

Summary

Background

When the OECD's PISA survey was presented in December 2016 the trend of declining Swedish school results seemed to have been broken. PISA (the Programme for International Student Assessment) measures the results of fifteen-year old pupils in tests in mathematics, science, reading and problem-solving. However, Sweden still lags far behind the best countries and the results roughly correspond to the average for OECD countries. The PISA survey also contains a number of 'equity indicators' and there the trend for several years has been a steady deterioration. From having been among the top performers when the PISA surveys were started in 2000, Sweden is now also at the OECD average here. For instance, family background has increasing importance for pupils' results in the science test.⁹³

The decrease in equity in Swedish schools has been attributed by various debaters to causes including the free choice of schools, the independent schools reform and the municipalisation of schools. However, the way in which these reforms were implemented means that it is impossible to determine definitively whether one or more – or any – of them explain the changes in schools that have occurred since 1990, while it is, of course, possible to find arguments for various effects. Thus Per Molander draws the conclusion in the previous ESO report *Time for reconsideration? [Dags för omprövning?]* that the introduction of school choice led to reinforced sorting of pupils.⁹⁴ This happened both because of spontaneous sorting on account of pupils' and parents' choices but also because,

⁹³ Swedish National Agency for Education (2016).

⁹⁴ Molander, P. (2017).

according to Molander, independent schools sort among the pupils applying to them. Henrik Jordahl⁹⁵ highlights the advantages of choice instead and refers to studies showing that pupils from weaker socioeconomic backgrounds or with immigrant parents do not lose out from the possibility of choosing their school, and that it may actually have certain positive (although weak) effects. The conclusion that definitely can be drawn is that, if there is a desire to understand what effects follow from a reform, it is important to plan its implementation to make it possible to observe its consequences and isolate them from other changes.

Another aspect that could be particularly problematic for equity would be if there was a tendency for independent schools to locate in areas where pupils can be expected to be in a better position relatively to cope with school. The location of independent schools has been analysed in the ESO report *When schools themselves can choose [När skolan själv får välja]* by Nikolay Angelov and Karin Edmark.⁹⁶ The authors find that independent schools often locate in areas where a larger share of the pupils' parents have foreign backgrounds.

Further light needs to be cast on the reasons for Sweden's downward slide in measurements of equity at school, particularly considering the large changes that the school system has undergone in recent decades. This ESO report asks the question: what can be done now to turn this downward slide? Given the present school system, how can we achieve a higher degree of equity in Swedish schools.

In this anthology a number of researchers from a range of disciplines and with different starting points examine measures to increase equity in schools. Several of the issues raised have not been given that much attention in the debate up to now. For instance, when the Swedish School Commission⁹⁷ presented its findings in spring 2017, the discussion focused mainly on one measure to increase equity: the proposal to introduce selection lotteries for popular independent schools.

⁹⁵ Jordahl, H. (2017).

⁹⁶ Angelov, N. and Edmark, K. (2016).

⁹⁷ SOU 2017:35.

What does equity mean?

It is not possible to write an anthology about equity in schools without discussing and taking a closer look at the concept of ‘equity’ itself. The development of the meaning of the concept has previously been illustrated by Camilo von Greiff in the ESO report *Equal schools with unequal resources? [Lika skola med olika resurser?]*⁹⁸ A short summary is given here of how the concept is expressed and interpreted today, and of the contradictions that follow from this.

The Swedish Education Act⁹⁹ formulates the requirement of equity more explicitly in Chapter 1, Section 9.

Education in the school system shall be equitable in each form of school and in each leisure-time centre irrespective of where in the country the education is organised.

Chapter 1, Section 8 of the Education Act makes particular mention of equal access to education; this wording is then followed by a reference to the Discrimination Act and the provisions in it:

Everyone shall have equal access to education in the school system irrespective of their geographical location and socioeconomic circumstances.

The part of the Education Act that describes the purpose of education in the school system (Chapter 1, Section 4) underlines the compensatory task of schools:

The education shall also take account of the different needs of children and pupils. Children and pupils shall be given support and encouragement to develop as far as is possible. An endeavour shall be made to offset the differences in the capacity of children and pupils to benefit from the education.

No further detail of what is meant by equity is given in the Act, which seems to be based on the assumption of equity being an unambiguous concept. Nor is anything said about the potential contradiction in that equal access is more likely to mean “unequal”

⁹⁸ von Greiff, C. (2009).

