Tighter study program structures and study progression: weak effects of new structures

Background

In most countries, the development towards mass higher education has led to a concern about quality and efficiency in higher education. High non-completion rates and long study duration indicate ineffective use of resources in higher education, both at societal, institutional and individual level. This is one of the main rationales behind the Norwegian Quality Reform, a comprehensive reform which was a national adaptation to the Bologna process as well as a response to national challenges in higher education.

Efficiency in terms of time to degree and completion may be obtained through a number of different measures; by reducing the length of the degree and make sure the number of students completing within estimated time to degree increase.

The purpose of this paper is to investigate whether these changes did lead to improved efficiency in term of reduced time to degree, using the recent reform in Norway as a case.

The Norwegian reform context

Norway has historically had a two-tier degree system at university, but the reform replaced the four-year undergraduate degree (3.5 years in natural sciences) with a three-year bachelor degree. The graduate degree was kept as a two-year programme. The bachelor degree also introduced more firmly structured degree pathways in general university education, leaving less to students' own choice. The former organisation with mainly subjects running as one-year units was replaced with shorter courses, modules, normally 10 to 15 ECTS (Aamodt, Hovdhaugen & Opheim 2009, Kehm, Michelsen & Vabø 2010). This also had implications for teaching and evaluation. The shorter courses were often taught in smaller group, allowing for closer follow-up of students, and more student active teaching methods, such as written assignments were more commonly in use (Dysthe 2007).

Analytical perspectives

The study structure and the mode of teaching represent the framework for how students are guided through their studies, and Berg (1997) found that study delays to a considerable degree are related to the amount and complexity of the choice situations students encounter while deciding their course of study. Hulst & Jansen (2002) found that a sequentially organised curriculum leads to a more effective study progression than if the courses are running parallel. This exemplifies that the organisation of the curriculum affects student behaviour (Aamodt, Hovdhaugen & Opheim 2009). Both study structure and teaching organisation may be classified along the distinction "loose" or "firm" (Vibe & Aamodt 1985), and firm structuring is assumed to be related to more efficient pathways through the studies. Not all students have the necessary self-discipline to handle the freedom of the traditional university system, and need a certain degree of external "study pressure" in order to complete (Bijleveld 1993). Students' success depends on the quality of teaching and learning environment, and especially aspects that stimulate students' own effort. Combining firmer

study organisation and closer follow-up may also contribute to improved integration of students, and through that improved study persistence (Tinto 1993).

Relatively little research has been conducted on study progression and delays (Aamodt, Hovdhaugen & Opheim 2009). Based on an American study, there seems to be two main reasons for students to extend their time at university: either to protect a high grade-point average (GPA) and at the same time enjoy college life, or because more time is spent on work or family responsibilities (Volkwein & Lorang 1996).

Previous analyses have shown that the effects of the Norwegian higher education reform in 2003 are weak. There are few signs of reduced dropout rates (Hovdhaugen 2011) and no decrease in study delays (Aamodt et.al. 2009).

Research questions

In the present paper, we raise the following questions:

- 1. Do we observe more efficient pathways towards a bachelor degree, compared to the previous degree?
- 2. Have there been any changes in the transition rate from undergraduate degree level (bachelor) to graduate degree level (master)?
- 3. Are there any signs of reduced average number of years spent in higher education?

Data and methods

The paper is based on register data compiled by Statistics Norway. First-time entrant students in 1999, 2003, 2005 and 2007 are tracked through higher education for several consecutive years. In addition to student background (parents' education, school grades, initial institution and study programme), the data contain information about on-going and completed education, number of credits the student has completed etc. for each year until 2011.

The first student cohort, 1999, began their studies, and probably also completed most of their studies before the Quality reform was implemented, while the latter cohorts are all "post-reform" students. Hence, with this data set is it possible to compare the situation before and after the reform, even if we cannot conclude that possible changes are necessarily *effects* of the reform.

Preliminary findings

Previous research has so far shown that after the Quality Reform, the dropout rate is more or less unchanged (Hovdhaugen 2011; Aamodt & Hovdhaugen 2011), and the proportion of students reporting that they are delayed in their studies is also unchanged (Aamodt, Hovdhaugen & Opheim 2009). Preliminary findings show that the reduced length of undergraduate studies has led to shorter time to degree for a bachelor student, but the average time spent in higher education has gone up. Furthermore, the proportion of students continuing to master level has increased after the reform. Consequently, the average number of years spent in higher education seems more or less unchanged. Based on these criteria, there are few signs of increasing study efficiency in Norwegian higher education.