神戸大学　大学教育推進機構　大学教育研究
第20号（2011年度）　2011年9月30日発行：1－20

The Strategy for Learning Outcomes at Higher Education Institutions in Sweden

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Abstract:

This article provides comprehensive information about new developments in the field of learning outcomes in Sweden. It focuses on the internal documents published by Högskolverket (the National Agency for Higher Education in Sweden). It briefly presents an overview of the development and current state of higher education institutions in Sweden. It, then, weighs the advantages and disadvantages of the strategy of learning outcomes.

1. Introduction

The establishment of a framework assessing the quality of education at higher education institutions (hereafter HEIs) by evaluating learners' learning processes and outcomes has been progressing on an international basis. The framework aims to evaluate what knowledge and skills learners (students) should have cultivated at the time of graduation, as indicated by the term "learning outcomes". Frameworks for learning outcomes have been established internationally, among them the *Assessment of Higher Education Learning Outcomes* (AHELO) by OECD (Organization for Economic Co-operation and Development) and the *Framework of Qualification for the European Higher Education Area* in Europe. Following the frameworks, nations make efforts to establish national frameworks for learning outcomes.

Sweden also set a framework for learning outcomes as a part of the framework for higher education quality assurance in 2011. Since the Higher Education Reform in 1977, HEIs have been required to provide knowledge and skills that can be utilized in actual life and society. Knowledge and skills provided by HEIs must suit social demands, and learning outcomes are intended to provide a bridge between institutions and society.

As the name implies, learning outcomes represent the measurement and appraisal of students' achievements at the end of the courses. The definition of students'

achievements at HEIs could be divided into a limited sense, which intimates the depth of knowledge and understanding of each academic field, and a broad sense, which intimates attitude, motivation and consciousness obtainable from the absorption of learning. HEIs are expected to prepare students to demonstrate the attitude and motivation desired in the real world along with acquiring knowledge and skills through courses. Learning outcomes as academic achievements through higher education, accordingly, can be defined as follows: (1) ability to develop knowledge and skills concerning students' academic fields, (2) ability to acquire autonomy and critical thinking, (3) ability to solve problems, and (4) ability to acquire social adjustment.

The paper is structured as follows. In the first part of this paper, I will examine the background of the development of higher education institutions, for this provides insights into the nature of education at HEIs and the roles they are expected to play. I will then consider the internal efficiency of HEIs in Sweden and show that learning outcomes will let HEIs be involved in the refinement of internal efficiency correlating with the allocation of public grants. The system of learning outcomes as quality assurance is marked in that it will influence the allocation of funding. It is therefore important to be aware of the strengths and weaknesses of its use as part of quality assurance. With these limitations in mind, the final part of this paper is concerned with identifying the issues that need to be taken into account upon adopting the use of learning outcomes.

2. The Historical Background of Higher Education Institutions in Sweden

In 1477, Uppsala University was established as the first higher education institution in Sweden. Being the only ones blessed with the opportunity to reach HEIs before that point, the sons of upper class families had pursued their studies at Paris, Bologna or Germany. The national federation between Sweden, Denmark and Norway was the key factor behind the foundation of a higher education institution. These three nations were governed by the Kalmar Union beginning in 1397; however, the fact was that Denmark exercised authority over Sweden and Norway. According to Matsuzaki (1976), "People in Sweden enhanced the resistance of domination by Denmark from the beginning of the union" (p. 44). The foundation of Uppsala University, consequently, intimated political and cultural independence from

Denmark. Matsuzaki (1976) further explains, "Behind incentive in establishment of Uppsala University, there was a national movement toward complete independence of Sweden from the Denmark governance. The establishment of their universities became a symbol of psychological and cultural independence for Swedes" (p. 45). Taking a look at the education content in its infancy, however, it is clear that it emulated that of Germany and bore the earmarks of an institution affiliated with Uppsala Cathedral aiming at the cultivation of clericals. Institutions also suffered from a lack of the lecturers and the insufficiency of facilities, both of which continued until the seventeenth century.

Having experienced a dispute about HEIs in the 17th century and the collapse of the absolute monarchy at the end of 18th century, institutions expanded and deepened their research horizons, valuing freedom in research and education. In the wake of Uppsala University, Lund University, which focuses on the natural sciences and pharmacy, was initiated in 1668. Stockholm University and Gothenburg University, again based on the natural sciences, were inaugurated in 1878 and 1891. The education content implemented in Latin was remodeled, and Swedish became the primary teaching language. Universities as research institutions, rather than for the cultivation of clericals, were formed. In the 19th century, other universities and colleges providing professional academic fields such as engineering, commerce and agriculture were inaugurated, and higher education institutions flourished.

