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Article

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Sweden's School Reforms to Postpone First Number Grades to Middle School: A Model?

Providing performance feedback to students plays a key role in the educational production process. A variety of formal feedback types has been used in different education systems, including numerical grades, alphabetical grades, descriptive marks (e.g., excellent, good, unsatisfactory), and narrative reports. Grade-based feedback forms, such as numerical and alphabetical grades, serve two main purposes. First, grades provide performance information to students, such that they become aware of their learning outcomes and can adjust their learning efforts accordingly, if necessary. Second, report card grades also inform parents about a child's performance and may signal the need for parental involvement. Report card grades provide information about student ability, which in turn improves the efficiency of tracking decisions and enables students to receive additional support if needed.

More recent political discussions have highlighted the potential negative impact of early grading on student motivation. Being graded may reduce a student's interest in learning if a student starts to consider learning merely as a task to get the reward. Consequently, students may tend to choose the easiest tasks and lose interest in more challenging tasks (Kohn, 1999). In addition, grading may increase inequalities due to potentially heterogeneous parent reactions to grades.

Consequently, several countries with well-established educational systems have postponed the timing of the first numerical grade assignment in recent decades. In particular, Sweden has postponed grades in report cards from school year 3 to year 8

ABSTRACT

In the educational production process of the school system, report cards provide a crucial performance feedback for students. Sweden was a pioneer in abolishing numerical grades from report cards in elementary school, as grades were considered harmful for students' motivation to learn. In this article, we outline the Swedish reforms and summarize the existing evidence on the consequences of early grading. Overall, this evidence points towards mixed effects on student achievement and educational inequalities.

in two steps. The country therefore provides both a reform model and a rare testing case to inquire into the effects of early grading on student outcomes. This article outlines the Swedish reforms and summarizes the existing empirical evidence regarding the consequences of early grading.

THE SWEDISH GRADING REFORMS

Swedish school grades are recorded in report cards on a scale from 1-5 (5 is the highest) to summarize student achievement at the end of the semester and to serve as a basis for tracking decisions. The grading system was subject to several major reforms summarized in Table 1. Until 1969, Swedish students were awarded grades at the end of the third (end of lower school) and sixth grade (end of elementary school).



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Table 1

School Grade Reforms in Sweden

Year	Before 1969	1969 – 1981	After 1981
School year to receive first grades	End of third school year	Depending on municipality: Either end of third year or end of grade six or not graded at all until grade eight	No school grading before grade eight in all municipalities

Source: Own compilation of the authors.

Between 1969 and 1981, a curriculum reform enabled Swedish municipal school boards to flexibly abolish grades for these two years. Even though administrative records of the implementation are not available, survey data from Sjögren (2010) shows that most municipalities decided to not abolish grading for both grades simultaneously. The preferred option was to abolish grading in third grade but to retain numerical grades in sixth grade. After ten years, around 76 percent of the municipalities removed grades at the end of third grade, whereas only 44 percent of them chose to not grade students at sixth grade. In addition to allowing municipal school boards to abolish early grades, the 1969 curriculum reform introduced in all municipalities non-compulsory biannual parent-teacher conferences.

The introduction of the “1980 National Compulsory School Curriculum” abolished all student grading before the eighth grade. Given the differences in school grading between municipalities arising between 1969 and 1980, the enactment of the 1980 curriculum triggered two changes. First, numerical grading was postponed for all schools through eighth grade. Second, grading was replaced by qualitative, oral communication between teacher and parents twice a year. The context of the Swedish reform provided the basis for the very first empirical studies on the impacts of early grading, as will be further discussed below.

EVALUATIONS OF THE SWEDISH SCHOOL GRADING REFORMS

Based on a literature search, we identify five papers evaluating the Swedish grading reforms. A summary of the data and research design is shown in Table 2.

Sjögren (2010) provides the first study exploring the Swedish grading reform to study the long-term effects of early grading on educational attainment and adult earnings. The author finds that early grading, on average, increases girls’ years of schooling irrespective of their family background. Moreover, sons and daughters of low-educated parents become more likely to graduate from high school if they received grades early. Conversely, boys with highly educated parents who had earned bachelor and post-grad degrees and were high earners performed better when they were not graded. Overall, the author uncovers positive effects of early grading for students with low academic ability and a lower-middle class or poor socio-economic background.

Klapp et al. (2014) focus on the effects of grades in terms of achievement by 13-year-old (in grade 7) Swedish students. The study finds no overall effects of early grading on subsequent achievement, which is measured through grades in 11 continuous subjects and three new subjects in seventh grade¹. However, grading was observed to have negative effects on subsequent school achievement for low-ability students. In a further study, Klapp (2015) evaluates the effects of early grading on student achievement in secondary school (grades 7, 8, 9) and upper secondary school (grade 12). The results confirm the previous findings that early grade assignments reduce subsequent school achievement, especially for low-ability students. However, early-graded girls are more successful compared to ungraded girls in terms of school achievement and upper secondary school completion rates. To explain these findings, Klapp (2017) questions whether academic and social self-concept and motivation explain the effect of early grading on student achievement. Such factors were collected from the spring 1979/1980 survey for students in grade 6. Some questions were hypothetically raised to reflect academic self-concepts in mathematics and Swedish such as, “Do you think you are good at spelling?” or, “Do you think you are good at counting?” Self-confidence in social contexts and social responsibility were hypothetically defined through indicators such as, “If you had to take the lesson when teacher was ill, how well would you cope with that?” and, “If you had to arrange a party for your class, how good at it do you think you would be?” The levels of motive to improve in academic results were reflected through indicators such as, “Do you want to do better in school?” and, “Do you often think that you would like to be better at math?” Klapp (2017) confirms that the negative effect of grading for low-ability students on their subsequent subject grades are fully mediated by academic self-concept and motivation to improve at school. He explains that grades provide new information about one’s relative academic ability in comparison to peers. Students who receive grades higher than their self-perceived competence tend to experience a gain in academic self-concept. Therefore, they may consider grades as a reward. In contrast, when students receive grades that are lower than they expected, grades then function as an academic loss. Low-ability students may tend to experience more failure and lose a larger number of resources that help them cope with academic stress. Lower-ability students tend to lose these resources, hurting their ability to cope with academic stress, which ushers in a vicious cycle of lower achievement later.

