This position paper focuses on issues related to equal education in small, rural schools in Sweden. Specifically, the report analyzes national statistics, reports from the National Agency for Education, and other research regarding the status of education in Sweden. Data indicate that for the 1994-95 school year, two-thirds of the schools in Sweden had less than 200 students, with a large proportion of schools having less than 100 students. In addition, small rural schools often have less than 50 students. The Swedish education system serves approximately 900,000 students. In 1993, class size averaged 22 students, but classes in rural areas had a mean of 18.9 students. Because of small class sizes, education in Sweden's small rural schools has traditionally been organized in mixed-age groups. The closing of 76 small rural schools between 1985 and 1993 was partly due to the assumption that mixed-age grouping did not offer an equal education nor meet the objectives of the national curriculum. However, research indicates that the academic performance of students from rural areas was equal to that of students in more populated, urban areas. Small rural districts tended to have the highest proportion of teachers untrained to teach specialty subjects. However, small schools have solved this problem by collaborating with neighboring schools in offering special subjects. Sparsely populated rural districts tend to have not only fewer pupils but also a relatively high density of teachers and low average class size. As salaries constitute the greatest costs, the continued existence of small, rural schools is questioned from an economic standpoint. However, the integration of preschool with primary schools in 1994 as part of the new national curriculum has helped to save small rural schools. This report stresses the need for establishing a database for examining the effectiveness of small rural schools in Sweden. Contains 20 references. (LP)
Education in Small Rural Swedish Schools:
An Initial Overview of the Field

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Göteborg University

Abstract: This position paper focuses mainly on some aspects of equivalence of education for all students (as stated by the national curriculum) in relation to small rural schools. Since 1991 several regulations in the School Act have been changed and in 1994 a new curriculum was introduced in Swedish schools. The implementation of these changes indicates interesting fields of possible research as to what the implications for small rural schools will be. When scrutinizing the official statistics and reports it was found that explicit data concerning small rural schools per se were not easily found. Existing data bases could be used in more elaborated ways for investigating small rural schools.

Sweden, with a land area of nearly 450,000 square kilometers and thus one of the largest countries in western Europe, has less than 9 million inhabitants. Moreover, as a considerable part of the population is concentrated to the urban districts in the southern part of Sweden, there are a number of very thinly populated areas in the rest of the country. Even if these sparsely populated rural districts are, to a great extent, located to the northern parts of the country, there are some in the south, particularly in the woodlands and in the island of Gotland. The irregular distribution of population, varying between 0.5 and 17.3 inhabitants per square kilometer (Stockholm not included) for different municipalities (Statistiska centralbyrån [SCB], 1995), naturally has implications for educational issues.

A majority of the compulsory schools, or nearly two thirds, had less than 200 students (SCB, 1995) in the academic year of 1994/1995. As these figures include secondary schools and schools comprised of both primary and secondary students, the proportion of smaller primary schools, ought to be somewhat lower.

As shown in Table 1 there is a rather large proportion of schools with less than a hundred students. Schools of relatively small size are common both in rural and urban municipalities in Sweden. However, small rural schools are often very small; often less or even much less than 60 pupils. Although not directly specified in these official statistics, such rural schools are possible to separate out by treating data in a more elaborated way.

As could be seen from the table the number of schools with less than a hundred pupils decreased by 76 between 1985/86 and 1992/93. It is plausible that a great part of the decrease has been the result of small rural schools being closed down.

Swedish compulsory school comprises nine years of education, the six first of which are usually looked upon as "primary education" (i.e., what is in Sweden named "lower and intermediate levels"). However, in 1994, the introduction of a new national curriculum – often referred to as Lpo94 (Utbildningsdepartementet, 1994), brought changes which implied that the sharp demarcation lines between the levels are, or at least will be, erased. Traditionally, Swedish children have commenced their education in primary school at seven years of age. Since 1991 schools are obliged to offer education for six-year-olds if the resources are available, but there is no obligation for the child to start at this age (Skolverket, 1994a).

