.04
Upbringing (High scores for "lenient" upbringing)	.45	.41
Left-wing political attitudes (R 10 I)	.38	.08
EPPS Intellectual flexibility (Sub-factors "introspection" and "changeability" together)	.36	.20
Mature, rational consideration v. affective verbalism in Himmelstrand's L scale		.42

The test was not included in this analysis.

With regard to R 10 F, Rubenowitz (1963 b, p. 11) has said that the test is sensitive to "response set". We refer back to the discussion above and are inclined to agree with Rubenowitz that the "response set" tendency is an expression of rigidity and that it serves to increase the predictive validity and lower the logical validity. Since a majority of the tests in the main investigation have a design similar to that of R 10 F, this comment on R 10 F might also apply to the others.

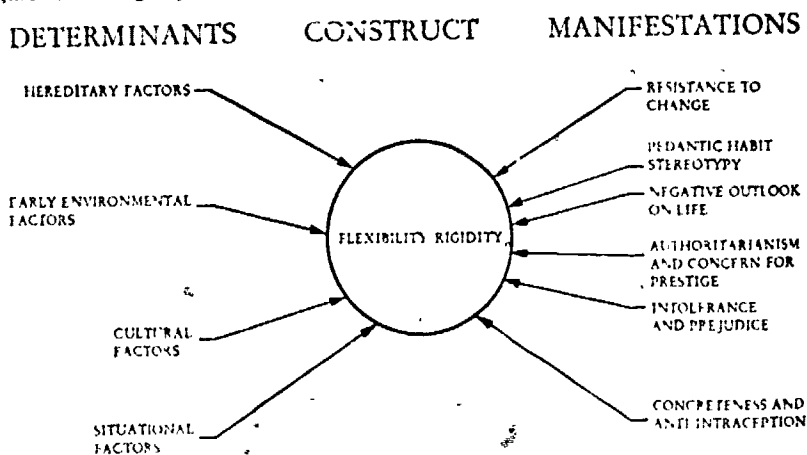
6.3.4 Discussion of measuring instruments

The school democracy tests (E 69, Tk/SD 70 and SDS 70) included in the preliminary investigation were originally constructed within the Student Democracy Project for other purposes. The two first-named questionnaires were considered prior to the main investigation to be less adequate and were replaced by a test that was newly-constructed for this study (SD 72). An additional complement was an attitude scale (Valind L/Sk), which was intended to measure the attitude towards democracy in schools (Valind, 1972).

In this way the main investigation came to include three school democracy tests (SDS 70, Valind L/Sk and SD 72). These cover the situation of the

student teachers both during their training (now aspect) and their future work as teachers (future aspect). The tests also contain questions of both a general (emotive) and specific (descriptive) nature. In order to shed some light on the choice of personality tests, we present a diagrammatic outline of the relations between the rigidity-flexibility factor and its determinants and manifestations (Rubenowitz, 1963 a, p. 232)

Figure 1. The rigidity-flexibility factor its determinants and manifestations.



The list of rigid manifestations in the figure could for our study be added to with e.g. "anxiety" and "authoritarian view of child upbringing".

Since the purpose of the present study is not to investigate the determinants of the rigidity-flexibility factor, we shall confine ourselves here to taking up a few points, in order to be able to describe the figure above.

While inborn predisposition has not been proved to have any particularly strong connection with rigidity-flexibility (Rubenowitz, 1970, pp. 60—66), it seems clear that the childhood environment has a decisive influence on this dimension (Rubenowitz, 1970, pp. 66—73). Among other things, a positive correlation could be demonstrated between rigidity, measured by R 10 F, and experienced strictness in upbringing and the frequency of physical punishment (ibid., pp. 115—116). As far as education and social background factors are concerned, Rubenowitz points out the importance of education, insofar as increased knowledge diminishes the threat of the unknown.

The measurement of rigid manifestations is one of the aims of the present study. The distinction between rigid expressions within the areas outlined in the figure and an authoritarian attitude towards school democracy may not seem very clear. But since we, like Rubenowitz (1970, p. 43), have assumed that rigidity-flexibility is an overall factor for the formation of attitudes, it should have some influence on school democracy attitudes as well. This is the basic question asked in the investigation: is there a connection between the rigid manifestations described in the figure (plus the additions we have

suggested, "anxiety" and "authoritarian attitudes to child upbringing") and authoritarian attitudes in questions concerning school democracy? School democracy attitudes can then form a specific attitude sector, potentially related to the rigidity-flexibility complex.

The examples of rigid manifestations described in the figure correspond well with the theories on rigidity-flexibility that have developed during the past few decades.

Rubenowitz's version of Gough-Sanford's rigidity scale, in the Swedish version known as R 10 R, is included in the preliminary investigation for the measurement of "resistance to change" and "pedantically stereotyped habits." We have attempted to measure "anxiety" with the sub-scales O and Q4 in Cattell's 16 PF. We have measured authoritarianism with the California group's F scale, which in the Swedish version is designated R 10 F.