⁹⁹ Swedish Education (2010:800).

given the compensatory task of schools. Consequently it is left to the authorities themselves to interpret what equity means.

The Swedish National Agency for Education has given an explicit interpretation of equity that seems to have gained broad acceptance. The concept of equity can, according to the Agency, “be divided up into three fundamental aspects: equal access to education, equal quality of education and education having to be compensatory”.¹⁰⁰ But this does not handle the potential contradiction, quite the opposite. The second and third aspects appear to be essentially irreconcilable. If everyone is to have education of the same quality, it is hard to see how it can be compensatory. If equal quality is assumed to mean that the teaching is to be conducted in the light of the pupils’ circumstances, the third aspect has already been included in the second.

The Swedish Schools Inspectorate has not given an explicit definition of the concept of equity, but essentially takes the view that if there are differences in terms of school quality within and between schools, there are equity shortcomings. The concept is used in, for instance, the annual report to the Government in which the Swedish Schools Inspectorate summarises its experience of the supervision and inspection of schools.¹⁰¹

There are also difficulties associated with measuring equity in practice. For this reason different types of result measures are often used as a means of operationalising the concept. For example, as mentioned initially, the PISA survey uses both differences in results in the light of socioeconomic background and the variation between pupils and between schools as indicators of equity. These result measures broaden the interpretation of the concept further.

In addition, equity as an objective of school activities can be problematised in yet other ways since greater equity can be the result both of a deterioration of the results of high performing students and of an improvement of the results of low performing students. What meaning the concept of equity is given will, of course, be of importance for what measures are considered to be effective. The authors participating in this anthology have been given the opportunity to address these issues, even though the focus of their

¹⁰⁰ Swedish National Agency for Education (2012), p. 11.

¹⁰¹ See, for example, Swedish Schools Inspectorate (2018).

contributions is on actual measures rather than on problematising the concept itself.¹⁰²

The anthology has also limited itself to measures aimed more directly at schools and their activities, such as measures for pupil selection, teaching models or the importance of school leaderships. While public action in a broader sense, such as action to reduce residential segregation, can play an important role in this regard, there is no specific discussion of measures of that type here. A previous report to ESO, *A good start [En god start]*¹⁰³ casts light on public action for children with special needs in the form of, for instance, social services, health care and schools, and this is why that question is not discussed explicitly either.

Alternative ways of assessing equity

The anthology begins with the chapter *What is the best way to assess equity in schools? [Hur ska likvärdigheten i skolan bäst bedömas?]* in which Robert Erikson discusses and problematises the concept of equity and how it is interpreted and measured today in more depth. The degree of equity is measured by the Swedish National Agency for Education on the basis of three indicators: 1) the degree of variation in results at different levels of the school system such as class, school, municipality or national level; 2) how differences in pupils' results covary with their background; and 3) the degree of variation in the pupil mix of schools in terms of different pupil characteristics. Differences in school results between boys and girls are also seen as an expression of a lack of equity.

Erikson argues that the approach chosen by the Swedish National Agency for Education does not say very much about equity and how it has developed. Even though he stresses that a greater spread causes concern, he has objections to the spread of results being seen as a meaningful indicator of equity – at least if the concept is taken to mean that pupils are given education of equally high quality. He also stresses that it is problematic to use pupils' school results in assessing the quality of education since a number of irrelevant factors affect the outcome. Instead, quality should be assessed more

¹⁰²The next chapter (chapter 2) is the exception here since it casts light on the concept of equity itself and on how it is interpreted and followed up.

¹⁰³ von Greiff, C., Sjögren, A. and Wieselgren, A-M. (2012).

directly, chiefly through the inspections already performed by the Swedish Schools Inspectorate. A random, stratified sample of these inspections is required to obtain a comprehensive picture of the degree of equity.

If a focus on pupils' school results is wanted, one alternative, or supplement to a direct assessment, is to measure the increase in knowledge during the school year for individual pupils – referred to as 'value added' in the literature – rather than to build on school results at a particular point in time. Another possibility, if increases in knowledge are difficult to capture, is to start from the development of grades. In addition, Erikson advocates lotteries – but with some modifications – as a method of selection to schools where the number of applicants exceeds the number of places.