1 Statistics of Sweden.
2 In Swedish: Läg och mellanstadiet.
3 Lpo 94 is an acronym for the Swedish title.
4 The Ministry of Education and Science.
5 From the 1st of July, 1997 the School act will be revised and thereafter there will be no possibility for the municipalities to refuse six-year-olds if the parents insist on their starting.
6 The National Agency for Education.
Table 1.  Number of schools of different sizes in Swedish compulsory education on three different occasions.

<table>
<thead>
<tr>
<th></th>
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<tr>
<td>99</td>
<td>1831</td>
<td>1755</td>
<td>1788</td>
</tr>
<tr>
<td>100-199</td>
<td>1084</td>
<td>1206</td>
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<tr>
<td>200-299</td>
<td>668</td>
<td>792</td>
<td>869</td>
</tr>
<tr>
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<td>451</td>
<td>498</td>
<td>522</td>
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<tr>
<td>400-499</td>
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<td>271</td>
<td>263</td>
</tr>
<tr>
<td>500-599</td>
<td>202</td>
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</tr>
<tr>
<td>600-699</td>
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<td>700-799</td>
<td>38</td>
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<td>22</td>
</tr>
<tr>
<td>800-899</td>
<td>21</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>900-999</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>1000-</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total number of schools</td>
<td>4731</td>
<td>4745</td>
<td>4900</td>
</tr>
</tbody>
</table>

Note. Adapted from SCB (1992, 1995).

Swedish compulsory school comprises nine years of education, the six first of which are usually looked upon as "primary education" (i.e., what is in Sweden named "lower and intermediate levels"). However, in 1994, the introduction of a new national curriculum – often referred to as Lpo94 (Utbildningsdepartementet, 1994), brought changes which implied that the sharp demarcation lines between the levels are, or at least will be, erased. Traditionally, Swedish children have commenced their education in primary school at seven years of age. Since 1991 schools are obliged to offer education for six-year-olds if the resources are available, but there is no obligation for the child to start at this age (Skolverket, 1994a).

The goals and guidelines for education, specified in the School Act (see, e.g., Djurstedt & Kastan, 1995), and the curriculum for the compulsory school system in Sweden state that the education offered to students shall be equivalent irrespective of where it is arranged. In my opinion, this might be an interesting point of departure for discussing rural primary education in Sweden, especially as keeping down the expenditure is, simultaneously, insisted on. As will be discussed later the issues of equivalent education and costs of education are intertwined and in one sense inseparable. In spite of this I will at times attempt to discuss them separately for the sake of clarity.

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7 In Swedish: Låg och mellanstadiet.
8 Lpo 94 is an acronym for the Swedish title.
9 The Ministry of Education and Science.
10 From the 1st of July, 1997 the School act will be revised and thereafter there will be no possibility for the municipalities to refuse six-year-olds if the parents insist on their starting.
11 The National Agency for Education.
This paper will give a brief summary of what can quite easily be collected from official statistics, reports from The National Agency for Education and similar widely spread materials, in addition to some remarks based on personal knowledge within the field. In conclusion some possible continuations for more elaborated research will be suggested.

Is education in small rural schools equivalent?

The Swedish compulsory education system comprises about 900,000 students. In 1993 there were on average 22.0 students per school class, whereas classes in sparsely populated municipalities had a mean of 18.9 (Skolverket, 1994a), which might be due to a high proportion of small rural schools.

Organization and pedagogy

Traditionally, education in most small rural schools in Sweden has been organized in mixed-age groups, since there have not been enough pupils to fill up ordinary age homogenous classes (Andræ Thelin, 1991). The closing down of a large number of rural schools that has been going on more or less intensively for decades is, of course, to a great extent due to urbanization and migration within the country. However, there have been fears that education in mixed-age groups is inferior to education in age homogenous groups. Thus, some decades ago, the closing down of small rural schools was partly justified by assumptions that these schools did not offer education sufficiently good to fill the demands of recent curricula (see e.g., Malmros & Norlen, 1984).