Associating to Rokeach's theories (1960), we have included for the measurement of general tolerance, free from ideological elements, the "Opinionation Scale", which in Rubenowitz's Swedish version is called R 10 I. Rubenowitz's version of Rokeach's dogmatism scale is also included, under the name R 10 D.

The tests intended to measure attitudes in questions concerning child upbringing (SAIDA and MA/Sch) and the "Measures for dealing with disciplinary problems" in school contexts lie somewhat closer to a "descriptive" aspect of rigidity-flexibility. In addition, the investigation includes tests such as CMPS and EK 9, which are based on the psychogenic needs in Murray's personality theory, LP, which aims at measuring the individual's political attitudes and Hidden figures, which is a cognitive flexibility test.

6.3.5 *Groups studied*

6.3.5.1 Preliminary investigation

The groups studied in the preliminary investigation consisted of:

(1) The student teachers in the class teacher courses at the Malmö School of Education, who had in 1969—70 participated in an opinion poll on school democracy and who had in addition taken part in the department's common tests and thereby answered the tests stated in the table above. After discarding the individuals for whom we did not have complete data (= answers to all the tests with a maximum 5% internal non-response) we were left with a group of 157 persons.

(2) All the student teachers in the class teacher courses at Kristianstad School of Education during the spring term of 1970. The data collection was carried out by the Student Democracy Project and the tests used are stated in Table 21 above. This group consisted of 310 student teachers. The internal non-response reduced the group studied to 189.

6.3.5.2 Main investigation

The arrangement of the timetable made it impossible to take a random sample

of classes. We asked those in charge of the training to select approximately 200 student teachers, and the classes that came to be included in the investigation were those which could be tested within the framework of the timetable.

Table 25. Groups studied in the main investigation (class teacher students at Malmö School of Education, spring term 1972).

Class	Selected	Tested	Non-response	(%)
P2	36	28	8	(22)
J2	22	21	1	(5)
J3	45	36	9	(20)
J4	60	43	17	(28)
J6	49	38	11	(22)
P (tot.)	36	28	8	(22)
J (tot.)	130	92	38	(29)
Women	131	103	28	(21)
Men	81	63	18	(22)
Total	212	166	46	(22)

As can be seen from the table, the groups studied consist mainly of student teachers taking the junior school teacher course. Despite the fact that the primary course is under-represented in the investigation, the table shows the expected female domination of the group studied.

When only results from the students who had answered all the tests with a maximum non-response of 5% had been included in the final analyses, 145 remained.

The possibility of generalizing the results of the investigation to apply to the population of student teachers taking the class teacher courses at schools of education all over Sweden is limited by the fact that the sample is not random. There is no reason to suppose, however, that the limitations of the timetable led to any systematic error in the sampling. It is difficult to decide how far the students at Malmö School of Education are representative of the rest of the student teachers in the country as far as the rigidity-flexibility factor is concerned. With regard to school democracy attitudes, we have carried out some studies on this question as part of the Student Democracy Project. These show that the students at the Malmö School of Education, which is one of the largest in the country, deviate admittedly in some respects but have largely the same attitudes as a sample representative of the nation as a whole.

6.3.6 Processing

In order that we might examine the dimensionality of the scales, the tests were factor analysed in both the preliminary investigation and the main investigation with the standard program BMD03M (Dixon, 1967). In this the principal axis method was used with varimax rotation. The com-

munity values were estimated as described above (p. 64). All factors with positive eigenvalues were rotated. The factor analyses have primarily had the function of providing guidance prior to the construction and selection of tests for the main investigation. To avoid making the present summary unnecessarily detailed, we shall confine ourselves to presenting the decisions made on the composition of the test batteries as indicated by the factor analyses.

We have used canonical correlation analysis, in which the calculations have been carried out with the standard program BMD06M (Dixon, 1967), for studying the main question of the investigation, namely the relation between a "school democracy dimension" and a "rigidity-flexibility dimension".

Both in our own preliminary investigation and in other investigations with a corresponding goal, the correlations obtained between tests or test factors in the school democracy dimension and tests or test factors in the rigidity-flexibility dimension are seldom higher than .50. We have then asked: Can one give different weights to the different variables within the dimensions named in order to increase thereby the correlation between them?

Canonical correlation analyses have been carried out in both the preliminary investigation and the main investigation. The correlation values obtained for the canonical analyses have been tested for significance (Cooley & Lohnes, 1971, p. 175). The number of correlation values equals the number of variables in the smallest group of variables. More than one canonical correlation can be significant.

6.4 Results

6.4.1 Factor analyses

The factor analyses in the main investigation have been carried out on 145 individuals, whereby only those with an internal non-response of $\leq 5\%$ have been included. This non-response has been adjusted to a mean value. The test battery finally looked like this:

Box 3 Summary of final test battery.

