



Programme Norwegian Educational Research towards 2020 – UTDANNING2020

# Work programme

# Norwegian Educational Research towards 2020 (UTDANNING2020)

(2009-2018)

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#### **Foreword**

The education sector is a vital part of the welfare society. What we learn in kindergarten, basic education, and training and educational institutions helps to shape us as individuals and lays the foundation for labour and industry in the society of tomorrow. Research-based knowledge is absolutely critical if the education sector is to continue to develop as a pillar of a modern knowledge society. In keeping with this, the Programme for Educational Research (UTDANNING2020) is an action-oriented research programme that conducts research relevant for the education sector as a whole – from politicians and public administrators to schools and kindergartens and teachers. The programme is financed by the Ministry of Education and Research and will run for a ten-year period. This work programme outlines a multi- and interdisciplinary research effort within four broad-based thematic priority areas of relevance to the education sector as well as areas of overlap in other sectors.

The work programme was drawn up during May to October 2008 by a programme planning committee with broad representation, and was approved by the Research Board of the Division for Strategic Priorities in December 2008. Some of the recommendations in the draft version were revised based on input from the Ministry of Education and Research and discussions within the Research Board prior to giving its final approval. The planning committee was charged with an important task, and it devised a good work programme for a wide-ranging and demanding field.

Oslo, December 2008

Anne Kjersti Fahlvik Director Division for Strategic Priorities

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## 1 Summary

This work programme sets out the objectives and priorities for a new, long-term educational research programme for the period 2009-2018. The Programme for Educational Research (UTDANNING2020) succeeds the Programme for Knowledge, Education and Learning (KUL) (2003-2007) and runs parallel with the Programme for Practice-based R&D in Preschool through Secondary Schools and Teacher Education (PRAKSISFOU) (2006-2010). Like these two programmes, the UTDANNING2020 programme is financed by the Ministry of Education and Research.

The profile of the UTDANNING2020 programme takes its point of departure in the challenges facing the education sector and educational research. The challenges for the sector must be viewed in light of the globalisation processes of which Norway is a part and the demands being placed on education in today's knowledge society. The expectations for the education sector are high, and the need for research that is significant for and relevant to the sector is great.

Norwegian education has many positive qualities, and is an important instrument for achieving equity within society. By the same token, research results show that social background is highly significant for a person's choice of education, educational performance and participation in social and working life. A great deal of resources are allocated to education, but international comparative studies show that Norwegian children and young people perform below average in basic skills such as reading, science and mathematics. Norway also has a high drop-out rate from upper secondary education and training. In general, there are strong indications that the Norwegian educational system has untapped potential that could be used for improving results. To realise this potential, more knowledge is needed about what factors are significant for achieving results in the sector – and what factors improve learning outcomes in a broad sense. Attention must therefore be directed at quality and relevance in the field of practice and research.

The education sector is large and generates a great variety of research questions, including questions related to factors outside of the educational institutions. Such a wide range of issues calls for research involving many subjects and disciplines as well as interdisciplinary approaches.

The programme invites projects within the following four priority research areas:

- A. Educational objectives, content, and teaching and working methods;
- B. Assessment forms, learning processes and learning outcomes in education;
- C. Management, administration and organisation of educational and research institutions;
- D. Education and society.

Norwegian educational research is facing major challenges. In recent years, various studies and evaluations have shown that the research field is fragmented and characterised by varying quality, weak internationalisation, and a lack of recruitment at all levels within academia. The primary objective of this programme is therefore to strengthen Norwegian educational research of high scientific merit and increase the knowledge base for practice, public administration, professional education and professional practice. In this context, the

programme will also give priority to implementing appropriate measures for knowledge-sharing and dissemination activities.