Correlations between school characteristics and school policy measures respectively and equity

Two chapters in the anthology take a more comprehensive approach to the question of which correlations can be seen between different school characteristics and school policy measures, on the one hand, and equity, on the other. In the chapter *Equity and school quality: socioeconomic origins and immigrant background* [*Likvärdighet och skolkvalitet: socioekonomiskt ursprung och invandrarbakgrund*] Jan O. Jonsson and Georg Treuter analyse equity in compulsory school and what importance schools have for it. The authors examine the school quality that children with different backgrounds meet and whether school quality can explain differences in educational outcomes as well as to what extent the correlation between background and educational outcomes depends on the characteristics of schools. Their study measures school quality in terms of a number of variables in the general categories of school resources, school climate including home-school relations and pupil mix, where more resources, a better school climate and a more favourable mix (for educational success) of pupils give higher quality.

Jonsson and Treuter define three different measures to capture the concept of equity. The first measure concerns the correlation between family background and school quality, where they find that the pupil/teacher ratio, in particular, has some compensatory effects

that improve conditions for the two groups studied (i.e. lower socioeconomic background and immigrant background). But they also find that the occurrence of various order and behaviour problems in schools worsen conditions for these groups.

The second measure studied concerns how large a share of the individual differences in educational outcomes can be explained by school quality in general – how much of a role is played by ”school as a whole” – and by school quality when the pupil mix of schools is also taken into account. The result is that schools play some role for school performance, but when pupil mix is taken into account, what is left are extremely small differences.

The third measure looks at family background and educational outcomes and examines to what extent schools and school quality contribute to the correlation found here. The correlation between socioeconomic background and educational outcomes is much stronger than the correlation between immigrant status and educational outcomes. However, these correlations hardly seem to be affected by school quality at all, which is also in line with the results of several other studies. Jonsson and Treuter point out, at the same time, that it is important not to draw overly hasty conclusions from this to the effect that school quality is of no importance for learning and study choices. The reasons for the lack of any strong effects may have more to do with earlier educational policy and the fact that there is little or unsystematic variation in school quality between schools in Sweden. But the conclusion is still that measures other than better school quality are likely to provide the great potential for reducing differences between schools in educational outcomes.

In the next chapter *What does research say about which measures best increase equity in schools? [Vad säger forskningen om vilka åtgärder som bäst ökar likvärdigheten i skolan?]* Mikael Lindahl presents conclusions from a number of experimental and quasi-experimental studies that cast light on effects of school policy measures on equity. Lindahl begins by recounting how studies have shown that childhood environment is of importance for pupils’ school performance. However, studies do not give any definite result regarding what importance measures aimed at the pupils’ family or immediate environment have for their school performance.

When it comes to the effects of school policy interventions Lindahl bases his review on two extensive meta-analyses of the sizes of effects. Overall, it turns out that there are a number of school policy measures that can be expected to increase equity in schools. Examples include conducting teaching in very small groups, changing curriculums especially concerning reading, "coaching" of staff and classroom observation by more experienced teachers with feedback to the teacher and/or pupils. Studying at "charter schools" in the United States also seems to have positive effects. These schools have some similarities with Swedish independent schools even though there are, of course, also differences. One of the most effective measures for increasing equity according to the material studied in this chapter is introducing school-like activities at early ages, before starting school. This applies both to more targeted measures for specific groups and to more general preschool programmes.

Even though the results are clear in terms of the size of effects for the various measures, it is hard to assess their cost-effectiveness. The reason is that school interventions can be implemented with varying intensity, and the general studies provide no information about this.

Nor is it clear how well the results can be generalised to Sweden, and Lindahl points out that there are very few Swedish studies with an experimental design. He would like to see more studies of that type – even though they would probably be relatively expensive. If such studies are conducted, it is important that the results are readily available to enable school leaders and others to form a view of what works well.

Role of the profession and implementation

Two chapters in the anthology both highlight the importance of the profession's role and the actual implementation of interventions in schools for improving teaching and equity.

In their chapter *Use of research on equity in compulsory school* [*Anvendelse af forskning om ligestilling i grundskolen*] Camilla Brørup Dyssegaard and Niels Egelund describe how the implementation of research-based measures can be promoted in schools.

As in other areas, it takes a long time for research results to be applied in practice in the area of education. Having an “evidence-based implementation guide” would be a help, at the same time as this is complicated by variations in the organisation of education systems between countries regarding, for instance, their degree of decentralisation.