Test	Decision
1. Hidden figures	total score
2. SDS 70	a) factor grades (1-6) (7-9+secondary+post secondary)
	b) factor amenities order working hours economy content of teaching teaching methods
3. Valid 1/Sk	total score

4	SD 72	factor 1 (attitude to school a) democracy as student teacher now aspect) factor 2 (attitude to school democracy as future teacher future aspect)
5	SAIDA	total score
6	MA/Sch	a) total score b) factor 1 (order) c) factor 2 (authority)
7	Disciplinary measures	a) total score b) factor F B A H S D
8	Cattell 16 P.F.O. Q4	total score
9	R 10 D	factor 1 (corresponds to Ruben- owitz's outgroup aggression) factor 2 ("general" rigidity)
10	CMPS	a) test not included b) factor 1-11 c) factor, index 1-V

For the abbreviations used, see Idman, 1973 (a).

High scores signify throughout a flexible - democratic attitude.

The letters a), b) and c) in the decision column state the alternative combinations of tests in the canonical correlation calculations.

The factors we have been able to interpret explain only a small part of the total variance, between 30 % and 40 %, fully acceptable only in the case of SDS 70, in which the interpretable factors explain 75 % of the total variance.

With the exception of Disciplinary measures, SDS 70 and SD 72, the factor analyses have not produced factors similar to the apriori scales. With regard to R 10 D, only one of the test constructor's scales has appeared in our analyses. A second factor in this test is included in the canonical correlations and we have called this factor "General rigidity".

Hidden figures and CMPS have not been factor analysed, the former because it is a speed test and the latter because of the design of the alternative answers and the multitude of items. Concerning CMPS, we refer our readers to the manual (Cesarec & Marke, 1968, p. 22 ff.).

6.4 Canonical correlation analyses

6.4.2.1 Preliminary investigation

Two canonical analyses have been carried out in the preliminary investigation, one for the Malmö material and one for the Kristianstad material.

The correlations between the school democracy tests and the rigidity-flexibility tests differ admittedly significantly from 0 in some cases, but they are consistently low. In parenthesis, it can be mentioned that correlations larger than .17 differ significantly from 0 on the 5 % level. It is debatable, however, whether such low correlations describe a meaningful psychological relationship.

Considerably higher internal correlations were obtained between the rigidity-flexibility tests in the preliminary investigation in Kristianstad. There should be a common background factor behind the expressions of rigidity that these tests aim at measuring (general dogmatic attitude irrespective of opinion, stereotyped behavior, the tendency to reject people holding a certain opinion and rejecting the opinion itself at the same time, political rigidity and an authoritarian attitude in child upbringing). Supported by these results, we can refer back to the section on the validity of the measuring instruments. Our data offer further support for Rubenowitz's factor analytical concept validation.

Significance tests made of the first canonical correlation in the two preliminary studies result in significant values on the 5% level. The result of these analyses is that a significant relation exists between the two groups of variables. By weighting the individual tests in the two groups of variables, the values obtained in the first canonical correlations are considerably higher than the correlations between individual tests in the higher variable groups, which do not exceed .25 and .31 for the Malmö and Kristianstad studies respectively. We abstain here from interpreting the significant relations between the two groups of variables (approx. .50). Despite the significances we estimated that the relationships obtained were relatively low. The preliminary investigation had shown, however, that the canonical correlation method had, through the weighting of the tests/sub-scales, considerably increased the correlations between the groups of variables, school democracy and rigidity-flexibility.

6.4.2.2 Main investigation

Tests

Taking as a starting point (a) reliability tests, (b) factor analyses and (c) canonical analyses of the preliminary investigation, a new test battery was compiled.

Since the correlations between the individual school democracy tests and the rigidity-flexibility tests in the preliminary investigation were comparatively low, we judged it to be necessary to complement the tests, especially in the school democracy group of variables. A new attitude test (SD 72) was constructed to measure the attitudes of the student teachers to school democracy during their period of training and to democracy in the schools, i.e. their future place of work. Another attitude schedule (Valind L/Sk), constructed earlier within the project, was also included. Only one of the tests from the preliminary investigation was retained, namely SDS 70.

As was mentioned earlier, the correlation between individual rigidity-flexibility tests in the preliminary investigation is considerably higher than between the individual school democracy tests. Despite this fact, we also made certain changes in the test battery in this variable area. The tests retained from the preliminary investigation were SAIDA, Disciplinary measures and R 10 D. Since SAIDA had proved to be of great importance in the preliminary study, yet another test (MA/Sch), intended to measure attitudes to child upbringing, was included. To complement this we also included two sub-scales from Cattell 16 PF (O, Q4) in order to obtain a measurement of "anxiety" and CMPS as a more general personality instrument.

Processing

Eighteen canonical correlation analyses have been carried out, by varying the test batteries in the two variable domains. The correlations have been tested for significance and it has then emerged that the first canonical correlation is significant in all analyses, the second correlation is significant in four analyses and the third in one.

Since the present study lacks direct parallels and since in addition the second canonical correlation (like the third in one analysis) in the respective analyses, though admittedly significant, is low, we shall abstain from attempting any interpretations of the second and third canonical correlations and concentrate on the first only.

