

Training needs of Swedish teachers

Background on primary and secondary education in Sweden

The backbone of the Swedish education system is since 1950 the compulsory primary school (grade 1 through 6) and lower secondary (grade 7 through 9). School attendance is compulsory for all children resident in Sweden. Children are required to attend school from the autumn term in the year they reach the age of 7, and the main rule is that compulsory school attendance ceases at the end of the spring term in the 9th.

Before entering the compulsory school, most children attend preschool (age 1-5) and preschool class (age 6). The activities of preschool are regarded as education and teaching. Teaching takes place under the supervision of preschool teachers, but there may also be other staff to promote the child's development and learning. The preschool class is a voluntary school form, which the majority of six-year-olds in Sweden attend. The preschool class is a school form in its own right with a large element of creative work and play.

All youth in Sweden who have completed compulsory school are entitled to a three-year upper secondary school education. Upper secondary education provides a good foundation for vocational activities and further studies, and for personal development and active participation in the life of society. It consists of 18 different national programmes each lasting three years. They are divided into upper secondary foundation subjects (Swedish, English, Mathematics), subjects common to a programme, orientations, programme specializations and a diploma project. The different upper secondary programmes may be either vocational programmes, or programmes preparatory for higher education.

All education in Sweden is free of charge, except parts of the preschool which has a moderate fee. This also includes universities and also private schools of all levels. Up until secondary school the municipalities are responsible for the education. The curriculum is governed by national laws, but the municipalities have the responsibility to provide every child with an adequate education.

There are national assessment tests and evaluations to identify and highlight those areas where national development is needed. Funding is provided through resources contributed by the municipalities themselves out of local tax revenues plus a general government grant to municipalities, which is linked to a special equalization system intended to create equal financial conditions for all municipalities and county councils. In addition to this, there are special funds in the form of targeted grants for special initiatives on the part of the state.

Teachers' education in Sweden

The teachers' education in Sweden was reformed in 2011. It consists of special programmes leading to one of four different degrees. These degrees can roughly be described as preschool, primary level, secondary level and vocational. The preschool and vocational degrees are not relevant for the SMART project and will not be described.

One characteristic that the education for teachers at primary and secondary level has in common is that subject, didactics and practical training are studied in parallel. For example a course in mathematics will often, in addition to teaching a mathematical subject, contain a part on didactics related to mathematics and also a part of practical training with a supervising teacher at a school.

Education for teachers at primary level

There are three different specializations:

- Preschool class and leisure-time centers
- Primary level, grades 1-3
- Primary level, grades 4-6

The study time for primary level teachers is 4 years, and for preschool it's 3 years. Teachers for grades 1-3 will have training and will be qualified to teach in all theoretical subjects for these grades. Teachers for grades 4-6 will have training and will be qualified to teach in mathematics, English, Swedish and at least one more subject.

Education for teachers at secondary level

There are two different specializations:

- Lower secondary level, grades 7-9
- Upper secondary level ("gymnasium"), grades 10-12

The study time for lower secondary level teachers is 4.5 years, and for upper secondary level teachers is 5-5.5 years. Teachers for grades 7-9 will have training and will be qualified to teach in three different subjects of which one is a main subject. Teachers for upper secondary level will have training and will be qualified to teach in two different subjects of which one is a main subject.

Certification of teachers

In 2011 the Swedish Parliament decided to introduce a certification of teachers. The purpose of the reform is to raise the skills among teachers in order to improve the quality of education. A teacher's certificate clearly shows in which types of school, which subjects and which years he or she is qualified to teach.

Only certified teachers are eligible for a permanent position. Exceptions are only allowed if there is a shortage of qualified teachers. A decision to allow an exception will be valid for at most one year at a time.

This reform is much needed since on average about 40% of teachers in a subject at upper secondary level are not qualified to teach in that subject. There is a national program aimed to give people who have been teaching without the formal qualification to get the necessary training in order to be eligible for certification.

Professional development and training needs for Swedish teachers

Introduction

In what follows, we summarize the results of the most elaborate and accurate recent investigation of the training needs of Swedish secondary school teachers. The results are extracted from the OECD survey TALIS (Teaching and Learning International Survey) from 2013. The report is available at oecd.org/talis.

The survey is directed to lower secondary education teachers, but it's reasonable, at least for Swedish teachers, to conclude that the differences compared to higher secondary education teachers would be small, since the rules of the professional development for the two categories are the same and most such activities are directed to both categories.

The Swedish results will in most cases be compared to the results from Italy and the Netherlands. Apart from being relevant in this context, it will also make it easier to compare to relate to the results of the questionnaire sent out to Italian teachers within the SMART project. Germany and Hungary did not take part in TALIS so it's not possible to compare with those countries.

The number of schools involved in the survey is at least 200 for each country and the number of teachers at least 4000. The average response rate for all countries was 82% and for Sweden it was 84%. In total 32 countries or regions took part in the survey.

Sweden, Netherlands and Italy all have a large proportion of teachers aged 50 or older with Italy having the largest proportion of all countries. The number of female teachers is 78% in Italy (4th highest), 66% in Sweden and 55% in Netherlands (3rd lowest).

Types of professional development

Participation rates for each type of professional development reported to be undertaken by lower secondary education teachers in the 12 months prior to the survey is given in the table below. Numbers are percentages of teachers reporting taking part in each type of professional development. The average is for all 32 countries taking part in the survey. In all but two of the types the percentage for Sweden is below average, and the percentage of teachers taking part in "Individual or collaborative research" is especially low.

