



RIKSREVISIONEN  
*The Swedish National Audit Office*

RiR 2009:25 Summary

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Resource control in undergraduate higher education

## Summary

Higher education in Sweden is funded by the central government and has an annual turnover of about SEK 20 billion. In recent years, concerns have been voiced in the higher-education sector that the resources allocated to it are not sufficient to secure the quality of the education provided. This issue has attracted the attention of the National Agency for Higher Education and the Government, which have promised additional resources to increase the amount of teacher-led time and reduce the number of students per teacher.

At the same time there are indications that resource-control mechanisms at higher education institutions are undeveloped and that there is a lack of knowledge about links between resource allocation and outcomes.

Against this background, *Riksrevisionen* (the Swedish National Audit Office, SNAO) examined resource control in undergraduate education at the University of Gothenburg, Karlstad University and Umeå University. The audit is based on the following audit question: *Have the universities audited taken action to promote the efficient use of resources in undergraduate education?*

The general conclusion from the audit is that the universities lack overall knowledge about how much individual degree programmes or courses actually cost and about how the resources available are used. The SNAO therefore finds that there is scope for top university management to exercise more active control over resource allocation.

### **Large variation in the resources allocated to individual programmes and courses**

The SNAO examined how the resources allocated to undergraduate education translate into resources devoted to students taking specific courses. At each of the three universities the SNAO calculated revenues, costs and instructional inputs for academic programmes in three subjects, hence covering three semesters' worth of full-time study from beginner's level to bachelor's level in a single subject.

There are differences between the subjects investigated in the standard resources allocated to them per student and semester at the level of central-government appropriations. The investigation shows that these differences are then reinforced by the provisions that the universities make for costs above the department level. For physics, about 63 per cent of the gross allocation remains after deductions have been made for common costs at the university and faculty levels. The corresponding proportion for Spanish varies between 48 and 78 per cent. For the third subject, sociology, the proportion is about 40 per cent.

It emerges from the investigation that physics students have just over ten hours of instruction per week while students of Spanish and sociology have between four and six hours. Costs also vary greatly between and within subjects, mainly depending on variation in total student numbers. In five of the nine programmes investigated, the department's average revenues are not enough to cover the instruction costs of the courses.

The SNAO notes that flexible resource use at the department level may yield benefits as strategically important but financially weak courses may be subsidised by other courses or subjects. At the same time there is a risk that, for example, financially weak courses or subjects with few students may be hidden in a wider financial context. There may be good reasons for organising courses with poor financial viability, but then the financial circumstances should be known to and accepted by management at higher levels within the higher education institution. Otherwise there is a risk that the educational offer will not be reviewed to a sufficient extent. If a higher education institution lacks transparent and comparable systems for reporting the financial performance of departments to faculty and top management, ensuring the efficient use of resources becomes a more difficult task.

### **The higher education institutions need to develop more transparent cost-allocation models**

For top management of a higher education institution to be able to evaluate the efficiency of undergraduate education, operational costs must be made visible by means of a breakdown per cost unit. This creates transparent accounts which give a true and fair view.

At the three universities examined, internal models are being developed to allocate costs to cost units at the department level. Even with the implementation of new models, however, there is a risk that the accounts will remain at such an aggregate level that it is not possible to perform analysis broken down to the level of individual courses and degree programmes. This is because the operations carried out at a department or within a subject often consist in a wide variety of courses and programmes, some of which may also involve cooperation with other departments, even ones belonging to other faculties. This is why the SNAO is of the opinion that it would be appropriate to consider using an accounting system that makes it clearer what the actual costs are of courses and programmes with differing conditions in terms of resources.

### **The allocation of resources among courses and programmes is rarely reviewed**

The Riksdag (parliament) and the Government have stated that higher education institution must be able, when necessary, to reallocate resources among educational areas with different standard allocation levels. This means that top higher education institution management have a duty to actively consider making internal reallocations.

The SNAO finds in its audit that top management have only to a limited extent taken the initiative in reviewing the standard allocation of resources among educational areas. The exceptions identified almost exclusively concern increased allocations for the language subject area. The existing resource-allocation principles are not based on integrated or updated information about the actual resource use of courses and programmes. Such knowledge would enable more active consideration of issues relating to the reallocation of resources among the various courses and programmes offered by a higher education institution.

### **The basis for top management's decisions should improve**

Educational planning should be closely linked to operational and financial monitoring. Top higher education institution management are responsible for deciding important issues relating to the overall focus of operations as well as the internal allocation of resources and the associated follow-up.

At the three universities examined, top management decide the overall focus of the various faculties and establish overall financial frameworks for them. In other respects, a great deal of decision-making authority is generally delegated to the faculties – even though there are examples at all three universities of top management influencing the educational offer of faculties by means of informal direction.

At the same time, the decentralised nature of implementation and the relatively limited extent of operational follow-up entail that top management need to develop their methods to ensure that resources are used efficiently and effectively. A department or a subject may have a turnover of tens of million *kronor* and offer a wide range of courses and programmes. It emerges from the SNAO's examination of the nine programmes that the overall budget of a department does not show reallocations of resources that may have taken place among subjects and courses/programmes within the department. This means that decision-makers at higher levels within the university will find it difficult to form an idea of the financial and operational conditions in which individual courses and programmes are given. This impairs top management's ability to perform an overall analysis in relation to the short- and long-term educational strategies of the university.

The SNAO identifies a significant need to develop systems for operational and financial follow-up that are common to all parts of a higher education institution. All three universities examined aim to develop key performance ratios for follow-up that will be common to all of their operations; this indicates that the information so far obtained by top university management does not meet their needs. The results of such follow-up and evaluation could lead to better allocation of resources and better planning of undergraduate education by both top management and faculty boards.

The information about the resource use of undergraduate education that is compiled at the university level does not provide an overall picture of the resource conditions under which courses and programmes are actually carried out. This entails that discussions about resource shortages threatening the quality of undergraduate education may lack a basis in the form of analyses establishing the actual cost of students taking specific

courses or programmes. Additionally, better knowledge about the cost of courses and programmes at the various higher education institutions may also enable the Government to actively review the standard resource allocations determined in the context of the national system.

### **The SNAO's recommendations**

The SNAO recommends that the three universities should strengthen their resource control of undergraduate education, thus creating the requisite conditions for more efficient use of resources, by:

- accounting for costs at a level showing how resources are used and what courses/programmes cost;
- developing their internal follow-up of resource use, not only to meet the need for a basis for decisions that is common to the entire university but also to make it possible to provide the Government with better information about undergraduate education.