Correlations

The correlations in the main investigation between the school democracy tests and the rigidity-flexibility tests are considerably higher than in the preliminary investigation. Among the school democracy tests, it is above all Valind L/Sk and SD 72, which correlate highly with SAIDA (.75 and .74), MA/Sch, 1 (.54 and .49), MA/Sch, 2 (.52 and .52), Disciplinary measures (.45 and .41), R 10 D, 1 (.55 and .53), CMPS, 1 (.29 and .31).

Within the school democracy variable group we find consistently high correlations between the different tests. The lowest correlations are those between the sub-scales in SDS 70 and SD 72, 1. The latter test ought in particular to measure a "now aspect" and the former a "future aspect".

We find within the rigidity-flexibility variable group that the cognitive flexibility test "Hidden figures" has throughout low correlations with the other tests.

SAIDA correlates comparatively highly with certain of the tests in this dimension, with MA/Sch, 1 (.60), MA/Sch, 2 (.58), R 10 D, 1 (.64) and CMPS, 1 (.45). The high correlations with the sub-scales in MA/Sch are in complete agreement with what was expected, since both SAIDA and MA/Sch are intended to measure the degree of rigid attitude towards child upbringing. The high correlation with R 10 D, 1 (Rubenowitz's version of Rokeach's scale, Outgroup aggression) also agree well with the rigidity-flexibility theory. The comparatively high correlation with CMPS, 1 (Achie-

vement) is more difficult to interpret. One possible explanation can be that the Achievement scale measures a "pushing", careerist personality dimension and that this is less child-centred.

The sub-scales in MA/Sch correlate highly with R 10 D, 1 (.47 and .54). This is in agreement with the relationship shown above between rigid attitudes towards child upbringing and a tendency to reject people with a certain opinion at the same time as one rejects the opinion itself.

"Disciplinary measures" correlates comparatively highly primarily with the sub-scales in R 10 D (.54 and .33) and CMPS 1 (Achievement). A punishing attitude in disciplinary matters appears to agree well with a general rigid attitude, such as is measured by R 10 D.

16 PF/O, Q4 (Cattell's anxiety scales) correlate most highly with R 10 D, 2 (— .38) and the sub-scales of CMPS "Aggression" (— .38), "Autonomy" (— .41) and "Succorance" (— .35).

The relationship between the tests/sub-scales within the rigidity-flexibility dimension agree largely with the data we obtained in the preliminary investigation and that have previously emerged in other studies (cf. e.g. Rubenowitz, 1963 a).

Canonical correlation analyses: Some examples

Two examples are given below, one to illustrate the main trend of the completed canonical correlation analyses, the other to show the effects when one of the most central tests of the investigation is not included.

Table 26. Canonical correlation analysis, an example of the main trend in the material

		Coeff. for the canonical variable (u)*		Coeff. for the canonical variable (v)**	
Test		u_1	Test	v_1	
Hidden figures		.12	SDS 70, amenities	.03	
SAIDA		-.75	order	-.07	
MA/Sch	F1	-.06	hours of work	.00	
	F2	-.11	economy	-.19	
Disciplinary measures		.01	cont. of teach.	.06	
16PF/O, Q4		.00	teach. method	-.01	
R 10 D	F1	-.25	Valind I/Sk	-.58	
	F2	.20	SD 72	F1	.15
CMPS	F1	-.06		F2	-.52
	F2	-.04			
	F3	.12			
	F4	.11			
	F5	.03			
	F6	.00			
	F7	.04			
	F8	-.09			
	F9	-.03			
	F10	.00			
	F11	.11			

$$r_{u_1 v_1} = .84$$

* rigidity-flexibility

** school democracy

As can be seen, it is above all SAIDA that has a high (negative) weight (-.75) in the rigidity-flexibility variable group. Moderately high weights are to be found for R 10 D's sub-scales (-.25 and .20), Outgroup aggression (negative) and General rigidity (positive).

In the school democracy variable group Valind L/Sk and SD 72, F2 have high negative weights (-.58 and -.52 respectively).

Since the individual correlations between the school democracy tests (Valind L/Sk and SD 72) and the test SAIDA are as high as .76 and .74 respectively, their weighting in the canonical analysis only increases the relationship between the groups of variables to a limited extent (to .84). Considering the high correlations between the individual tests this result must be regarded as expected.

Attitudes in school democracy questions, particularly with regard to the compulsory schools, have a high common variance with attitudes in child upbringing.

Table 27. Canonical correlation analysis, an example in which SAIDA is not included.