The Higher Education Reforms of 1977 and 1993 were significant turning points in the history of higher education and autonomy. It was with the Higher Education Reform of 1977 that the opportunity to access higher education institutions was granted to all nations under the idea of recurrent education. Universities or colleges had been placed in each local government while additional open universities had been built, but with the reform, all the whole nation were entitled to access higher education institutions regardless of geographical condition. The second Higher Education Reform gave universities the authority to determine their education content and curriculums. This, at the same time, provided authorization to construct a framework of qualifications for education content.

As of 2011 in Sweden, there are thirteen public universities (Universitiet), twenty public colleges (Högskola) and eighteen private colleges (Table 1). Three private colleges have the authority to offer a doctorate[i]. Other private colleges are entitled

to award a degree of bachelor and master. Among EU countries, the enrollment ratio in Sweden's higher education institutions is relatively high, with the percentage of enrollment reaching 65% in 2008 (OECD 2010). The policies establishing equal opportunity to access HEIs regardless of geographical, economic or gender dimensions, and the idea of higher education as lifelong learning have reinforced the ratio. The average age of enrollment is 22, which is slightly higher than the average age in OECD countries, 20.4. Högskolverket elucidated that the reason such a number of students are surging to participate in higher education in Sweden is that higher education is expanding through the consolidation of the system in the form of distance or correspondence learning, as well as through the spread of the idea of higher education as lifelong learning (Högskolverket 2010). The government aims to improve the enrollment ratio in the under-25 age group from 45% to 50%.

According to the latest report in 2011, the number of students who attend bachelor and master courses is 369,000, with 321,000 being full-time students. This number shows that more students are enrolling in higher education institutions than ever before. Conversely, students acquire fewer credits; it has deteriorated to 78% of the students earned at least some credits in the year 2009/2010 from 83% in 2004/2005. HEIs are concerned about the decline in performance because the students' performance – the situation of earning credits among full-time students – and the number of enrolled students are the basis of resource allocation at the bachelor and master levels.

According to the enrollment data in autumn 2011, 3,600 students out of 5,700 applicants obtained admissions from Uppsala University. At Lund University, 5,400 of 8,800 were admitted, and 5,400 of 7,700 received admissions to Stockholm University. Applicants are ranked according to their academic results at the end of their upper secondary education or Swedish Scholastic Aptitude Test, and then at least one-third of applicants are selected from the number of applicants. HEIs actually admit more the number of applicants than the prescriptions. HEIs are opening their doors to a broader range of applicants. The number of students enrolled in universities has continued to rise; 72,000 enrolled in 2002, 82,000 in 2005, and more than 100,000 in 2009. It is because young people who could not enter the job market because of the weak economy flock to the universities (Högskolverket 2011).

As described above, the system of HEIs is facing an increasing number of enrollees and an expansion of the teaching staff, which implies that the government must absorb increased costs in the public universities. The resource allocation system based on the number of full-time students and the earning of credits was introduced by the Higher Education Reform in 1993. Engwall (2007) suggests, however, that the introduction of the resource allocation system led higher education circles to control students' performance. In other words, to avoid a budget retrenchment, HEIs are suspected of allowing students with low grades to pass courses. In order to earn public confidence, HEIs sought another assessment criterion to allow outsiders to evaluate the quality of their education (Engwall 2007).

The next section includes a further discussion on how the quality assurance framework and learning outcomes are fostered, not only by the adoption at the bachelor and master levels, but also by the initiation of the funding systems.

Table 1. The Number of Students at HEIs
(The number of enrollees/students at 1st and 2nd cycle/ students at 3rd cycle/staff)