# 2 Background and framework

#### 2.1 Background

In recent years the Ministry of Education and Research has strengthened its focus on educational research, for example through funding to various programmes administered by the Research Council.<sup>1</sup> As part of the ongoing effort to enhance the breadth and quality of Norwegian educational research, the ministry has asked the Research Council of Norway to plan, launch and implement a new, long-term research programme for the period 2009-2018.<sup>2</sup> This programme initiative is one of several instruments currently being employed by the ministry to strengthen Norwegian educational research.<sup>3</sup>

This work programme sets out the objectives, priorities and funding instruments for the new Programme for Educational Research (UTDANNING2020), which follows up and may be seen as a continuation of the recently concluded Programme for Knowledge, Education and Learning (KUL) (2003-2007). The UTDANNING2020 programme will initially run parallel with the Programme for Practice-based R&D in Pre-school through Secondary Schools and Teacher Education (PRAKSISFOU) (2006-2010). The recommendations in this work programme are based on the assumption that a decision will be taken well in advance of the currently scheduled completion of the PRAKSISFOU programme as to whether that programme will be continued and possibly coordinated with the UTDANNING2020 programme. This must also be seen in light of the ministry's request that the Research Council focus greater attention on educational research as a cohesive area of research.

Educational research is a multidisciplinary field encompassing a variety of research disciplines, traditions and groups. The field investigates education's assumptions and objectives, organisation and structuring, and results and impacts. The programme seeks to enhance the quality of educational research by providing support to dynamic, internationally oriented research groups. The programme also establishes a framework that encourages interdisciplinary approaches and the systematic accumulation of knowledge.

The ministry's commissioning letter to the Research Council, and the background documents to which this refers, form an important set of assumptions for the work programme.<sup>4</sup>

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<sup>&</sup>lt;sup>1</sup> Programme for Knowledge, Education and Learning (KUL) (2003-2007), Programme for Practice-based R&D in Pre-school through Secondary Schools and Teacher Education (PRAKSISFOU) (2006-2010), Programme for Regional R&D and Innovation (VRI) and Programme for Mobilisation of R&D-related Innovation (MOBI).

<sup>&</sup>lt;sup>2</sup> See Proposition No. 1 (2007-2008) to the Storting as well as the letters of 14 January 2008 and 14 March 2008 from the Ministry of Education and Research to the Research Council.

<sup>&</sup>lt;sup>3</sup> The Ministry of Education and Research has set out a strategy for educational research in connection with Report No. 1 (2008-2009) to the Storting.

<sup>&</sup>lt;sup>4</sup> NIFU STEP report 15/2007a: *Utdanningsforskning. Fagdepartementets sektoransvar* ("Educational research: The ministry's sectoral responsibility"); NIFU STEP report 32/2007b: *Kartlegging av norsk utdanningsforskning* ("Survey of Norwegian educational research"); Rambøll Management (2007): *Norsk utdanningsforskning – en systemutredning*. ("Report on Norwegian educational research")

Additionally, the work programme builds on the following primary objectives set out in the Research Council's strategy up to 2010, *Research expands frontiers*:

- Enhance quality in Norwegian research;
- Expand the dialogue between research and society;
- Increase the internationalisation of Norwegian research;
- Do more to foster talent:
- Encourage more research for innovation.

These objectives coincide well with both the planning committee's intentions for the new programme and the ministry's commissioning letter to the Research Council, and are also in keeping with the challenges identified in the evaluation of Norwegian educational research and the recommendations of the follow-up committee.<sup>5</sup> The work programme is in conformance with the Research Council's guidelines for research programmes and its guiding principles and priorities with regard to project organisation and utilisation of funding instruments.

#### 2.2 Challenges and key assumptions

The Norwegian education sector and Norwegian educational research are facing major challenges. The task of a new, long-term research programme is therefore to combine as far as possible the most pressing challenges from both areas so that the programme may provide a stimulus to the sector as well as the research field.

The ministry's commissioning letter identifies three main challenges that underlie the current efforts to strengthen educational research:

- The need to increase the multidisciplinary and interdisciplinary nature of the research field:
- The need to enhance the scientific merit of Norwegian educational research;
- The need to expand the knowledge base for use in practice and political decisionmaking.

These challenges, despite a certain measure of inherent divergence between them, provide the focus of the new programme.