		Coeff. for the canonical variable (u)*			Coeff. for the canonical variable (v)**
<i>Test</i>		u_1	<i>Test</i>		v_1
MA/Sch	F1	-.36	SDS 70, amenities		.19
	F2	-.16	order		.06
Disciplinary measures	FE	.23	hours of work		.21
	FB	-.07	economy		-.07
	FA	.01	cont. of teach.		.19
	FH	-.19	teach. meth.		-.31
	FS	-.16	Valind L/Sk		-.53
	FD	-.05	SD 72	F1	.31
16PF/O, Q4		-.12	F2	-.49	
R 10 D	F1	-.60	$r_{u_1 v_1} = .76$		
	F2	.27			
CMPS	FA	-.03			
	FB	-.18			
	FC	.05			
	FD	.14			
	FE	.01			
rigidity-flexibility			** school democracy		

In this analysis $r_{u_1 v_1}$ is significant. The question that must be put prior to this last analysis is: which tests will give higher weights if we do not include the SAIDA test in the analysis? One could possibly expect that the other child upbringing test (MA/Sch) would be given higher weights in the variable group rigidity-flexibility, while in the school democracy variable group high weights would be given to the tests which measure the future aspect (Valind L/Sk and SD 72, F2).

The results are not altogether those expected. Admittedly, MA/Sch, 1 is given a relatively high weight (as compensation for the SAIDA) but an even higher weight is given to R 10 D, 1. In the school democracy variable group Valind L/Sk and SD 72, 2 ("future aspect") are given the highest weights. The first result could not have been predicted on the basis of the correlation matrix. One possible interpretation of this analysis is that, when R 10 D, 1 is given such a high weight in relation to MA/Sch, SAIDA, which is primarily intended to measure attitudes to child upbringing, is in our test battery the most effective instrument for measuring rigidity-flexibility.

6.5 Summary

The two main questions put in the investigation have been answered

There is a clear relationship between attitudes to school democracy and some of the attitude variables that we have placed in the rigidity-flexibility complex.

The tests that in the school democracy variable group are responsible for the main part of this relationship are Valind L/Sk and SD 72, factor 2. Within the rigidity-flexibility variable group it is mainly the child upbringing test, SAIDA, which contributes to the high relationship. These three tests take up to a large extent concrete issues and can be said to belong to the tests that measure the descriptive meaning of an attitude concept.

In a special analysis we have studied what happens when primarily one of the main instruments of the study, the SAIDA test, is not included. We have tentatively interpreted the result of this analysis as showing that SAIDA measures the rigidity factor better than the conventional rigidity-flexibility test R 10 D does.

The data presented here is based on reported attitudes. The measuring instruments we have used are largely based on research from the 1950's. The present study should be regarded as being explorative. Further research is necessary, within the area of test development, for example. Furthermore, validation studies, such as systematic observation studies of teacher and pupil behaviours, are desirable.

7. Final comments

The hallmark of the latter half of the 1960's, as far as higher education was concerned, was the great rise in the number of students. In Western Europe the governments in the various countries were trying to deal with the increased numbers of students by reorganizing university education. In many countries this gave rise to an intense debate on the role of the universities and the goals of higher education and a reaction from above all the students against what was felt to be a one-sided adaptation of the university to the requirements of business and industry. There was also a reaction against the dilution of the university's critical role through its gradual integration into a society that was becoming more and more bureaucratic and technocratic.

In the Swedish daily press and student press the goals in higher education were debated during the period 1967—1969, and in this debate "equality" and "democracy" were the goals most often mentioned with a positive evaluation.

In order to study the meaning of the concept "democracy" in school contexts more intensely, an explorative study was carried out among a group of school leaders. In discussing the results of this study a distinction was made between an emotive and descriptive aspect of the concept. When asked to suggest personal qualities felt to be essential for an individual to be able to function in a democratic society, the school leaders stated qualities showing a positive "emotive" meaning: willingness to cooperate and ability to cooperate, consideration, understanding and tolerance, ability to take initiative, independence, ability to make decisions and ability to adopt a standpoint, to name the most frequent.

When on the other hand it came to putting the concept of democracy into practice in the school, it emerged that our school leaders were inclined to give the pupils only a limited measure of influence. Here — on the descriptive level — the respondents revealed a more reserved attitude.

The distinction between an emotive and a descriptive meaning in a concept such as "school democracy" should lead to careful interpretations of in particular more general issues with an emotive tendency.

Marcuse (1968 a) discusses concepts such as "freedom", "peace", "law and order", "democracy" and other praiseworthy words and suggests that they have become ritualized concepts, immune to contradictions. He declares that one of the most important privileges of the ruling class is being able to

establish current definitions of words. It is they who decide that "the free world" is free and that where "law and order" reigns, law and order reigns. If a bureaucratic dictatorship rules the "communist society", if fascist states function as members of the "free world", if the welfare program of enlightened capitalism is rejected because it is called "socialism" etc., the old historical concepts are, in Marcuse's opinion, put out of action. The words lose their meaning.

We can agree with Marcuse in this argument. The quality of school democracy can basically not be determined by anything other than the structure of power and influence in the decision-making process in school issues.

Since teacher training holds a central position in the democratization of the school, we have particularly studied questions concerning democracy in teacher training.

Are new methods for cooperation tried out in the schools of education, methods which, if they prove to function well, could be tried out in the compulsory school as well? Is enthusiasm for the democratic goals of the school created in the new generation of teachers?