	Enrollees	1st and 2nd cycle	3rd cycle	Teaching staff
TOTAL	199,816	369,291	17,693	46,605
Uppsala University	12,311	26,341	1,774	4,034
Lund University	14,033	31,851	2,505	4,985
Göteborg University	13,800	32,764	1,635	4,177
Stockholm University	17,740	36,065	1,520	3,355
Umeå University	14,032	21,583	1,087	3,134
Linköping University	8,394	20,882	1,169	2,522
Karolinska Institute	2,716	7,333	2,184	3,637
Royal Institute of Technology	8,078	15,146	1,793	2,413
Luleå University of Technology	5,725	9,796	518	1,015
The Swedish University of Agricultural Sciences	2,547	5,058	634	2,609
Karlstad University	6,033	11,424	226	955
Linneas University (Växjö University and Kalmar University)	14,986	20,728	268	1,495
Örebro University	6,472	12,713	449	906
Mid Sweden University	13,446	12,586	206	791
Blekinge Institute of Technology	5,404	5,645	116	452
Chalmers University of Technology (private)	3,378	9,466	1,127	1,765
Stockholm School of Economics (private)	728	1,731	126	203
Jönköping University College (private)	6,783	11,870	150	623
Malmö University College	8,550	15,182	86	1,191
Mälardalen University College	4,874	9,857	132	755
The Swedish School of Sport and Health Sciences	387	476	-	82
Borås University College	5,160	8,043	-	555
Dalarna University College	9,777	11,058	-	584
Gotland University College	4,977	4,431	-	182
Gälve University College	7,093	9,592	-	529
Halmstad University College	6,290	6,854	-	490
Kristianstad University College	6,534	8,277	-	453
University of Skövde	5,134	7,022	-	410
Swedish National Defense College	517	636	-	324
Södertörn University College	5,533	10,021	-	638
University West	4,548	6,741	-	472
University of Dance and Circus	111	213	-	61
University College of Arts, Craft and Design	300	732	-	137
Royal University College of Fine Arts	83	238	-	48
University College of Film, Radio, Television and Theatre	95	195	-	53
Royal College of Music in Stockholm	426	999	-	172
Stockholm University College of Opera	16	39	-	20
Stockholm Academy of Dramatic Arts	78	85	-	33

Source: Högskoleverket. (2011). *Rapport 2011:8 R Universitet & Högskolor Högskoleverkets årsrapport 2011.*
Note: Ministry of Agriculture and Forestry and Ministry of Defense have exclusive authority on The Swedish University of Agricultural Science and Swedish National Defense College regarding resource allocation. However, they should follow Higher Education Ordinances when they award grades.

3. The Background of the Introduction of Learning Outcomes

3.1. The Background of the Formulation of the Quality Assurance Framework

The beginning of this section attempts to present an overview of the current state of the quality assurance framework before examining the strategy for learning outcomes since the learning outcomes are outlined in the quality assurance framework.

As described above, the 1993 Higher Education Reform promoted debates concerning the quality of higher education. Since then, HEIs have received greater autonomy, not only to set the criteria for selecting enrollees but also to determine the curriculum and learning outcomes which students are expected to achieve. In 1995, the quality assurance framework was formulated by the government. The following four points were set: (1) the accreditation of the academic degree, (2) the internal quality assurance system, (3) the quality of education in each course, and (4) the degree of students' participation, partnership with private sector, internationalization and gender balance. In 2007, Sweden acceded to the Bologna Process[ii] and unified the education system into the 1st cycle (3 years for bachelor degree), 2nd cycle (2 years for master degree) and 3rd cycle (3 years for doctoral degree). The learning content and outcomes of evaluation in education became a center of focus through the reinforcement of policies in quality assurance. HEIs face challenges in finding ways to evaluate and assure students' academic achievements because students' learning outcomes are reflected in not only resource allocation but also quality assurance.

The previous evaluation for quality assurance implemented by Högskolverket was used until 2009. The former evaluation was based on five points, which were: (1) accreditation, (2) thematic studies, (3) evaluation of education, (4) evaluation of researches and studies, and (5) award of excellence in educational environment. In 2010, two more evaluation items were added to the former ones. The additional items are the number of degrees awarded at the doctoral level and the students' achievements. Students' achievements will be evaluated based on students' learning outcomes, review of students' theses, and questionnaires to students and alumni. Examinations and the evaluation of students' theses aim to appraise the education performance at higher education institutions. The questionnaire to alumni will be conducted in order to evaluate how the education content at universities is beneficial after graduation.

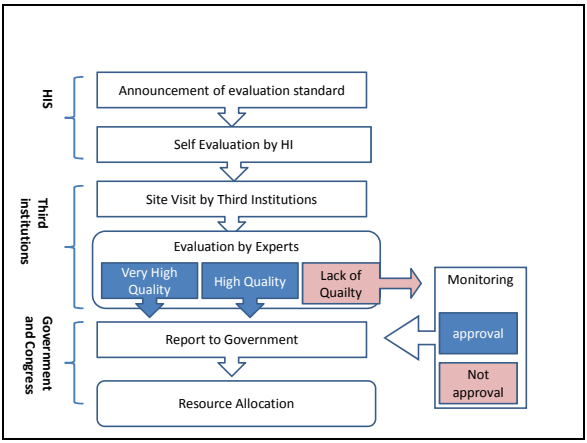
Based on the results of the evaluation including learning outcomes, Högskolverket