#### *Multi- and interdisciplinarity*

The education sector is large, complex and growing. To further develop the sector's overall knowledge base, it is necessary to encourage research activity that incorporates many different subject areas and cross-disciplinary approaches. In keeping with this, *educational research* is a research field that encompasses all thematic areas related to education and that

<sup>&</sup>lt;sup>5</sup> Research Council of Norway (2004): *Norsk pedagogisk forskning. En evaluering av forskningen ved utvalgte universiteter og høgskoler* ("Norwegian educational research: An evaluation of research at selected universities and university colleges") and Research Council of Norway (2006): *En nasjonal strategi for norsk pedagogisk forskning. Oppfølgingsutvalgets anbefalinger etter Forskningsrådets evaluering i 2004* ("A national strategy for Norwegian educational research: Recommendations by the follow-up committee subsequent to the Research Council's evaluation of 2004")

focuses attention on education's assumptions and objectives, organisation and working methods, results and impacts. Pedagogy, special needs education and subject didactics comprise key disciplinary areas within educational research, but educational research also involves research within the *social sciences*, such as economics, political science, law and sociology, as well as within the *humanities*, such as history, philosophy and the history of ideas. The sector's need for knowledge increasingly requires cross-disciplinary approaches.

#### Scientific merit

According to studies of Norwegian educational research by the Norwegian Institute for Studies in Innovation, Research and Education (NIFU STEP) and Rambøll Management, the scientific merit of educational research needs to be strengthened.<sup>6</sup> An expert evaluation of educational research also points out several key challenges facing research in this area, describing it as a fragmented research field characterised by varying degrees of scientific merit, small research groups, weak international publication activity, and diffuse distribution of resources. The evaluation concludes by stating, among other things, that educational research has been too oriented toward its social mandate and that this has hindered participation in scientific discussions at the international level. The strategy for the follow-up of the evaluation states that there is not necessarily a contradiction between scientific merit and relevance to society.<sup>7</sup> It goes on to emphasise the need to increase resources, strengthen recruitment and enhance project management, as well as to develop strong, internationally oriented research groups with a sounder theoretical and methodological foundation. This programme seeks to enhance scientific merit throughout the entire field of educational research.

#### Relevance for practice and policy

While efforts must be undertaken to enhance the scientific merit of educational research, the NIFU STEP study shows that knowledge needs within the sector are far from being met. According to NIFU STEP, this may be related to a lack of consensus on the appropriate focus of educational research and to the relatively broad definition of social relevance applied by individual researchers. An evaluation of the general teacher training programme conducted by the Norwegian Agency for Quality Assurance in Education (NOKUT) also shows that the connection between research and professional education is poorly developed and should be strengthened. The NIFU STEP study concludes that Norwegian educational research has comprised too many thematically defined programme initiatives. The study recommends that greater focus be placed on research which maintains a high degree of scientific merit and is relevant to professional practice, and that measures be implemented to promote the long-term accumulation of knowledge. The study by Rambøll Management also emphasises the need to develop state-of-the-art reviews targeted at research communities and systematic reviews targeted at users in the sector.

<sup>&</sup>lt;sup>6</sup> NIFU STEP (2007b) and Rambøll Management (2007)

<sup>&</sup>lt;sup>7</sup> Research Council of Norway (2006)

<sup>&</sup>lt;sup>8</sup> NIFU STEP (2007b), p. 41.

<sup>&</sup>lt;sup>9</sup> NOKUT (2005)

#### 2.3 Focus and profile

The UTDANNING2020 programme is based on recommendations made in the various reports on Norwegian educational research, the evaluation of Norwegian education, and the national follow-up strategy to the evaluation.

#### Further development of the research field

The UTDANNING2020 programme seeks to develop and consolidate educational research as a research field that incorporates many different subject areas. The programme will promote scientific development within all subject areas that are able to provide greater insight into and knowledge about and for the education sector. In addition to adult learning, little research has been conducted on kindergarten and upper secondary education and training (especially vocational education and training), and the programme will give priority to these areas as well.