The aspect of the meaning of the concept school democracy, which we have particularly emphasized, is the actual influence, or the descriptive aspect, which must be seen both as the influence that one wishes as a student teacher to have over one's training situation and as the influence that one is prepared to give to others, to teachers and other staff at the school during one's training period and to one's future pupils after the training. If one is to be able to speak of a democratic attitude, there should in our opinion exist a "balance of influence" in the individual's pattern of attitudes, i.e. between the influence one wishes for oneself and the influence one is prepared to grant others.

According to the empirical studies we have carried out, the answer to the two questions above must be "no". The majority of the student teachers and a large number of the teachers at the schools of education were not aware of the existence of the committees and councils that had been appointed in accordance with the directives of the new School of Education Act and within which the formal cooperation at the schools of education was intended to take place. Dissatisfied with their influence over their own training and given no training in democratic forms of work, the prospective teachers do not appear to be given the best prospects for being able to fulfil the goals drawn up in the curricula for the compulsory schools for the development of school democracy.

We have, however, also assumed that the individual student teachers vary greatly in their qualifications for playing a democratic teacher role. Therefore we have regarded it as an important task to study the relationship between attitudes and opinions to school democracy on the one hand and certain other individual variables on the other. Correlation studies carried out showed in general that there is a clear relationship between attitudes towards school democracy and attitudes within the area rigidity-flexibility.

The highest relationship with attitudes to school democracy is to be found in the attitude towards questions concerning child upbringing; an authoritarian approach in school democracy issues co-variates with a rigid attitude towards child upbringing. Attitudes to measures for dealing with disciplinary problems and a general dogmatic approach also show high correlations with attitudes to school democracy.

Thus school democracy attitudes can be said to be integrated in a wider complex of attitudes and opinions, which in its turn can possibly imply that they are not particularly easy to influence.

Against the background of the reported studies the present author finds it reasonable that important reforms in teacher training can consist of a combination of organizational and teaching measures such as e.g.:

(1) The influence of the single student teacher over his training situation should be radically increased in order to give concepts like "school democracy" a substantial content.

(2) To guarantee this influence the forms for the democratic cooperation should be laid down and regulated in detail in the School of Education Act. Thus the meaning of the concept of democracy would be established in a descriptive way, making different interpretations of a "praiseworthy word" impossible.

(3) Systematic education and training in democratic working forms should be given each student teacher throughout the teacher training.

We have assumed that the experiences of democratic forms of work that the student teachers receive during their teacher training will serve as an example and influence their attitudes towards different forms of cooperation in their future work. If measures like the ones suggested above are taken, the teacher training should be able to contribute more actively to realizing the democratic ideals of the society and the school.

References

- Adorno, T. W. et al. *The authoritarian personality*. New York: Harper, 1950.
- Alehammar, S. Förenklad metod för urval av befattningshavare med regionalt betingade arbetsuppgifter. *Pedagogisk-psykologiska problem* Nr 79, 1969.
- Ambjörnsson, R. Marcuse och studentrevolten. *Ord och Bild*, 1968, 77 (5), 356-362.
- Asplund, Ch. Makt- och inflytandeproblematik belyst av beslutsprocessen angående UKAS I. *Statsvetenskaplig Tidskrift*, 1969, 72 (3), 249-274.
- Bergman, U., Dutschke, R., Lefèvre, W. & Rabehl, B. *Studentrevolten*. Stockholm: Raben & Sjögren, 1968.
- Bjerstedt, A. Studerandedemokrati - medplanering på olika utbildningsstadier. Projektplan. Malmö Lärarhögskolan, 1968.
- Bjerstedt, A. Icke amnesspecifika mål för universitetsutbildning. Projektplan. Malmö Lärarhögskolan, 1970.
- Brandell, G. *Skoleform og universitetskris*. Stockholm: Aldus Bonnier, 1969.
- Brown, R. *Social psychology*. New York: The Free Press, 1965.
- Burri, C. The present status of the problem of individual differences in alternative activities. *Psychol. Bull.*, 1935, 32, 443-439.
- Cattell, R. B. On measurement of perseveration. *Brit. J. educ. Psychol.*, 1935, 5, 76-91.
- Cattell, R. B. *Description and measurement of personality*. Yorker-on-Hudson: World Book, 1946.
- Cesarec, Z. & Marke, S. *Matning av psykogena behov med frågeformulärsteknik*. Manual till CMPS. Stockholm: Skandinaviska Testförlaget, 1968.
- Christie, R. & Garcia, I. Subcultural variation in authoritarian personality. *J. abnormal soc. Psychol.*, 1951, 46, 457-469.
- Cohn, T. S. Is the F scale indirect? *J. abnormal soc. Psychol.*, 1952, 47, 732.
- Cooley, W. W. & Lohnes, P. R. *Multivariate data analysis*. New York: Wiley, 1971.
- Dahlström, F. Studenternas revolt. *Dagens Nyheter*, 17/9 1969.
- Dixon, W. J. (Ed.) *BMD Biomedical computer programs*. Berkeley, Calif.: Univer. Calif. Pr., 1967.
- Dixon, W. J. (Ed.) *BMD Biomedical computer programs. Y-series supplement*. Berkeley, Calif.: Univer. Calif. Pr., 1970.
- Edwards, A. I. *Personal Preference Schedule*. New York: Psychological Corporation, 1954.
- Feuer, I. S. *The conflict of generations: The character and significance of student movements*. New York: Basic Books, 1965.
- Fleming, D. & Åberg, B. Studentrörelsen i Sverige - ett försök till analys av de politiska linjerna. *Zenit Nordisk socialistisk tidskrift*, 1970, 14, Nr 20, 14-36.
- Furhoff, I. & Hederberg, H. *Dagspressen i Sverige*. Stockholm: Aldus/Bonnier, 1968.