Facchinello (2019) investigates the effects of early grading on Swedish student outcomes over the short- and long-term. The author finds no general statisti-

¹ Of those 11 subjects were taught and graded both in grade 6 and 7, the other three subjects were new to students in grade 7, i.e., biology, chemistry and physics.

Table 2

Summary of Data and Design of Studies on the Swedish School Grading Reform

Study	Sjögren (2010)	Klapp et al. (2014)	Klapp (2015)	Klapp et al. (2017)	Facchinello (2019)
Data	Survey data on school grading reform implementation in 187 municipalities. Swedish register data on individual long-term educational outcomes	Evaluation Through Follow-up (ETF) dataset, containing register and questionnaire data on a nationally representative sample of Swedish compulsory school students.	Evaluation Through Follow-up (ETF) dataset, containing register and questionnaire data on a nationally representative sample of Swedish compulsory school students.	Evaluation Through Follow-up (ETF) dataset, containing register and questionnaire data on a nationally representative sample of Swedish compulsory school students.	The longitudinal Evaluation Through Follow-up (ETF) survey data and administrative register data
Study design	Compares the difference in outcomes of children from cohorts exposed to different grading policies within a reforming municipality to the difference in outcomes between children of the respective cohorts in non-reforming municipalities.	Compares the difference in outcomes, e.g. subject grades, of children from cohorts exposed to different grading policies within a reforming municipality to the difference in outcomes between children of the respective cohorts in non-reforming municipalities. The authors expect grading in 6th grade will negatively impact grades in the 7th grade for continuing subjects but will be unrelated or weakly related to grades in 7th grade for the new subjects.	Same as previous study of Klapp et al. (2014); however, outcomes are extended to grades 7-9 and upper secondary school (grade 12) to track the medium-term effects of grading in upper secondary school.	Exploit the same quasi-experimental setting that was used in previous studies. In addition, student self-report in sixth grade is used to identify their self-concept in school subjects (Mathematics and Swedish), social situations, and motivation to improve in school subjects. This dataset is then used to investigate the mediating relations between grading and students' subsequent achievements.	Exploit Swedish school grading reform to find the different effects of early grading along two dimensions, namely students' ability and social economic conditions in the short-term and long-term. Compares the difference in outcomes of children from cohorts (1967 and 1972) exposed to different grading policies within a reforming municipality to the difference in outcomes between children of the respective cohorts in non-reforming municipalities.
Main Outcomes	Years of Schooling, Earnings	School achievement, i.e., school grades in continuous subjects and new subjects in grade 7	School achievement, i.e., school grades in continuous subjects and new subjects in grades 7-9; Educational attainment in upper secondary school (grade 12)	School grades in grade 7.	Academic motivation, test scores, GPA, educational attainment, earnings

Source: Own compilation of the authors.

cally significant effects on educational attainment, academic choices, and labor market outcomes. He does, however, uncover heterogeneous effects involving the ability and SES dimensions. In the short-term, early grading decreases grades and motivation to go to school for students with low ability and low SES. However, being graded early helps low-ability/low-SES students to optimize their educational choices and opt for more suitable vocational paths. High-ability/high-SES students benefit from early grading in terms of better grades during compulsory school. Owing to the optimization of educational choices, the effects of early grading are persistent over the long-term and affect labor market outcomes. In particular, low-ability/low-SES students experience an upward income trend, whereas their high-ability/high-SES peers suffer from downward income mobility.

CONCLUSION

In summary, postponing grade assignments in Swedish schools has been found to have mixed effects

on student achievement. The effects differ according to student gender, socio-economic backgrounds, and throughout a student's life cycle. A clear-cut endorsement of the Swedish model therefore cannot be made. More empirical evidence in different contexts is needed to determine whether students should receive grades already in primary school. The grading reforms in several German states since the 1970s provide an alternative setting, which is currently being studied at the ifo Center for the Economics of Education as part of the "Efficiency and Equity in Education: Quasi-Experimental Evidence from School Reforms across German States (EffEE)" project funded by the Leibniz association.

REFERENCES

- Facchinello, L. (2019), "Short- and Long-run Effects of Early Grades", *Research Collection School of Economics*, pp. 1-126.
- Klapp, A. (2015), "Does Grading Affect Educational Attainment? A Longitudinal Study", *Assessment in Education: Principles, Policy and Practice*, 22(3), pp. 302-323.

Klapp, A. (2017), "Does Academic and Social Self-concept and Motivation Explain the Effect of Grading on Students' Achievement?", *European Journal of Psychology of Education*, pp. 355-376.

Klapp, A., C. Cliffordson and J.-E. Gustafsson (2014), "The Effect of Being Graded on Later Achievement: Evidence From 13-year-olds in Swedish Compulsory School", *Educational Psychology: An International Journal of Experimental Educational Psychology*, pp. 1-19.

Kohn, A. (1999), "From Degrading to De-grading", *High School Magazine*, 6(5), pp. 38-43.

Sjögren, A. (2010), "Graded Children – Evidence of Long Run Consequences of School Grades from a Nationwide Reform", Working Paper Series 2010:7, IFAU - Institute for Evaluation of Labor Market and Education Policy.