

What can be done to make better use of new knowledge in schools?



Foreword

Research serves as a constant source of new knowledge which can be of use in schools. But putting new knowledge into practical use is often a difficult art, requiring good organisation and perseverance. There are around 900,000 pupils in compulsory schools in Sweden today, who meet almost 85,000 teachers at over 4,600 schools. For new knowledge to be of benefit to these pupils, schools need to stand out as modern, professional knowledge organisations which can make use of and integrate available knowledge on a continuous basis. At the request of the parliamentary Committee on Education, a study has been conducted with the aim of increasing understanding of how new knowledge can come to better use in schools. A greater understanding of how schools can function as knowledge organisations can increase opportunities for well-founded political decisions.

A steering group from the Committee on Education with representatives of all the parties in the Riksdag drew up the guidelines for the work. Senior Research Officers Johan Wallin and Helene Limén from the Parliamentary Evaluation and Research Unit at the Committee Services Division conducted the study and wrote the report. They take full responsibility for the contents of the report. Cecilia Nordling, Ingrid Edmar, Mimmi Lapadatovic and Per Anders Stranberg from the Secretariat of the Committee on Education assisted their work. Searches for reference materials were carried out together with Madeleine Bengtsson and Maria Sundin via the Riksdag Library.

The report has been reviewed by Jan Håkansson, Senior Lecturer in Education at the Linné University in Växjö; Elisabet Nihlfors, Adjunct Professor of Education at Umeå University and Principal Secretary to the Committee for Educational Sciences at the Swedish Research Council; Per Nilsen, Associate Professor of Social Medicine at Linköping University and Andreas Ryve, Professor of Mathematics at Mälardalen University College. The report has been published in the Report from the Riksdag series (Report 2012/13: RFR10) and may be downloaded (in Swedish) from the Riksdag website www.riksdagen.se. This brochure contains a summary of the report.

What can be done to make better use of new knowledge in schools?

The report consists of three parts: a review of relevant literature, a questionnaire with the purpose of examining how teachers and school managers make use of knowledge derived from new research and a summary of a number of interviews with various actors working to promote the use of research findings in schools.

What does the literature say about implementation of knowledge?

Human beings are not passive recipients of knowledge. Implementation of knowledge can therefore never be simplified as being about convincing people of what is “right”. Neither are there any quick, simple solutions. On the other hand, it is important to increase understanding of the various factors that can affect an implementation process. These factors appear to have as great a role in achieving results as the knowledge that is to be implemented. It is, primarily, the users’ *subjective perceptions* that determine how new knowledge is received.

When it comes to larger, complex community services such as schools, there are many actors who, in various ways, influence the build-up of knowledge. There may also be different perceptions, both within and outside the school system, of what types of knowledge are most relevant. The first step in an implementation process should therefore be an analysis of the needs. In order to have an impact, new knowledge needs to meet a genuine need. This analysis must gain good support and result in a few, well-formulated priorities. The organisation also needs to have a plan for what measures and resources are needed, for how results are to be followed up and to be prepared in case the proposals meet with resistance.

If new working methods are to replace old ones, it is important that they are perceived as potentially better and able to work well in their context. It is also an advantage if the working methods are simple and easy to learn. But one cannot be sure until they have been tested. Users are generally

more willing to test something new if it is possible to quickly revert to previous working methods or try something else.

In order to be able to make use of research findings, it is important to be well prepared and that there are good conditions for local adaptation in schools. Merely having information presented is usually not enough. Having an appropriate education is not enough either. For teachers, it is often about having the opportunity to practise in the classroom. Good practice means being able to test, discuss and adapt new working methods together with colleagues or supervisors, and in this way to develop and refine one's skills.

A modern knowledge organisation is characterised by a culture that promotes knowledge. The management has a decisive influence on the culture of an organisation. Clear visions and a management that encourages staff to search for new solutions also benefit regular development efforts. In addition to the head teacher's responsibility as an educational leader, it is an advantage if there is a clear organisational structure, assigning specific areas of responsibility. Specialised, sustainable structures for receiving new knowledge and promoting its use should therefore be developed. Politicians and officials at various levels in the education system are also important creators of culture. But it is not enough to send clear signals that an education based on scientific principles and proven experience has high priority; concrete routines for how this is to be implemented in everyday activities at the local level are also needed. There are several examples today of collaborative efforts designed to bring about professional learning where schools can regularly catch up on, adapt, develop and start to use knowledge derived from new research. This takes time and effort, but is presumably well worth the investment in the long term.