Educational research is characterised by multidisciplinarity, and coordinating measures are needed to bring together research projects and researchers who study issues related to education. The programme will foster coordination among a number of disciplines and national and international research communities, and encourage creativity and boldness in the formulation of research questions, choice of methodology and development of theory. In this context, the UTDANNING2020 programme has a crucial role to play as it sets scientific and thematic priorities, selects funding instruments, and implements knowledge-sharing and dissemination measures.

The programme will also strengthen social science research on the outcomes of education, including the effects of educational interventions, as well as research based on longitudinal studies and empirical research, including research based on quantitative data.

#### Concentration of research resources

Resources must be concentrated on high-calibre research groups with the ability to establish networks and cooperation as well as compete at the international level. Dynamic research groups with sound management will help to increase international publication in the field and attract promising researcher talent as well as international expertise. Recruitment efforts will be focused especially on integrating doctoral and post-doctoral research fellowships into research projects and by implementing measures that target younger researchers who display an ability to develop research groups.

#### Scientific merit and relevance

Like most other research fields, educational research operates with two different sets of quality-related criteria: those related to scientific merit and those related to utility in the context of society. Educational research, and pedagogical research in particular, is often pulled between the field's scientific and social mandates. The UTDANNING2020 work programme assumes that there is not necessarily a contradiction between scientific merit and relevance to society. Research that is highly relevant for users, whether these are professional practitioners or public education decision-makers, must be conducted in accordance with

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<sup>&</sup>lt;sup>10</sup> Here the education sector encompasses kindergartens, day care facilities for school children, basic education, upper secondary education and training (including vocational education and training), higher education, working life and organised leisure activities.

established criteria for research quality. This principle underlies the programme's focus and will serve as a guiding principle when it comes to the allocation of project funding.

#### Knowledge production

In many ways the UTDANNING2020 programme carries on the research profile of the KUL programme to build long-term knowledge, but the new programme gives higher priority to research projects that combine scientific merit with relevance for practice and policy making The programme's focus differs from the PRAKSISFOU programme in that it does not require research projects to be based on cooperation with the field of practice.

## 3 Perspectives and challenges

*Perspectives* – *globalisation* and the knowledge society

Knowledge is a major driving force within all segments of today's society. In most countries there are high expectations for what the education sector can accomplish. The challenges currently facing the education sector may be divided into two main perspectives. These perspectives reflect extensive change processes and pose many challenges. One perspective entails globalisation and globalisation processes. The other involves factors that fall under the general heading of the knowledge society.

In our increasingly globalised world, social development requires cooperation, and education is growing more and more important for our success as individuals and for the development of society. In order to meet the global challenges related to climate change, the environment and poverty, global responsibility must be stimulated and widespread investments in the population's competence must be made. Education increases our knowledge about and understanding of other people, cultures and ethnic groups. Consequently, education may expand dialogue between individuals and groups, and promote solidarity across borders. A key question for educational research is whether the educational system gives sufficient focus to educating children and young people to meet the major global challenges we are facing.

Today's knowledge-based society requires continual, relevant development of expertise in order to advance the necessary social, cultural and economic development. Rapid technological changes and growth in knowledge result in new patterns of interaction that challenge traditional means of problem-solving. The function, content and objectives of education have a dynamic relationship with the society of which it is a part. Lifelong learning, enthusiastic participation and constructive interaction in working life require basic knowledge and skills which are acquired through the formal educational system. The fast pace of social change presents the education sector with numerous challenges related to society's expectations and requirements for expertise, individual needs and preferences, and the authorities' need for knowledge and information in managing the sector.

#### Challenges for the sector and society-at-large

Education has intrinsic value, derived from its role based on the concept of *Bildung*. Education helps to strengthen democracy and a sense of community by enabling individuals to participate actively in society and working life. Values such as the universal right to education, equity and gender equality are cornerstones of the Norwegian education tradition. In addition to its intrinsic value, education is a tool for social, cultural and economic development. The purpose of education is to prepare individuals for working life, lay the groundwork for their growth and acquisition of expertise, and enhance their opportunities to make a constructive contribution to society.