However, Dyssegaard and Egelund have used a large systematic review of a number of research reports to identify six factors of central importance when measures are to be implemented in schools. The factors are:

1. The importance of the school leadership in planning and the analysis of the environment and for how implementation is going to be put in to effect.
2. Professional development: what professional development measures are required in the implementation of a measure and who should access them.
3. Resource persons who should be available before, during and after the implementation of a measure.
4. Implementation and its quality: the extent to which instructions and guidance are followed when implementing the measure.
5. The profession's inclusion and acceptance of the measure.
6. Building support and acceptance over time.

These factors are interrelated and should not be viewed separately. However, if any one factor is to be judged to be of particular importance for success in reforms or individual measures, it is the first point; the school leadership is of crucial importance for also putting the other factors in place.

Dyssegaard and Egelund recount experience from various studies and give examples of why measures did, or did not, succeed. On the basis of this material they also draw the conclusion that it is relatively easier to succeed with measures that focus on, for example, the well-being in schools or that are aimed at pupils with special needs. In contrast, measures targeted at individual school subjects, such as mathematics or reading, are harder to implement successfully. The reasons can, for instance, be that the former measures do

not encroach on the teacher's autonomy. At the same time, when it comes to increasing equity, it is the former factors that may be particularly important.

In her paper *Leadership in the classroom is a key to equitable learning [Leiarskap i klasseromet ein nøkkel til likeverdige opplæring]*, Sigrun K. Ertesvåg focuses on the teacher's leadership. The author highlights the great differences in teaching quality that do, in fact, exist, both in classes and between classes and argues for focusing on leadership in the classroom. The teacher needs to identify the challenges that the individual pupil encounters and to be able to adapt their teaching to this. Ertesvåg refers to the "Handbook of classroom management", which is a systematic overview of the literature in the area, in which leadership in the classroom is specifically defined in terms of the interaction between teacher and pupils. While the teacher's teaching and their measures to deal with problems of order in the class can be improved, the central point is how these acts are perceived and accepted by the pupils. The fact that the classroom situation is basically to be viewed as a social system, where the relations between pupils are also of importance, increases the complexity. At the same time, insights about this social system are something that can be of benefit in obtaining a better understanding of how leadership in the classroom can contribute to more equitable schools.

In her chapter Ertesvåg describes how the "Teaching Through Interaction" (TTI) framework, which is based on extensive observation, can provide a basis for understanding, organising and mapping teacher-pupil interaction. TTI distinguishes between three main aspects of the teacher's leadership: emotional support, organisation in the classroom and subject support. These aspects are relevant irrespective of the age of the pupil, but their importance can vary.

Ertesvåg stresses, with support from studies in the area, that a very small share of measures in schools are actually aimed at the classroom situation as such and are intended to improve teacher-pupil interaction. We can ask ourselves why this is so. Teaching of high quality promotes social equalisation since it can generate involvement among pupils and also be effective in identifying pupils who are in the risk zone for failing in their studies. As regards specific measures to improve teaching quality, they can be both

direct measures in specific situations that can arise in the interaction between the teacher and pupils and measures to support pupils socially and reduce bullying. Ertesvåg stresses that both types of measures are needed to improve teaching quality, which can, in turn, level out differences in and between classrooms.

Pupils' educational choices

The last two chapters of the anthology both deal with the possibility of influencing pupils' educational choices so as to reduce segregation in schools. In the chapter *The function of study and vocational guidance and its importance for the individual's educational choices* [Studie- och yrkesvägledningens funktion och betydelse för individens utbildningsval] Anders Stenberg focuses on the role of study and vocational guidance in this context. This function as such seems to vary relatively strongly between schools, but the question of what schools actually invest in study and vocational guidance is not particularly well-studied. Stenberg devotes part of his chapter to examining the potential inherent in the role of study and vocational guidance to counteract stereotypical views and educational choices. In the second part he examines the question of how social norms and social identity can influence educational choice.

There is no precise definition of study and vocational guidance and it contains a range of features such as lectures, group counselling, individual counselling and mentorship. In his chapter Stenberg recounts research that has studied information provision and mentorship. It turns out that studies – mainly performed in the US – indicate that in many instances information provision has positive effects on the probability of individuals applying to college. At the same time, it can be seen that the information provision studied has mainly been targeted at groups with good study results but with a weak socioeconomic background. In more general studies, which do not target a particular group, it is more difficult to find any effects on average. The literature review also provides some support for potential positive effects of more targeted information provision to individuals from poorer socioeconomic circumstances at home and to individuals with erroneous expectations of what an occupation can involve in terms of content and pay. In other words,

relatively simple interventions can help to reduce socially skewed recruitment.