rates programs at higher education institutions on a three-point scale: Very High Quality, High Quality, and Lack of Quality. The procedure of evaluation occurs at three levels, which begin with the HEIs followed by a third-party institution and finally the government and the Diet (Figure 1). HEIs conduct a self-evaluation based on their evaluation criteria and method. A third-party institution conducts a site visit and evaluates the report submitted by HEIs. This evaluation is focused on whether the institution explicitly conveys its educational goals and contents, the goals are achieved, and the education program is connected with the labor market's demand. The positive result of the evaluation, Very High Quality or High Quality, would be reported to the government, and the amount of the grant would be determined. If the evaluation results in a Lack of Quality designation, the institution would be required to undergo a second monitoring. If the evaluation report was then approved, the resources would be allocated. If not approved, however, the right to award degrees would be stripped from the institution. According to the report from the government, Malmö University and Mälardalen University showed negative reactions to the resource allocation based on the result of quality evaluation. It is because HIEs with fewer programs will be given fewer resources, the qualitative difference between HIEs will be occurred, and thus the conditions will deteriorate further (Prop.2009/10:139). The government proposed that a limited amount of total resources should be influenced by the result of evaluation. The new allocation system requires consideration to prevent the difference of education qualities between HIEs.

The new evaluation system thus approves the greater autonomy of institutions, while at the same time reinforcing the implementation of evaluation by internal and external institutions. It was generated with the involvement of the Association of Swedish Higher Education (SUHF: Sveriges Universitiets och Högskoleföbund), the Swedish National Union of Students, the labor market representatives and chambers at institutions. The remarkable point is that the evaluation result is reflected in resource allocation[iii]. Higher education institutions are required to engage in self-evaluation of their educational content to obtain a view of their students, and they are further required to get involved in the improvement of their education. The government insisted that assessing learning outcomes is the most important item in evaluating the quality of education[iv]. The next section reviews the index of learning

outcomes.

Figure 1. The Framework of Quality Assurance



Source: Högskoleverket. (2008) *Rapport 2009: 25R Kvalitetsutvärdering för lärande - Högskoleverkets förslag till nya kvalitets-utvärderingar för högskoleutbildningar.*

3.2. The Index of Learning Outcomes

This section will examine the strategy of learning outcomes structured as a new quality assurance framework. In light of the higher education reform for improved learning outcomes in Europe, Sweden has restructured higher education on the grounds of the *Framework of Qualification for the European Higher Education Area*. Learning outcomes aim to stipulate explicitly what students should learn and what kind of abilities they should acquire. The new quality assurance system aspires to improve the visibility and the transparency in higher education. HEIs should follow the guidelines of learning outcomes that the government outlined and release their own index of learning outcomes. The reinforcement of quality assurance with emphasis on learning outcomes functions to strengthen accountability (Kawashima 2008). The announcement of learning outcomes, additionally, would be a worthwhile source for students to conceive their own learning program. It would provide students with more information about specific learning programs so they can decide which institution to attend. Learning outcomes are believed to prevent

inconsistencies between the educational content and students' needs.

Learning outcomes would be evaluated based on three sections: intended learning outcomes and examination, achieved learning outcomes, and students' experience and influence. "Intended learning outcomes and examination" is composed of "knowledge and understanding", "competence and skills", and "judgment and approach", as will hereinafter be described in detail.

"Achieved learning outcomes" would be evaluated based on students' study outcomes, such as a thesis submitted at the end of courses. The purpose is not to evaluate students' abilities but to assess whether students accomplish the goals set for the end of courses.

"Judgment and approach" is to ask questions regarding students' and alumni's satisfaction with education at HEIs. The students' questionnaire survey has been conducted in Australia and the U.K. as one of the evaluation methods for higher education institutions. Sweden will develop a new questionnaire with adjustments appropriate for the Swedish case compared to those of Australia and the U.K. According to Aoyama, Kominato and Torii (2004), the Course Experience Questionnaire survey is conducted nationwide in Australia. Universities in Australia are expected to develop their own course experience questionnaires by taking advantage of the scale stipulated by the Department of Higher Education and Science Training in Australia.. The questionnaire is comprised of 11 scales, which are: (1) Good Teaching Scale, (2) Generic Skill Scale, (3) Overall Satisfaction Item, (4) Clear Goals and Standards Scale, (5) Appropriate Assessment Scale, (6) Appropriate Workload Scale, (7) Student Survey Scale, (8) Learning Resource Scale, (9) Learning Community Scale, (10) Graduate Qualities Scale, and (11) Intellectual Motivation Scale. A questionnaire survey modeled on those of Australia would be able to perceive the quality of students' academic achievements as defined by the article. The questionnaire survey, therefore, would be useful to examine how the acquired knowledge, skills and abilities through higher education are exerted in a real life. The Swedish government would be required to investigate whether those questionnaires are administered smoothly. The requirement to use this type of questionnaire becomes effective in 2013, so further consideration will be needed hereafter.