International studies indicate that Norwegian education has been successful in imparting the knowledge needed for democratic participation. A major survey also shows that Norwegian

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<sup>&</sup>lt;sup>11</sup> The German term *Bildung* refers to the idea that every individual has unique potential and it is the task of education to form this potential so that individuals can make their unique contribution to the culture which has shaped them.

school children like school and have good self-esteem.<sup>12</sup> The OECD recommends that Norway maintain the educational system's basic structure, as the system has been successful overall in enhancing equity within society.<sup>13</sup> Although the educational system has been designed to break down social inequalities and promote equity, studies show that the Norwegian educational system nonetheless reproduces social, cultural and gender inequalities with regard to a person's choice of educational programmes, educational performance and participation in social and working life.<sup>14</sup> It should be noted, however, that there are fewer inequalities in Norway than in many other countries.

Education increases the likelihood that an individual will be integrated into the labour market. More and better educational programmes have an inclusive effect and counteract the tendency to marginalise individuals and groups. A well-functioning educational system is necessary for the development of social and working life. This places great demands on educational authorities and the individual educational institutions to ensure that all children and young people acquire basic skills and expertise. Working life has become more knowledge-intensive, for example as technology increasingly requires people to master abstract knowledge and symbols. This in turn creates new demands for expertise. The professionalisation of the labour force is occurring in both the public and private sectors. These trends intensify the need for better professional, vocational and continuing education and training programmes. The interplay between the educational system, including vocational education and training, and a changing labour market is therefore a crucial challenge for the sector and an important object of study for educational research. A key question in this context is whether today's education sector operates with a relevant understanding of and ideas about what constitutes vital, essential knowledge and constructive approaches for targeted learning.

Norway allocates a relatively large amount of resources to education, and the question is more frequently being raised as to whether the level of funding is reasonable in relation to the results reported in international comparative studies. Studies show average results for Norwegian schools in basic reading and mathematics skills, and several studies point out that Norwegian schools have not utilised their potential to achieve more and better learning. More knowledge is needed about the factors that influence the achievement of results within the sector and learning outcomes in a broad sense, and greater focus must be placed on how efforts are carried out within the sector. This is an overall challenge for all levels within the education sector and will serve as a guidepost for the programme's focus. With regard to the more specific challenges within the sector, the following three factors are relevant:

As part of the educational cycle, kindergarten represents a vital educational foundation. The dramatic expansion in the number of kindergartens in recent years has made kindergarten an arena of socialisation and learning for almost all children. While kindergarten has intrinsic value, several studies show that high-quality kindergartens also help to lay an important foundation for further learning in schools and educational institutions. 15 However, there is

<sup>&</sup>lt;sup>12</sup> Pupil survey 2007, http://www.skoleporten.no

<sup>&</sup>lt;sup>13</sup> OECD (2004): Equity in Education Norway: Thematic Review

<sup>&</sup>lt;sup>14</sup> Report No. 16 (2006-2007) to the Storting: Early Intervention for Lifelong Learning

<sup>&</sup>lt;sup>15</sup> Ministry of Education and Research (2006): *Tidlig språkstimulering og livslang læring – en* kunnskapsoversikt ("Early language stimulation and lifelong learning – a knowledge overview")

limited knowledge about how kindergartens attempt to integrate children in the larger social group and how practices employed in kindergartens affect children's development, learning and creation of meaning. In light of the Government's new "Framework Plan on the Content and Tasks of Kindergartens", these issues will constitute crucial areas of study.

The drop-out rate of pupils from upper secondary education and training, especially vocational and educational training, presents major challenges, and there is little knowledge about the causes for and consequences of so many young people, especially males, ending up outside of the educational system. Moreover, more knowledge is needed about the content of educational and training programmes, as well as how these programmes are organised and how responsibility for them is distributed among the various players. A key challenge is the school's ability to provide adapted education that ensures good learning outcomes for all pupils while fostering social integration at the same time.