- Crane, N. J. (ed.) *Herbert A. Simon's life in work*. Chicago: Rand McNally, 1963.
- Crane, N. J., Cavitt, G. S. & Stone, G. C. The psychological meaning of acquiescence scale for authoritarianism. *Labour and Psychology*, 1957, 55, 98-103.
- Hays, W. *St. Ives*. New York: Holt, Rinehart & Winston, 1969.
- Hummelstrand, U. *Social pressures, attitudes and democratic processes*. Stockholm: Almqvist & Wiksell, 1960.
- Holsti, O. R. Content analysis. In Lindzey, G. & Aronson, E. (Eds.) *The handbook of social psychology* (2nd ed) Vol. 2. Reading, Mass.: Addison-Wesley, 1968. Pp. 596-692.
- Hyman, H. H. & Sheatsly, P. B. The authoritarian personality. In R. Christie & M. Jahoda (Eds.) *Studies in the scope and method of the authoritarian personality*. New York: Free Press, 1954. Pp. 50-122.
- Hurd, av Segerstedt, P. Attityder till skoldemokrati - en sociologisk undersökning. Uppsala: Sociologiska institutionen, 1969.
- Høyer, S. Textstudier i forskningen och utrikespolitik. *Internasjonal Politikk*, Nr 1, Oslo, 1965.
- Idman, P. Inställning till skoldemokrati bland skolledare. En explorativ studie. *Pedagogisk-psykologiska problem*, Nr 120, 1970.
- Idman, P. Samverkan mellan lärare och lärarkandidater i lärarutbildningen. Några opinionsdata. *Pedagogisk-psykologiska problem*, Nr 132, 1971. (a)
- Idman, P. Samverkan mellan lärare och lärarkandidater i lärarutbildningen. Några opinionsdata. *Utbildning och utveckling*, 1971, 3 (1), 32-53. (b)
- Idman, P. Forsöksverksamhet med nya samarbetsformer vid lärarhögskolan i Malmö. Erfarenheter från den första försöksterminen. *Pedagogisk psykologiska problem*, Nr 183, 1972. (a)
- Idman, P. Relationer mellan attityder till skoldemokrati och vissa personlighetskaraktäristika. *Pedagogisk-psykologiska problem*, Nr 181, 1972. (b)
- Idman, P. Samverkansopinioner om lärarutbildningen. En studie av opinionsutvecklingen under några terminer. *Pedagogisk-psykologiska problem*, Nr 180, 1972. (c)
- Idman, P., Björk, K. & Stremmer, I. Lärarkandidaters inställning till sin utbildningssituation. En studie av utvecklingen under den första termen. *Pedagogisk psykologiska problem*, Nr 182, 1972.
- Idman, P. Skoldemokrati - attityder och personlighetsdrag. Ett testbatteri. *Testkonstruktion och testdata*, Nr 16, 1973. (a)
- Idman, P. Student democracy in teacher training. Opinions, individual correlates and innovation. *Educational and psychological interactions*, No. 43, 1973. (b)
- Idman, P. Debattanalyser som sökningsinstrument. *Pedagogisk-psykologiska problem*, Nr 235, 1974.
- Engel, J. Skolan som socialt system. *Protektplan*. Köpenhamn, 1970.
- Jacobson, R. & Hinkelman, S. (Red.) *En Dödslek till Palah*. Stockholm: Tempus, 1969.
- Jasper, H. A. Is perseveration a functional unit participating in all behavior processes? *Exp. Psychol.* 1930, 2, 29-51.
- Jeskedal, A., Gardin, J. & Matheer, B. *Allt utan*. Stockholm: Personaladministrativa Rådet, 1966.
- Jönasson, I. Utbildningen. Rapport nr. del 1. Utgåst till Kap. 7 i Lagkommitteutredningen. Stockholm, 1970.
- Johansson, S. U 68. Det nya universitetet. *Hatten för vetenskapliga studier*, 1973, 5-6, 34-43.
- Kringl, M. i skollag (SFS 1967:329). *Skollagets utvärdering i skol 1968-69*.
- Kringl, M. i skollag (SFS 1967:330). *Skollagets utvärdering i skol 1968-69*.