	Courses/ workshops	Education conferences or seminars	Observation visits to other schools	Observation visits to business premises, public organisations, non- governmental organisations	In-service training courses in business premises, public organisations, non- governmental organisations	Qualification programme (e.g. a degree programme)	Participation in a network of teachers formed specifically for the professional development of teachers	Individual or collaborative research on a topic of interest to the teacher	Mentoring and/or peer observation and coaching, as part of a formal school arrangement
Italy	50,9	31,3	12,5	5,2	3,4	9,8	21,8	45,6	12,3
Netherlands	78,4	45,7	15,8	20,1	23,4	20,0	30,3	38,3	33,6
Sweden	58,1	45,1	13,5	9,5	7,4	10,4	41,5	9,6	17,5
Average	70,9	43,6	19,0	12,8	14,0	17,9	36,9	31,1	29,5

Content and impact of professional development

Percentage of lower secondary education teachers who report having participated in professional development with the following content in the 12 months prior to the survey and the percentage of them who report a "moderate" or "large" positive impact of this professional development on their teaching is given in the table below. The 6 content categories most relevant to the SMART project have been selected among a total of 14 categories. In all categories the percentage of Swedish teachers reporting participating is below average, and also the percentage of them feeling it had a positive impact on their teaching is below average.

	Knowledge and understanding of subject field(s)		Pedagogical competencies in teaching subject field(s)		ICT skills for teaching		Approaches to individual learning		Teaching cross-curricular skills (e.g., problem solving, learning-to-learn)		New technologies in the workplace	
	Percentage of teachers	Positive impact	Percentage of teachers	Positive impact	Percentage of teachers	Positive impact	Percentage of teachers	Positive impact	Percentage of teachers	Positive impact	Percentage of teachers	Positive impact
	%	%	%	%	%	%	%	%	%	%	%	%
Italy	62,6	90,2	60,3	88,9	53,2	82,2	36,6	87,9	34,0	85,9	44,7	80,0
Netherlands	69,0	89,5	62,2	82,6	48,1	72,8	41,0	70,2	33,2	77,6	29,8	71,2
Sweden	58,6	84,4	45,4	77,8	46,8	66,4	24,9	65,1	16,2	65,2	37,1	65,4
Average	72,7	90,8	67,9	87,2	54,2	80,3	40,7	80,4	38,5	80,5	40,0	78,8

Teachers' needs for professional development

Percentage of lower secondary education teachers indicating they have a high level of need for professional development is given in the table below. The same 6 content categories as in the previous table are selected. The estimated need among the teachers in Sweden is about average in all categories except for ICT skills, where it's above average.

An interesting observation when comparing the results for Italy from 2008 and 2013 is that the need for "Knowledge and understanding of the field" went down significantly from 34% to less than 17% while the need for ICT skills went up from 25% to almost 36%. Sweden did not take part in the survey 2008 so it's not possible to compare the Swedish results.

	Knowledge and understanding of the subject field(s)	Pedagogical competencies in teaching subject field(s)	ICT skills for teaching	Approaches to individualised learning	Teaching cross-curricular skills (e.g., problem solving, learning-to-learn)	New technologies in the workplace
Italy	16,6	23,5	35,9	22,1	22,3	32,2
Netherlands	6,9	5,6	14,9	14,0	6,8	11,5
Sweden	9,6	9,1	25,5	15,3	12,0	18,1
Average	8,7	9,7	18,9	12,5	11,0	17,8

Support received by teachers for professional development

Percentage of lower secondary education teachers who report having received the following types of support for the professional development undertaken in the 12 months prior to the survey is given in the table below. The percentage of Swedish teachers that received compensation for time engaged in professional development is above average, in particular for activities outside working hours.

	Scheduled time for activities that took place during regular working hours at this school	Salary supplement for activities outside working hours	Non-monetary support for activities outside working hours (reduced teaching, days off, study leave, etc.)
Italy	26,9	5,7	11,3
Netherlands	70,0	3,3	13,5
Sweden	64,3	4,3	31,1
Average	54,5	7,9	14,1

Barriers to teachers' participation in professional development

Percentage of lower secondary education teachers indicating that they "agree" or "strongly agree" that the selected reasons represent barriers to their participation in professional development is given in the table below. The barrier that is most troublesome for Swedish teachers, both in absolute percentage and compared to average, is that it's too expensive or unaffordable.

	Do not have the pre-requisites (e.g., qualifications, experience, seniority)	Professional development is too expensive/unaffordable	There is a lack of employer support	Professional development conflicts with my work schedule	Lack of time due to family responsibilities	There is no relevant professional development offered	There are no incentives for participating in such activities
Italy	14,0	53,0	39,8	59,6	39,2	66,6	83,4
Netherlands	8,2	26,3	26,9	38,3	26,9	39,3	30,9
Sweden	7,7	60,6	35,4	58,1	22,6	46,1	38,2
Average	11,1	43,8	31,6	50,6	35,7	39,0	48,0

Sources

The Swedish National Agency for Education, the Swedish Education System:

<http://www.skolverket.se/om-skolverket/andra-sprak-och-lattlast/in-english/the-swedish-education-system>

The Official Site of Sweden, Swedish education system:

<http://sweden.se/society/education-in-sweden/>

Sweden abroad, on funding of the Swedish school system: <http://www.swedenabroad.com/>

Läroutbildningar (Teachers' educations): <http://www.lararutbildningar.se>

Teaching and Learning International Survey (TALIS): <http://www.oecd.org/talis>