

English summaries

Christina Cliffordsson, 2004: Inflation in goal-related grades from upper secondary school /Betygsinflation i de målrelaterade gymnasiebetygen/. *Pedagogisk Forskning i Sverige*, Vol 9, No 1, pp 1-14. Stockholm. ISSN 1401-6788.

Since the goal-related grading system was introduced in the middle of the 1990s it has become possible for students to increase their chances of being admitted to higher education by raising the level of their upper secondary school-leaving grades by means of »supplementation». Upper secondary grades, along with SweSAT scores, are the assessment instruments that are most commonly used when admitting students on a competitive basis to higher education.

The new system for assessment of qualifications was introduced in 1997 and is based upon a comparative score, which is calculated either from school-leaving grades from upper secondary school, or from subsequently supplemented grades. The purpose of the goal-related grading system is that the grades obtained should give students information about the levels of knowledge and skills that they have attained. Therefore, it seems reasonable that a student who has learned more through supplementation (e.g., repetition of a course) is awarded a higher grade.

As grades are supposed to be indicators of knowledge, and the knowledge students acquire in upper secondary school should form the grounds for further education, it is reasonable to presume that higher grades are associated with a better achievement in higher education. However, in practice, the primary purpose for increasing school-leaving grades is not to obtain further knowledge that might be relevant for higher education, but to increase the competitiveness of the grades. Thus, the question is whether supplemented grades have the same prognostic power as upper secondary school-leaving grades.

Furthermore, a relatively constant annual increase in the mean of the grades in upper secondary school has taken place since the goal-related grading system was first introduced in 1997. This implies that for an increasing number of students, it is necessary to supplement the school-leaving grades in order to remain competitive with those students who complete their upper secondary school education at a later point in time. One interpretation of the annual increase in overall comparative scores is that students' knowledge improves year-by-year. Another interpretation is that the increase in students' grades is an expression of grade inflation. In order to investigate this question

there is a need to examine the meaning of the grades using external criteria. The same is true for the increases that are a consequence of supplementation.

The purpose of the study is to examine the meaning of the goal-related grades by relating the comparative score to efficiency in studies, measured by credit points for results achieved in the first year of university engineering and medical programs. The meaning of the increase in grades over time is investigated by comparing the obtained credit points in relation to grades for different school-leaving cohorts. The meaning of the grade increases obtained as a result of supplementation is examined by comparing obtained credit points in relation to, first, those students who have increased their grades in order to improve their competitiveness and, secondly, those who have not.

The study relies on data from a large scale longitudinal project (VALUTA), which contains information from different official registers about everyone in Sweden born during the years 1972 to 1984. The data analyzed here are from individuals born in the years 1976 to 1982 who completed upper secondary school in the spring semester 1997 or later, and who began engineering or medical education programs during the years 1997 to 2000. The number of students in engineering and medical programs was 13 438 and 785, respectively.

In the analysis regression models were used, which included credit points achieved in the first year as the dependent variable. When investigating increases in grades over time, the comparative scores based on school-leaving grades from upper secondary school were used along with dummy-variables representing different school-leaving cohorts. When investigating increases as a consequence of supplementation, comparative scores including supplementation were used along with a dummy-variable indicating whether the students had supplemented their grades or not.

The results confirmed that there have been annual increases in grades since the introduction of the goal-related grading system. The results also showed that a considerable proportion of the medical students had increased their grades by supplementation after having completed upper secondary school, while the corresponding proportion among the engineering students was lower. Neither the increase in grades over time, nor the increase in grades as a result of supplementation, correspond to an increase in credit points obtained during the first year in the two higher education programs. The analyses revealed that all increases of the aggregated comparative grade, both over time and as a result of supplementation, constitute »hollow» grade units. Thus, the predictive validity of the grade increases was zero.

There is substantial variation in grade-setting between individual teachers, schools and municipalities. There is also substantial variation in opportunities to supplement grades after the completion of upper secondary school from one municipality to the next. The grade inflation and the inequality of opportunity to increase the school-leaving comparative score involve a significant cost both to society and to the individual students who have to take these measures. Different conceivable reasons for the results are discussed, as are proposals for possible remedial measures. For example, the criteria for the grades have to be more precise and calibration instruments need to be deve-

loped so that, over time, grading differences between teachers, schools and municipalities will be reduced. The option to increase school-leaving grades by means of supplementation might also be set aside.

Moreover, there is a need to review and revise the assessment system in a way that can ameliorate its negative impact on upper secondary school education. For example, measures designed to minimize strategic choices aimed simply at increasing grades in order to optimize the chance of being admitted to desirable higher education programs ought to be implemented. However, it must finally be said that goal-related grades, in spite of all their imperfections, still provide a better selection instrument, with higher predictive validity than SweSAT scores.

Allan Svensson, 2004: Grades or achievement tests for selection to civil engineer education? The Master of Engineering case /Gymnasiebetyg eller högskoleprov urvalsinstrumen? Fallet civilingenjörsutbildningarna/. *Pedagogisk Forskning i Sverige*, Vol 9, No 1, pp 15–36. Stockholm. ISSN 1401-6788.