However, as pointed out by Malmros and Norlen (1984), with reference to studies by Råberg, Johansson and Marklund respectively, there was no reason to assume that children from sparsely populated rural areas did not perform equally well as other students. The investigation by Råberg of 200 children from sparsely populated rural districts in a county in northern Sweden, although carried out some years ago, is one of the most elaborated studies within the field (Råberg, 1979). Academic achievement of the children was measured with national standardized tests in the third and sixth school years and marks given in the sixth year. In addition, a variety of other data, such as teachers' estimation of school adjustment and maturity, were collected. The results were compared to those of 215 children as similar as possible to the first group but not living in thinly populated areas. It was found that children from sparsely populated areas that took part in mixed-age education obtained as good results as other children. At the end of the sixth year the rural students from mixed-age groups even tended to perform better than the control group and seemed to have a somewhat more stable and positive attitude to school and school work.

Whereas many small rural schools have been closed-down, sometimes with reference to the presumed better education in age homogenous groups in larger schools (Råberg, 1979), certain aspects of the pedagogy involved in mixed-age education has been as valuable (see, e.g., “They are all”, 1986; Malmros 1985; Östmar, 1981). Mixed-age groups have been established in many large village, town, and city schools not due to a lack of students but for sheer pedagogical reasons. Thus the number of mixed-age groups has increased dramatically in the last fifteen years (Malmros & Norlen, 1984; Skolverket, 1994a). Official statistics building on more recent data collections of school achievement often could not easily be used for studying small rural schools, as mixed-age classes in these schools are not distinguished from other mixed-age groups. It consequently becomes problematic to assess separately the performance of students from small rural schools or other groupings. Thus, when Andræ Thelin (1991) maintains that results from the national assessment of school achievement in 1989 show that students' performance in some central subjects are equally good in mixed-age and in age homogenous education, she does not separate students at small rural schools from age heterogeneous groups established for pedagogical reasons. In my opinion, it is questionable whether conclusions concerning either of these types of groupings can be drawn from results from a joint data material.

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12 Before starting my post graduate studies, I was a primary school teacher for approximately twenty years. More than half of that time I worked in small rural schools.

13 The county of Västerbotten.
The teachers

A substantial body of statistics concerning teachers is grounded on official data on the county or municipality level. Using these data is, however, also problematic. Even if the different districts or municipalities are classified in accordance with their structural status, for example, large cities, medium-sized towns, sparsely populated rural districts etc. only means and/or frequencies are provided and no clear-cut picture of small rural schools (or any other type of school that might be in focus for the interest) is obtained. However, when it is shown that districts with the highest proportions of primary school teachers not pedagogically trained to a high degree overlap districts that are sparsely populated (Skolverket, 1993b) it might be suspected, that it is the small rural schools that are affected.

There are additional indications in this direction constituted by the fact that several non-coastal municipalities in the north of Sweden (which are thinly populated areas) have high percentage of teachers without formal pedagogical qualifications. Moreover, the data collected with questionnaires by the National Agency for Education showed that the teachers not pedagogically trained are unevenly distributed throughout the municipalities and are more frequent in peripheral areas than in the central parts. Furthermore, teachers in peripheral schools are not only to a higher extent not pedagogically trained, they also tend to stay for rather short periods of time, moving to more central schools when possible.

Swedish primary teachers traditionally teach a majority of school subjects. More recent teacher education is divided into two main lines, which implies a choice of special training directed either towards mathematics and natural science or towards Swedish and social science. So far there does not seem to be much attention paid to this reform when hiring teachers. When and if the system is fully accepted, the implications for the small country schools (if any) need to be investigated. There are, however, a few subjects traditionally not taught by the classroom teacher, namely craft shops for wood-working and sewing. Naturally, in many cases there are too few students at a school to employ these special types of teachers full-time. Small schools (rural as well as urban) have usually solved this problem by collaboration with neighbour schools under a larger administration entity and employ such teachers jointly. Voluntary music education is also often organized with the assistance of ambulating "municipality music school" teachers.

What are the rural schools allowed to cost?