The drop-out rate and low completion rate are also a challenge in higher education. The evaluation of the Quality Reform showed that immediate positive results had been achieved, but it also questioned whether the reform had adequately helped to enhance the quality of education. More knowledge is needed about the long-term effects of the Quality Reform and about the quality, content and learning outcomes at the higher education institutions.

# 4 Objectives of the programme

#### 4.1 Primary objective

The programme's primary objective is to strengthen educational research by promoting research of high scientific merit and to enhance the knowledge base for policy making, public administration, professional education and professional practice. A variety of subject areas and research communities will be encouraged to conduct research on issues related to the education sector as well as areas of overlap in other sectors, including working life.

#### 4.2 Secondary objectives

To achieve the primary objective, it will be necessary to:

- Develop dynamic research groups that will make a significant contribution on the international research front;
- Strengthen the basis for recruitment within educational research in general and to toplevel positions in particular;
- Enhance the theoretical and methodological foundation of educational research;
- Encourage research projects that combine various theoretical perspectives and methodologies as well as longitudinal studies;
- Encourage a diversity of methodologies, for example by increasing the volume of quantitative research and social science research on the outcomes and effects of education;
- Focus research thematically on the challenges within the sector and increase research on under-investigated areas such as kindergarten, upper secondary education and training, especially vocational education and training, higher education and adult learning;
- Increase communication among researchers and between researchers and users.

The programme board should draw up specific performance targets and indicators related to the various secondary objectives. These should be set out in annual, updated action plans. The programme board must also prepare a separate communication plan for knowledge-sharing and dissemination activities.

## 5 Thematic priority areas

The programme invites projects within the following four thematic priority areas:

- A. Educational objectives, content, and teaching and working methods;
- B. Assessment forms, learning processes and learning outcomes in education;
- C. Management, administration and organisation of educational and research institutions;
- D. Education and society.

These priority areas reflect the breadth of educational research while directing the thematic focus toward issues that are relevant for meeting society's needs for knowledge in the short and long term. It should be noted, however, that the role of the education sector in social development is undergoing constant change, and it may be necessary to consider introducing new thematic priority areas during the programme period. It is recommended that the thematic priority areas are assessed after the first three years of the programme in light of the project portfolio funded up until that point, as well as any new research needs that have arisen.

The programme gives a boost to research on under-investigated areas and encourages the use of methodologies which have been under-utilised within educational research in recent years, and at the same time represents continuity in previous and ongoing programmes. Projects that investigate a single thematic area and those that address several areas are interesting and relevant under the new programme. The thematic priority areas should not be viewed as separate from each other, and there are particularly clear connections between thematic priorities A and B.

The relatively open and broad thematic areas give researchers a great deal of freedom to design their projects. If the budget framework allows, the programme will also consider funding researcher-initiated projects that support the programme's primary objective and promote development of the field and cutting-edge research.

#### A. Educational objectives, content, and teaching and working methods

Thematic priority area A focuses on didactics for different subjects and didactics for vocational education and training, primarily teaching and working methods that are intended to produce good learning outcomes for young children, pupils, students, apprentices and adults. There seems to be some disparity between the significance of teaching quality for the learning outcomes of pupils, apprentices and students and the attention paid to this, and issues related to subject didactics in general, within educational research. A better understanding of how the knowledge society challenges educational institutions may be gained by asking questions such as: What does it mean today to teach a subject, learn a subject and master a subject? What subjects and skills are essential for meeting future challenges? This thematic area seeks research projects that investigate issues relevant for education's *content and objectives* (i.e. the balance between play and learning areas in kindergarten and how subjects in basic, vocational and professional education are prioritised), *steering documents* (i.e. national curricula and framework plans), *teaching resources* (including digital resources), and *adaptation, organisation and implementation* of teaching and learning activities.