What do teachers and school managers do to make use of knowledge from new research?

Below follows a summary of the results of the survey that was carried out to examine how teachers and school managers make use of knowledge deri-

ved from new research. The selection consisted of 3000 teachers and school managers. Of these, 62 per cent answered the questionnaire.

A large majority of the teachers and school managers answered that they need knowledge from new research in order to be able to develop their educational activities. Most of the respondents benefit most from new technology and tools to enhance their teaching. Many of them also need to update their subject knowledge as well as a greater knowledge of the psychosocial environment in schools. A majority also say that they regularly receive and use new knowledge in their work. Despite this, only around half of the teachers consider that this is actually part of their responsibilities. In general, the perceived needs correspond well to the type of knowledge that is said to be used.

Few schools actually have a plan for the implementation of new knowledge. Just one fourth of the school managers and one in ten teachers say that there is such a plan. Teachers obtain new knowledge primarily from the Swedish National Agency for Education, from colleagues and from the school management. School managers also cite the Swedish National Agency for Education as their main source, but also search for knowledge from higher education establishments and from local education departments in their municipalities.

Just under half of the teachers perceive that they receive support in obtaining knowledge from the school management and roughly the same proportion feel that they receive support from their colleagues. Among the school managers, a somewhat larger proportion reply that they receive support from their immediate superiors.

Just over half of both teachers and school managers consider that their basic education has given them a very good or fairly good ability to obtain and use knowledge from new research. A majority of the school managers have also participated in some form of continuing professional development which has also enhanced their skills. The most common of these is the programme for head teachers. Of the teachers, just three in ten say that their continuing professional development has been of value in this regard and over half of the teachers have not participated in any continuing professional development.

Nine out of ten teachers and almost as many of the school managers consider that they do not get sufficient time to make use of knowledge from new research in their work. In addition to receiving more time, they consider that other factors that facilitate making use of new knowledge include feeling motivated and that the purpose of the new knowledge is clear. However, not many of the teachers consider that support from colleagues is an important factor in this context. At the same time, four in ten teachers reply that poor support from the school management is an obstacle.

With few exceptions, there are no differences between municipal and independent schools, large and small schools or larger and smaller municipalities. Neither do there appear to be any differences among teachers regarding whether they are fully qualified teachers or not, what type of degree they have or how many years have passed since they graduated. Further, almost all of the school managers who have participated in the programme for head teachers reply that they use knowledge from new research in their work, even if nine out of ten of the other school managers also say that they do.

An education system based on scientific principles and proven experience – summary of the interviews

Below follows a summary of the interviews that were conducted. Interviews were held with representatives of the Swedish National Agency for Education, the Committee for Educational Sciences at the Swedish Research Council, the Swedish Association of Local Authorities and Regions and the City of Stockholm Education Department.

According to the new Education Act, education is to be based on scientific principles and proven experience. This formulation has received considerable attention in schools and in the social debate. As a result, many schools also feel a need for support in interpreting the practical implications of the wording.

Scientific principles means that schools shall both use new research findings and adopt a critical approach in order to be able to distinguish, formulate and solve problems. All affected parties need to take responsibility:

decision-makers and officials at all levels as well as school managers and teachers at the individual schools.

Experience is also an important form of knowledge. But it needs to be collected, processed, documented and made accessible in order to be of wider benefit. Only then can it be considered to be proven. Regardless of whether it is scientific research or proven experience that guides a certain working method, the goal is to use the best available knowledge in any given situation.

Even if there is a need for more and better research within the field, which is closely linked to actual practice, a concerted effort is also needed to systematically compile the research that actually exists. This applies to both Swedish research and research from other countries. The fact that the research findings are spread and lead to the involvement of many actors may be a strength, provided there is a functioning coordination.

For new knowledge to come to use, schools need to have the ability to assess its relevance and quality, and the key is to base the assessment on actual needs. It is therefore necessary for teachers to collaborate regarding new knowledge in order to ensure an ongoing development among all teaching staff. In this way, each school can build up sustainable and professional teams of teachers who observe and learn from each other. Teacher training that prepares new teachers well when it comes to systematising and sorting information is also an important aspect.

School managers have the main responsibility for developing a professional organisation. One way of promoting specialisation in schools is by creating specific teaching positions that include a special responsibility for development. Schools should also be able to learn from other professional areas. By letting in other professions such as management and organisational experts, schools can become attractive workplaces for more people. This would be easier to achieve if the entire management chain, including politicians and officials, recognised the benefits of using knowledge generated from research and understood what is needed for new research to become new practice.

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