As mentioned above, "Intended learning outcomes and examination" constitutes

three areas: “Knowledge and Understanding”, “Competence and Skills”, and “Judgment and Approach”. An example of the indication of this learning outcome in the 1st cycle and 2nd cycle is as shown in Table 2. “Knowledge and Understanding” aims for students to acquire basic knowledge regarding their major fields. “Competence and Skills” refers to students acquiring the critical thinking and enhanced information-gathering capabilities necessary for self-sustaining problem resolution. It is also meant to develop the ability of presentation, or writing reports in order to deliver their opinions. “Judgment and Approach” aims to develop the ability to consider academic significance from various aspects. Students must acknowledge a connection between knowledge and society, and to realize the necessity of continuous learning. The content of intended learning outcomes and examination involves knowledge, skill and abilities which are defined as students’ academic achievements at the first, second and third definitions of the article. Students are required to acquire knowledge about major academic fields, develop an attitude to learn autonomously, cultivate abilities of critical thinking and problem resolution, and gain skills for discussion and communication through the courses of higher education institutions.

Högskolverket mentioned that a high value must be placed on the evaluation of learning outcomes to increase the quality of higher education. A loose regulation, therefore, is imposed on an exit from higher education institutions by introducing learning outcomes at the end of courses. The next section will uncover the negative aspects of higher education funding and the depression of the graduation rate of students. It should be noted that learning outcomes not only set regulations on the entrance and exit of students but also help higher education institutions become engaged in the issues mentioned above.

Table 2. Learning Outcomes

The 1st cycle(Bachelor's degree)	The 2nd cycle (Magister's degree)	The 2nd cycle (Master's degree)
Knowledge and understanding	**Knowledge and understanding**	**Knowledge and understanding**
- demonstrate knowledge and understanding in the main field of study including knowledge of the disciplinary foundation of the field	- demonstrate knowledge and understanding in the main field of study including knowledge of the disciplinary foundation of the field	- demonstrate knowledge and understanding in the main field of study including knowledge of the disciplinary foundation of the field
- understand applicable methodologies in the field, specialized study in some aspect of the field as well as awareness of current research issues	- demonstrate specialized methodological knowledge in the main field of study	- demonstrate specialized methodological knowledge in the main field of study
Competence and skills	**Competence and skills**	**Competence and skills**
- demonstrate the ability to research, gather, evaluate and critically interpret the relevant information for a formulated problem and also discuss issues critically	- demonstrate the ability to integrate knowledge and analyze, assess and deal with complex phenomena, issues and situations even with limited information	- demonstrate the ability to critically and systematically integrate knowledge and analyze, assess and deal with complex phenomena, issues and situations with limited information
- demonstrate the ability to solve problems autonomously	- demonstrate the ability to identify and formulate issues autonomously as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames	- demonstrate the ability to identify and formulate issues autonomously as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames
- demonstrate the ability to present and discuss problems and solutions in speech and writing	- demonstrate the ability in speech and writing to report clearly and discuss his or her conclusions and the knowledge and arguments on which they are based in dialogue with different audiences	- demonstrate the ability in speech and writing to report clearly and discuss his or her conclusions and the knowledge and arguments on which they are based in dialogue with different audiences
	- demonstrate the skills required for participation in research and development work or employment in some other qualified capacity	- demonstrate the skills required for participation in research and development work or employment in some other qualified capacity
Judgment and approach	**Judgment and approach**	**Judgment and approach**
- demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues	- demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work	- demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work
- demonstrate insight into the role of knowledge in society and the responsibility of the individual	- demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual	- demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual
- demonstrate the ability to identify the need for further knowledge and ongoing learning	- demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning	- demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning

Source: Högskoleverket. (2011). *National Qualifications Framework*.