The steering documents provide the foundation for education as a whole. Several different curricula have been tested, and more knowledge is needed about the impact of the steering documents and regulations on teaching and working methods, learning processes and learning outcomes. The "Framework Plan for the Content and Tasks of Kindergartens" from 2006 specifies seven different learning areas that kindergarten must address. It is crucial to generate knowledge about how the framework plan is interpreted and practiced and how this influences the kindergarten staff's educational priorities and children's development and learning. Kindergarten's educational tradition is based on the recognition that early childhood as a phase of life has intrinsic value, in which play, care and a tightly knit social group are crucial. There is a great need for varied knowledge about kindergarten as an arena for socialisation and learning for young children. More insight is needed into the various aspects of kindergarten life viewed from the perspective of children, parents and kindergarten employees. A particular challenge is related to knowledge about the impact of kindergarten on the youngest children's learning and development.

Key challenges related to didactics for vocational education and training are the relationship between classroom learning and in-service training in an enterprise, and the significance of teachers and instructors for the quality of education. It will also be interesting to investigate whether the Quality Reform's requirement for closer follow up of students functions as intended and helps to improve learning outcomes and increase throughput.

There is a need for studies that provide insight into the connection between teaching and working methods within the various subjects, sound and inspiring learning processes, and learning outcomes. An important question is what teachers do to realise the ideal of adapted and inclusive education. It is also necessary to look more closely at the connections between various forms of practice and learning outcomes. Furthermore, it may be relevant to study the significance of the physical working environment and architectural solutions for teaching and learning. Another topic is how educational programmes involving practice periods adapt the practical training to reflect the needs of working life. It is also interesting to analyse how various models of user involvement, including cooperation with parents, help to improve and ensure the quality of education. At the international level there is extensive research activity and increasing knowledge development on issues related to formal and informal learning in working life. However, more knowledge is needed about which educational strategies and working methods best advance learning in the work place and how knowledge acquired through school and studies is transferred to working life. How – and what – do teachers, such as kindergarten employees and teachers, learn as they practice their profession?

#### B. Assessment forms, learning processes and learning outcomes in education

While thematic priority area A seeks to shed light on connections between curricula, working methods and learning outcomes, thematic priority area B invites more research on connections between assessment forms, learning processes and learning outcomes. How teachers and instructors direct the learning processes of young children, pupils, apprentices and students, e.g. what they do (or do not do) in a teaching context to influence learning outcomes. For instance, studies show that the teacher's or instructor's ability to provide continual feedback is crucial for the pupils' awareness of their own learning processes. In recent years more attention has therefore been given to how assessment and feedback promotes learning at the individual, organisational and system level. Consequently, priority research area B

<sup>&</sup>lt;sup>16</sup> Report No. 31 (2007-2008) to the Storting: Kvalitet i skolen ("Quality in the schools")

emphasises the need for more knowledge about connections between assessment practices and learning outcomes at all stages of the educational cycle. Here assessment is defined in a broad sense, and includes assessments of pupils with and without marks as well as assessments at the system level. More knowledge is needed about how various assessment forms may promote learning at the individual, group and organisational level.

International studies and national tests have drawn more attention to learning outcomes in Norwegian education. They have also shown a lack of expertise in performing assessments in basic education and teacher training programmes.<sup>17</sup> More knowledge is therefore needed about how assessments are used by educational institutions to enhance young children's. pupils' and students' learning. Are teachers and instructors aware of the ongoing assessment that takes place in a teaching context? How do they apply their assessment expertise when they sum up the objective of the teaching activity and what learning was to have taken place. As a result of the Quality Reform, new forms of assessment and a quality-assurance system have been introduced in higher education. The OECD is now planning a PISA survey for higher education and for vocational education, and there is a need for research-based knowledge about how assessment results are understood and interpreted at these educational levels and what implications such analysis has for practice. There is also a connection between assessment expertise and learning at the organisational level. If organisations are to work for lasting improvements, they must know how to assess their activities and learn from the assessments that are made. This challenges the leadership's assessment expertise in particular, as it is the task of leadership to direct the development and learning processes within organisations. Consequently, there is a great need for long-term, systematic research on these relationships.

# C. Management, administration and organisation of educational and research institutions

Thematic priority area C addresses issues related to management, administration and organisation at both the system and institutional level, not least the interaction *between* various management levels and players.