Sparsely populated rural districts tend not only to have fewer pupils per school but also a relatively high density of teachers and relatively low average class sizes (Skolverket, 1992, 1994a, 1995, 1996). As salaries constitute the greatest part of the total costs for schooling the continued existence of a small school may be called into question from economical aspects. In addition, there are other expenditures that are relatively high for rural schools, for example, small schools’ premises are more expensive per square meter and pupil (Skolverket 1993a).

However, the closing down of a rural school that is considered by the authorities as too small to offer equivalent education and/or too expensive to run is seldom an unproblematic affair. The consequences, both for the children that would have to undertake long and tiresome journeys every day to and from another school and for the village as such, are often controversial. Sometimes school strikes and/or other actions of protest are carried out. On a few occasions parents have organized alternative education not in accordance with the law. However, from July 1992, due to new regulations for the distribution of financial support from the municipal authorities, very small legal private schools have been possible, for example, in sparsely populated areas (Skolverket, 1994b, p. 9).

Pre-school integration

An integration of pre-school and lower primary groups has yielded a solution, frequently used in the last two decades to save small rural schools from being closed down. Through such solutions, staff and school facilities may be used more effectively and joint expenditures thus decrease. Projects aiming at differing degrees of integration in combination with mixed-age education were carried out also with the assumption of pedagogical benefits (see, e.g., Ljungvall, 1979) in the late 70’s and 80’s, not only in rural schools but also in
urban districts. Since 1991, however, six-year-olds are allowed to start lower primary school and such an integration is, as a consequence of this reform, now commonly arranged in all types of schools and is insistently advocated by the national public authorities (Government Bill, 1995/96:206).

Some reflections on possible studies

In the foregoing discussion I have focused on some organizational and economic aspects in relation to the demands of equivalence in education and its application to small rural schools. However, as pointed out there are difficulties in separating special information about rural schools in official statistics and reports. Naturally, this could be done not only by new data collections, but by other analyses of existing data bases.

The UGU-project\(^\text{14}\) (see, Härnqvist, Emanuelsson, Reuterberg, and Svensson, 1994, for an overview), for example, comprises longitudinal data for individuals born in certain years (1948, 1953, 1967, 1972, 1978, 1982). The sample from each cohort comprises approximately 10,000 individuals, and the data involves a large number of variables concerning academic achievement measured by tests and school marks, socio-economic background, school organization, type of municipality, teachers' assessments etc. With some elaboration these data could be further used for studying small rural schools from certain aspects. Another possible point of departure could involve using the huge IEA (i.e., The International Association for Evaluation of Educational Achievement) material. With modern sophisticated techniques for multi-level analyses and latent variable modeling interesting investigations on rural schools could be carried out.

It might also be pointed out that while a substantial number of rural schools have been closed down for one reason or another, aspects of the pedagogy developed there have gradually been absorbed into the organization of "ordinary education". To my knowledge, however, it has never been thoroughly investigated as to whether the apparent advantages are the same in other contexts. Nor has it been studied which aspects of the pedagogy have been transformed and which are kept stable when taken over by larger schools. Naturally, these issues could be addressed directly in studies comparing mixed-age education in different settings.

Another issue to be raised is whether new information technology or IT will contribute to more equivalent education and learning conditions in small rural schools. The use of computers in rural classrooms is a feasible object of research, that seems urgent. Will the computers "bring the world" into the rural classrooms and compensate for lack of big libraries, well equipped laboratories, or easily reached cultural activities? A quick scanning of the "school-computer-web"\(^\text{15}\) provided by the National Agency of Education was rather discouraging. Very few really small rural schools were connected. Whereas about one third of Swedish schools have less than 100 pupils, the proportion of schools of that size on the web was more modest. Can it be that small schools do not have computers to the same extent or is there not enough competence among the teachers? On the other hand there may be a number of schools not connected to that web, but still using computers in a communicative manner.

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\(^\text{14}\) UGU is an acronym for the Swedish project title (in English: Evaluation through follow-up).

\(^\text{15}\)http://www.skolverket.se/skolnet/
References


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