4. Higher Education Finance

The proportion of public expenditure on higher education in 2007 in Sweden was 3.4%. Compared with the average of OECD countries (3.0%), the U.K. (2.0%) and Japan (1.7%), Sweden is characterized by high levels of public expenditure on higher education. Table 3 shows the proportion of government expenditure on higher education. Following the Nordic model of higher education, tuition of higher education is free, which means that the great costs involved in higher education are covered by the national treasury (Fägerlind and Strömqvist 2004). The proportion of government expenditure on higher education was 89.3%, much higher than that of OECD countries, at 68.9% (OECD 2010) (Table 3). A similar tendency can be seen in the Nordic countries: Denmark (96.5%), Finland (95.7%), and Norway (97.0%). The allocation of government expenditure on higher education, however, has been on a downward trend since 1995. Högskolverket announced that 81% of the public expenditure was distributed to higher education in 2009.

Table 3. Transition of the Proportion of Government Expenditure on Higher Education

	1995	2000	2002	2004	2006	2007
Denmark	99.4	97.6	97.9	96.7	96.4	96.5
Finland	97.8	97.2	96.3	96.3	95.5	95.7
Iceland	m	91.8	91.4	90.3	90.2	91.0
Norway	93.7	96.3	96.3	100.0	m	97.0
Sweden	93.6	91.3	90.0	88.4	89.1	89.3
U.K.	80.0	67.7	72.0	69.6	64.8	35.8
U.S.A.	37.4	31.1	39.5	35.4	34.0	31.6
Japan	35.1	38.5	35.3	36.6	32.2	32.5
OECD Countries	77.3	75.7	74.9	74.1	68.8	68.9

Source: Table B3.3. Trends in relative proportions of public expenditure on educational institutions and index of change between 1995 and 2007 (2000 = 100), for tertiary education (1995, 2000, 2002, 2004, 2006 and 2007)/ OECD Education at a Glance 2010.
Note: (m) shows that data is not available

The total amount of revenue spent on the higher education field (the 1st and 2nd cycle) in 2010 was SEK 25.6 billion, and 88% of that was funded by the government. As presented previously, the allocation to the 1st and 2nd cycles is determined by the

number of full-time students and the number of students who passed each year. Compared with Japan and the U.S.A, where the calculation of public funding allocation is based on input factors alone – the number of students, teaching staffs and facilities – Sweden puts emphasis on both input and output. The calculation focusing on output is characterized as the Nordic Model. It can be similarly seen in Denmark, Iceland and Finland (Fägerlind and Strömqvist 2004).

The current budget allocation is based on: (1) the number of full-time students during a year, and (2) the number of credits students earned. The education expenses differ depending on academic fields, so they are calculated on the basis of enumeration data which are classified into 15 groups. Table 4 shows the enumeration data in each academic field in 2011. The enumeration data fluctuate depending on the number of students. In 2009, the amount granted per student was SEK 20,866 and the amount per student's credit earning was SEK18,315 in the fields of cultural science, social science, theology and law; by 2011, the amounts edged up slightly to SEK 21,614 (per student) and SEK 18,972 (per credit). A glance at Table 4 will reveal that the total amount of funding in a field for which a small number of students enrolls is relatively higher than that of a larger number. In other words, the current allocation system is not likely to assure quality of education as long as it is contingent on quantity, the number of students. The government indicated that the current allocation system focusing on the number of students and credit earnings would ensure the quality of education (Prop. 2009). The allocation system is based on quantity, such as the number of students and their credits earned, but to improve the quality of education, the content of education at HEIs, not the quantity, should be stressed. For this purpose, the issues of low performance and students who are in courses longer than the three years they are supposed to be there should be addressed by HEIs. The strategy of learning outcomes should be of significance in designing effective education at HEIs and enhancing competitiveness in an international society.

Table 4. The Amount of Funding to Each Academic Field

Academic Field	Compensation per FET student 2011, Kronor	Compensation per full year performance, 2011, Kronor	Distribution of Full Time Students, 2010, percentage
Humanistic, Social Sciences, Theological, Legal	21 614	18 972	41.9
Natural Science	49 645	41 866	33.1
Healthcare	52 779	45 713	7.4
Education	34 452	40 575	7.0
Medical	58 979	71 740	5.3
Others	39 869	32 387	2.5
Music	121 367	76 738	0.7
Design	140 679	85 711	0.6
Sports	102 499	47 433	0.5
Dentistry	43 646	50 842	0.5
Art	199 718	85 742	0.2
Media	285 414	228 628	0.1
Theater	279 680	139 306	0.1
Dance	196 699	108 687	0.0
Opera	289 231	173 021	0.0

Source: Högskoleverket. (2011). *Rapport 2011:8 R Universitet & Högskolor Högskoleverkets årsrapport 2011*.