The most resource-demanding measure is mentorship, but the study also indicates that well-organised mentorship can be of great importance for the probability of leaving compulsory school or upper secondary school with pass grades. However, mentorship has not been used to a particularly great extent in Sweden. Stenberg therefore stresses – alongside a number of other policy proposals – that a pilot could be justified, and should, if held, preferably be designed to also make it evaluable.

In the part of his chapter about the barriers that prevent pupils from making norm-breaking educational choices Stenberg underlines the whole role of schools. This is about the values that schools communicate and, not least, the need for concentrated action against bullying.

In the following chapter *Do lotteries of school places lead to better equity? [Leder lottning av skolplatser till förbättrad likvärdighet?]*, Anders Böhlmark studies lotteries instead of queue time as a method for selection to certain independent schools. Böhlmark studies whether, and in what way, the proposal of lotteries of school places at popular independent schools presented by the Swedish School Commission in 2017 could improve equity. The proposal is based on the observation that queue time can be segregating. Information about the attractiveness of a school, and the importance of putting their child in the queue to it, tends to spread quickly among highly educated and more resource-rich groups. This has led to some schools being segregated by month of birth and tending to only have pupils born in the opening months of the year. When an admission lottery is used, everyone who participates has the same chance of being admitted. According to Böhlmark, the simple answer to the question in the chapter title is “yes”, i.e. lotteries lead to better equity. At least if the assessment is made that there should be equal access to education in the school system and that independent schools should be open to everyone on equal terms.

After going through various arguments for and against lotteries – the proposal has, of course, been seen as controversial – Böhlmark examines the potential effect of introducing lotteries instead of queue time as a method of selection to popular schools. The chapter makes a particular study of the densely populated areas of

Stockholm, Gothenburg and Malmö. The conclusion is that in practice the proposal has a real potential to influence the mix of pupils at popular schools for relatively large groups of pupils and therefore also potential to influence the difference in pupil outcomes between schools in metropolitan areas. In practice, this is also an argument for implementing the proposal. But Böhlmark notes, at the same time, that it ought to be even more important to work to achieve equal access to good schools and there, too, lotteries can be an improvement on queue time as a ground for selection. At the same time he also makes the point that there can be objectives other than equity objectives in the allocation of school places, for instance matching pupil to schools on the basis of the pupils' first choices. This is something that ought to be taken into account in the introduction of a lottery procedure.

Concluding comments

In the anthology the various authors have chosen to interpret equity in schools in the way they have found appropriate and also to approach the question of what can be done to increase equity in different ways. They all draw conclusions with more or less policy-centred implications in their chapters. The starting point of the anthology has actually not been to draw general conclusions on the basis of the relatively different chapters. At the same time, it is not possible to disregard the fact that there are some conclusions that emerge in the report as a whole and that have come up again and again in the underlying work and discussions. To sum up, we choose to highlight the following more general conclusions that are of importance in terms of the ability of schools to reduce the correlation between social background and conditions later in life.

Clarify what is meant by equity in schools

The concept of equity in schools is fuzzy and has changed over time in a direction that has actually led to it also containing contradictions. It is doubtful what value the present follow-ups of the concept actually have.

There is no universal solution for increasing equity in schools

There is no *single* solution to the problems of a lack of equity or of education of poorer quality provided by some schools. Above all, the issue needs to be addressed at a number of levels: at central and municipal level and in individual schools and classrooms.

Too few studies are based on Swedish conditions

Even though questions concerning equity in schools are relatively well studied, most studies of measures in the area have been carried out in other countries; this is especially so regarding experimental studies. More studies carried out in a Swedish setting would increase our insight into what works and what does not.

The potential seems to be limited

Schools seem to play a certain, but limited, role in breaking the correlation between family background and educational outcomes. Other measures that have not been studied in this report – reducing residential segregation and more investment in preschools, for instance – may be of more importance.

Despite the last-mentioned point the conclusion is still that it is important to promote equity in schools. Schools are a work environment for pupils, teachers and other staff and it is key that they function well. It is also important that schools maintain high quality and that they do not contribute to increasing differences between children from different backgrounds. More needs to be done to be able to establish the quality of schools and to then improve their quality where deficiencies have been observed.

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