Civil engineering education is offered in Sweden by seven universities or technical universities. There are some 15 programs of study, with different specializations, for example Computer science, Electrical engineering, Industrial management, Chemical engineering and Engineering physics. The programs comprise 180 credit points, which implies that the education normally is to be completed in four and a half years. However, few admitted students complete the programs according to these expectations and only about two thirds of the students admitted in the late 1980s had completed their programs seven years later.

There are about twice as many applicants as there are places available. Two thirds of the places are appointed on the basis of the grades from upper secondary school and one third via the Swedish Scholastic Aptitude Test (SweSAT). The aim is to study if there are any differences in academic performance among students admitted on the basis of their:

- grade-point average from upper secondary school (GPA)
- SweSAT scores (SweSAT)

The data used are taken from the VALUTA-project. This database includes all Swedes born during the period 1972–84, in all about 1,4 million persons. In this study all students admitted to the civil engineer program between 1993 and 2000 are included, in all more than 35 000 students.

The results show rather large differences in study progress between the two selection groups. If we scrutinize the average number of credit points the students have obtained during the first academic year the GPA group is found

to be superior to the SweSAT group. The difference amounts to more than four points or about 40 per cent of the standard deviation.

What happens after the first academic year? Will the GPA-group continue to be more successful? To be able to answer this question we have looked at cohorts that have been possible to follow at least five academic years, i.e. cohorts that started 1993, 1994 and 1995. Three criteria of academic performance are used:

- the number of students enrolled during each academic year
- the number of credit points achieved after the second, the third, the fourth and the fifth academic year
- the number of university degrees taken

In all respects the GPA-group is found to be superior. The students in this group continue their studies to a greater extent and the average credit points obtained after each academic year is higher as well as the examination rate. In the latter case there is a difference of about 20 per cent.

How can these differences be explained? There are of course many causes, but one of the most important ones is without doubt large differences between the selection groups in grades from upper secondary school. The fact is that credits points obtained in the civil engineer program show higher correlations with grades than with scores on SweSAT. Thus, how you succeed in upper secondary school is of greater importance for your progress in higher technical education than your achievement on SweSAT. The results obtained raise two questions:

- Are the differences of such a magnitude that they are of practical importance?
- Should only grades from upper secondary school be used for selection to civil engineering education?

The first question should be answered by »yes». As one third of the applicants are admitted on the basis of the scores of the SweSAT the universities lose significant amounts every year. The reason is that the Swedish universities get financial compensation for each credit point the students obtain. How large the total loss will be can not be exactly estimated but calculations made point to an amount of about 50 million Swedish crowns every year. You may also pay attention to the fact that not only the universities but also the students who fail to complete their education make large economical loses.

As seen from the results the answer of the second question ought to be »yes» as well. However, it is not possible to totally remove the SweSAT. Firstly because a small number of applicants do not have a certificate examination from upper secondary school. Secondly because we should not completely eliminate the possibility of »a second chance» for those students who have failed to get good grades in upper secondary school. In stead of entirely discarding the SweSAT as a selection instrument to higher technical education the contents of the test have to be changed. One suggestion may be to increase the number of quantitative subtests. By doing so a significant increment in predictive validity should be attained.

Tomas Englund, 2004: New tendencies within Swedish educational research during the last three decades /Nya tendenser inom pedagogikdisciplinen under de tre senaste decennierna/. *Pedagogisk Forskning i Sverige*, Vol 9, No 1, pp 37–49. Stockholm. ISSN 1401-6788.

Educational research or education as a science developed out of philosophy early in the 20th century but its relationship to philosophy was broken during its infancy. During the first half of the 20th century educational research leans heavily towards psychology and in the 1950s sociology successively became a new supporting science to educational research. In the 1950s and 1960s educational research became part of social engineering where the three sciences mentioned (psychology, sociology and educational research) supplement each other in the development of a welfare society. In the 1950s and 1960s educational research was dominated by quantitative methods.

The 1970s: Qualitative research challenges the quantitative approach and the new sociology of education challenges traditional sociology of education

In the 1970s three different qualitative methods, hermeneutics, ethnography and phenomenography, began to challenge the dominance of quantitative methods and stimulate the production of a different kind of knowledge. There was also a move from traditional sociology of education to the new sociology of education. The new sociology of education proclaims a conflict perspective of society and criticizes the consensual view of society carried out by both psychology and the traditional sociology of education

The 1980s: The didactic revolution

Two versions of didactic research, the didactics related to phenomenography and to curriculum theory, redirected Swedish educational research during the 1980s. This change within educational research also reinstated its place within educational policy when it was said that all prospective teachers have to learn didactics. In the evaluation of Swedish educational research made in 1990s the two traditions mentioned, were pointed out as the two most internationally important and excellent orientations within Swedish educational research.

The 1990s: The linguistic, communicative turn and the renaissance for philosophy of education

During the 1990s the linguistic, communicative turn has created new preconditions for Swedish educational research in different respects. The linguistic turn has also pointed out its moral importance and the choice between its role in widening and deepening our sense of community, stressing the connection between knowledge and solidarity, compared to its role as an instrument of the disciplinary order and the relationship between knowledge and power. The renaissance of the philosophy of education, which is also a part of the linguistic turn, has, on a broader base, created new opportunities for returning to the philosophy of ideas and its relationship to education. Ideas from Aristotle to Dewey, Habermas and Levinas have been important.