5. Conclusions – the Prospects and Challenges of the Strategy for Learning Outcomes in Sweden

The government pursues the goal that the younger generation will form a knowledgeable society by taking advantage of the opportunity to receive higher education. The circumstances concerning HEIs are not optimistic. In addition to the high average age of enrollees, the number of students entering HEIs after graduation from upper secondary education tends to increase with the recession. The effect of recession, moreover, makes an impact on students' paths after graduation from HEIs. The transition from education to occupation does not always go smoothly because of low employment rates. Those who could not find employment opt for the choice of repeating a course, which causes an extension of the education period. As long as the government injects public money into higher education, these are pressing issues to be addressed.

Education provided by HEIs is required to be useful for students in real life. HEIs are expected to cultivate students' knowledge, attitude of autonomous learning, and ability to think critically and solve problems, as well as develop their skills of

discussion and communication. These abilities are evaluated at the end of courses and programs to determine how much students acquired and how they can exercise them in a society.

As a final point, I should emphasize the followings as advantages and disadvantages of using learning outcomes as quality assurance in higher education. First, as an advantage, learning outcomes would contribute to the effectiveness of higher education management by ensuring transparency of higher education and strengthening accountability of HEIs. Second, the allocation system based on the results of evaluation will make HEIs involved in the improvement of their education content. Third, the improvement of education content, which aims to connect students' learning achievement to a desired ability in society, would develop desired human capital. On the other hand, the following could be pointed out as disadvantages of employing learning outcomes. First, it would be difficult to evaluate students' learning outcomes depending on a fixed measurement. Although the amount of knowledge would be measurable, it would be difficult to indicate the amount of skill and ability as an index. Second, the standard of evaluation would vary among estimators. Since the results of learning outcome evaluations will have an effect on resource allocation, estimators from a third-party institution would need to be trained in order to evaluate on equitable basis. Third, the allocation system – based on the results of learning outcomes – should be implemented carefully. More precisely, the results of learning outcomes should be evinced in detail in each academic field. The current framework of learning outcomes under the framework of quality assurance presents a broad outline. It should set the desired knowledge, skills, and abilities through each program in detail to avert the consequence of HEIs controlling the results of students' learning outcomes. Fourth, there would be a chance that students would not be able to find employment even if students acquired the desired knowledge and were well-prepared to go into the workforce. Although HEIs could become engaged in the lessening of students' long education period, HEIs would be limited in dealing with the low employment opportunities. With regard to the transition from education to employment, it should be discussed from another side – for example, providing job assistance for students. Finally, an evaluation of students' learning outcomes should consider who benefits from the evaluation. The beneficiaries should be students. The strategy for learning outcomes and the new

allocation system need to be discussed further to avoid causing turmoil in the academic field.

Reference

Allan, J. (1996). *Studies in Higher Education*, Vol. 21, No.1, pp. 93-108.

Engwall, L. (2007). Universities, the State and the Market: Changing Patterns of University Governance in Sweden and Beyond, *Higher Education Management and Policy*, Vol. 19, No. 3, p. 6.

Fägerlind, I. and Strömqvist, G. (2004). Higher Education Reform in the Global Context – What Ever Happened to the Nordic Model? In Fägerlind, I. and Strömqvist, G. (Eds.) *Reforming Higher Education in the Nordic Countries – Studies of Change in Denmark, Finland, Iceland, Norway and Sweden*, UNESCO.

Gallavara, G., Hreinsson, E., Kajaste, M., Lindesjöö, E., Sølvhjelm, C., Sørskår, A. K., and Sedigh Zadeh, M. (2008). *Learning Outcomes: Common Framework-Different Approaches to Evaluating Learning Outcomes in the Nordic Countries*. Nordic Quality Assurance Network for Higher Education (NOQA).

Hämäläinen, K., Haakstad,J., Kangasniemi, J., Lindeberg, T., and Sjölund, M. (2001). *Quality Assurance in the Nordic Higher Education – Accreditation-like Practices*, European Network for Quality Assurance in Higher Education.

Josefson, K., Pobiega, J., and Stråhlman, C. (2011). Student Participation in Developing Student Feedback. *Quality in Higher Education*, Vol. 17, No. 2, pp. 257-262.

Kim, L. (2004). Massification in a Uniform System of Higher Education – the Swedish Dilemma. In Fägerlind, I. and Strömqvist, G. (Eds.) *Reforming Higher Education in the Nordic Countries – Studies of Change in Denmark, Finland, Iceland, Norway and Sweden*, UNESCO.