- Kungl. Maj:ts skofstadga (SFS 1968:318). *Skolöverstyrelsens författningsbok* 1968/69.
- Iagerback, B. Effekten av ett skoldemokratiskt experiment i linje med en skolpolitisk målsättning SISK-rapport. Stockholm: Skolöverstyrelsen, 1971.
- Leavitt, H. J., Hax, H. & Roche, J. H. "Authoritarianism" and agreement with things authoritative. *J. Psychol.*, 1955, 40, 215-221.
- Lewin, K., Lippitt, R. & White, R. K. Patterns of aggressive behavior in experimentally created "social climates". *J. soc. Psychol.*, 1939, 10, 271-299.
- Lord, F. & Novick, M. *Statistical theories of mental test scores*. Reading, Mass.: Addison-Wesley, 1968.
- Lorenz, E. *Studenternas oppror*. Oslo: Pax-forlag, 1968.
- Marcuse, H. *Den endimensionella människan*. Stockholm: Aldus/Bonnier, 1968. (a)
- Marcuse, H. *Protest, demonstration och revolt*. Stockholm: Aldus/Bonnier, 1968. (b)
- Philipson, L. & Hallberg, P. A. *Mål och medel för hogre utbildning*. Stockholm: Prisma, 1969.
- Rokeach, M. Generalized mental rigidity as a factor in ethnocentrism. *J. abnorm. soc. Psychol.*, 1948, 49, 259-278.
- Rokeach, M. *The open and closed mind*. New York: Basic Books, 1960.
- Rubenowitz, S. *Emotional flexibility as a comprehensive dimension of mind*. Stockholm: Almqvist & Wiksell, 1963. (a)
- Rubenowitz, S. *R 10 F - manual*. Stockholm: Skandinaviska Testförlaget, 1963. (b)
- Rubenowitz, S. *Rubenowitz' version av Himmelstrands Lp-skala*. (Stencil) Göteborg, 1963. (c)
- Rubenowitz, S. *Utvärdering och normer för R 10 D. Rubenowitz' modifierade version av Rokeach's Dogmatism Scale*. (Stencil) Göteborg, 1963. (d)
- Rubenowitz, S. *Utvärdering och normer för R 10 R (beteendestereotypi)*. (Stencil) Göteborg, 1963. (e)
- Rubenowitz, S. *Personlighetspsykologi*. Stockholm: Aldus/Bonnier, 1970.
- Schaller, J. & Andersson, E. *Föräldrar och barn*. Göteborg: Psykologiska institutionen, 1970.
- Seale, P. & McConville, M. *Revolution: Frankrike 1968*. Stockholm: Aldus/Bonnier, 1968.
- Shuevach, B. J. Studies in perseveration: VII Experimental results of tests for sensory perseveration. *J. Psychol.*, 1936, 3, 403-427.
- Skolöverstyrelsen. *Läroplan för grundskolan*. Stockholm: SÖ-förlaget, 1962.
- Skolöverstyrelsen. *Samverkan i skolan: Främjande av goda arbetsförhållanden. Aktuell från Skolöverstyrelsen, Nr 5*, 1968.
- Skolöverstyrelsen. *Utbildningsplan för klasslärarinjer vid lärarhögskola*. Stockholm: Utbildningsförlaget, 1971.
- Statens offentliga utredningar 1973:2, Utbildningsdepartementet. *Högskolan. Betänkande av 1968 års utbildningsutredning*. Stockholm, 1973.
- Statistiska centralbyrån. *Faktorer som påverkar svarsprocenten vid postenkäter*. Stockholm, 1970.
- Statistisk årsbok för Sverige. Stockholm: Statistiska centralbyrån, 1965 och 1970.
- Stenius-Aschan, M. (Red.) *UKAS och samhället*. Stockholm: Aldus/Bonnier, 1968.
- Sundgren, P. *Lärarpersonlighet och lärarlämplighet. En undersökning av klasslärarkandidater. Pedagogisk-psykologiska problem, Nr 47*, 1967.
- *Svensk politik, utländsk politik. Arbetsmaterial i statskunskap*. Lund, 1971.
- Tarschys, D. & Tham, C. *Den nygamla vänstern*. Stockholm: Bonnier, 1967.

Titus, H. E. & Hollander, E. P. The California F-Scale in psychological research. *Psychol. Bull.*, 1957, 14, 47-62.

U68 Debatt. Mål för högre utbildning. Stockholm: Norstedt, 1969.

UNESCO *Access to higher education in Europe*. Paris, 1967.

Universitetskanslersämbetet. *Den akademiska undervisningen. Principbetänkande av-
givet av universitetspedagogiska utredningen (UPU)*. Stockholm, 1970.

Utbildningsdepartementet. *Reformerad lärarutbildning*. SOU 1970:4.

Valind, L. Inställning till demokrati i samhälle och skola: Konstruktion och utprövning
av attitydschema. *Testkonstruktion och testdata*, Nr 11, 1972.

Winer, J. B. *Statistical principles in experimental design*. New York: McGraw-Hill,
1962.

Wolff, R. P., More Jr, B. & Marcuse, H. *Kritik av den rena toleransen*. Stockholm:
Aldus/Bonnier, 1968.