Melton, R. (1996). Learning Outcomes for Higher Education: Some Key Issues. *British Journal of Educational Studies*, Vol. 44, No. 4, pp. 409-425.

OECD. (2008). *OECD Economic Surveys: Sweden*. OECD.

OECD. (2010). *Education at a Glance*. OECD.

Regeringens proposition 2009/10:139, *Fokus på kunskap – kvalitet i den högre utbildningen*.

Regeringens proposition 2004/05:162, *Ny värld – ny högskola*.

Sveriges Officiella Statistik. (2010). *Universitet och högskolor -Sökande och antagna till högskoleutbildning på grundnivå och avancerad nivå höstterminen 2010.*

Trigwell, K. and Prosser, M. (1991). Improving the Quality of Student Learning: the Influence of Learning Context and Student Approaches to Learning on Learning Outcomes. *Higher Education*, Vol. 22, pp. 251-266.

Tuijnman, A. (1990). Dilemmas of Open Admissions Policy: Quality and Efficiency in Swedish Higher Education. *Higher Education,* Vol. 20, pp. 443-457.

Högskoleverket. (2008). *Rapport 2009: 25R Kvalitetsutvärdering för lärande - Högskoleverkets förslag till nya kvalitets-utvärderingar för högskoleutbildningar*.

----- (2010). *Rapport 2010:10 R, Universitet&högskolorHögskoleverkets årsrapport 2010.*

----- (2011). *Rapport 2011:8 R Universitet & Högskolor Högskoleverkets årsrapport 2011.*

----- (2011). *National Qualifications Framework*.

----- (2011). *Generell Vägledning för Självvärdering i Högskoleverkets System för Kvalitetsutvärdering 2011–2014.*

Aoyama, K., Kominato, T., and Torii, A. (2004). The Improvement of Higher Education in Sidney University – Focusing on Student Course Experience Questionnaire: SCEQ. *Nagoya Journal of Higher Education*, Vol. 4, pp. 205-222.

Kawashima, T. (2008). The International Movement of Higher Education Reform Focusing on Learning Outcomes and the Implications to Japan. *Nagoya Journal of Higher Education*, Vol. 8, pp. 173-191.

Matsuzaki, I. (1976). Life and Education for Nordic in Antiquity and Medieval. In Umene, S. and Association for Education History in World (Eds.) *Education History in Nordic*, Kodansha.

[i] The three HEIs are: Chalmers University of Technology, the Stockholm School of Economics, Jönköping University Foundation.

[ii] The Bologna process aims to facilitate exchange and cooperation of higher education institutions in Europe, and to reinforce international competitiveness. The education was unified such as three years for bachelors (1st cycle), two years for masters (2nd cycle), and three years for doctors (3rd cycle).

[iii] The new resource allocation would be implemented from 2013.

[iv] Regeringens proposition 2009/10:139 *Fokus på kunskap – kvalitet i den högre utbildningen*.

[v] There are two kinds of 2nd cycle in Sweden, *Magisterexamen* for one year and *Masterexamen* for two years. *Magisterexamen* is maintained after joining the Bologna Process.

スウェーデンの高等教育機関における
ラーニング・アウトカムズ政策の動向

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要旨

本稿は、スウェーデンにおけるラーニング・アウトカムズ政策の動向について考察し、学士課程、修士課程におけるラーニング・アウトカムズの評価がいかなる利点・欠点をもつのかを考究する。学士、修士課程に焦点をあてるのは、これらの課程においてラーニング・アウトカムズによる評価結果が予算配分に反映されることがその理由である。

近年、学生の「学習成果（ラーニング・アウトカムズ）」は大学における教育の質の評価基準の一つとしてみなされており、その枠組の構築が進められている。学習者である大学生が大学卒業時にどのような知識と能力を身につけているべきかを評価しようというものである。スウェーデン国内においても 2007 年に構築された新たな質保証システムのひとつに学生の学習成果が含まれることになった。1977 年の高等教育改革以来、大学は現実社会で求められる知識とスキルを提供することが重視されてきた。つまり、大学が学生に対して習得させるべき知識やスキルは社会の需要に適応していることが求められており、大学と社会との結びつきは主要なテーマだといえる。

本文では、スウェーデンの高等教育に関する概要をふまえ、質保証枠組およびラーニング・アウトカムズ導入背景とラーニング・アウトカムズの指標について詳述した後、高等教育の内部効率性の問題について考究する。さらに、高等教育の財政問題を検討することで、ラーニング・アウトカムズがもたらす効果と問題点について考察している。