At the *system level*, research must reflect the fact that national management of education occurs increasingly within the framework of supranational guidelines, which may challenge national values and interests. Research should investigate and explain these framework conditions and uncover any areas of conflict. For instance, it is important to acquire more knowledge about the development of universities and university colleges as well as the sector as a whole in an international perspective and what this means in the context of European processes of integration and globalisation. Other important topics include national management and organisation of the education sector, including national steering documents and management strategies, the degree of delegation, national oversight and the organisation of the national public education administration. Research should also focus on whether various management instruments and incentives help to achieve key objectives for the sector. Changes in the management and administrative structure of higher education are especially relevant in this context. Issues related to the legal aspects of education are also relevant under this thematic area. This may entail, for example, the legal aspects of the public administration

<sup>&</sup>lt;sup>17</sup> Report No. 31 (2007-2008) to the Storting: Kvalitet i skolen ("Quality in the schools")

of education and the consequences of international developments that Norway must take into account due to its membership of multinational organisations such as the UN and WTO and its cooperation with the EU.

Kindergarten, basic education and upper secondary education and training are the responsibility of municipalities and counties and thus a part of the local community and local democracy. Like the universities and university colleges, they are also subject to extensive national management. Key research areas include how the individual municipality and county has chosen to organise its ownership, the relationship to other municipal services that are significant for training and education, kindergartens and schools as local institutions with democratically elected leadership, and how contact between levels in the administrative chain is maintained both internally within the individual municipality/county and between the municipality/county and authorities at the national level. Knowledge about the impacts of various incentives, explicit or implicit, economic or non-economic, is limited. Research should therefore also focus on how various management instruments and incentives help to achieve key objectives for the sector.

At the institutional level, there is a general need for more knowledge about the connections between management, administration, organisation, resource use and learning outcomes and about which administrative forms produce good results at the various levels within the educational system. Within a single educational institution, various and partly incompatible forms of management and administration operate side by side. This places great demands on the leadership and confirms the need for research that sheds light on conditions for knowledge development and that investigates educational institutions as knowledge organisations. A framework for extensive changes in the management and administration of universities and university colleges has been laid in recent years, and more research is needed on how these changes affect activities at the institutions. In the area of basic education, there is a need for studies that produce more knowledge about how the school's leadership supports teachers in the practice of their profession and which results this gives. More knowledge is also needed about how key steering documents such as framework plans and curricula are used in the management of educational institutions. Does the leadership ensure that the institutions are achieving the entire spectrum of educational policy objectives? There is also a need for more knowledge about management and administrative practices from the perspective of both the employer and the employee.

#### D. Education and society

Thematic priority area D involves research on conditions for *Bildung* and education in a multicultural society undergoing rapid change. This area addresses the ethical, normative and value-related aspects of education. It also includes the capacity of education to guide social development in relation to established political objectives. Education today takes place in a multicultural society. This means the educational system must have the ability to manage differences and diversity and promote tolerance and equality. Political ambitions for inclusive practices raise questions related to ethnicity, gender, equality and inequality. Globalisation processes and increased mobility enhance these trends. Norwegian children grow up with greater knowledge about the world they live in, and it is the task of education to further develop this knowledge. Changes in the family structure have consequences for living conditions for children and young people and for their education. Therefore, a crucial topic of investigation is the kindergarten's dialogue with parents and how cooperation between the school and home is fostered.

Research under this priority area focuses on how the individual is included in society and functions as a citizen, i.e. the social conditions required for individual growth, the educational system as an arena for reproduction and change, and the relationship between education and working life. Educational institutions must be aware of the mechanisms that have an inclusive or exclusive effect on individuals, and they must realise that if a person is marginalised in one context, he or she will not necessarily be excluded from all arenas of participation. Studies about the conditions that reproduce inequalities and conditions that may lessen social inequity and promote social mobility are important topics. Consumption, media and lifestyle are important aspects of this.

This thematic area also calls for research on society's future needs for expertise and ability to innovate and how the educational system can meet these challenges. How are expectations for future professions formed and decisions about these taken, and what role does education play in the choice of professions? Is there a correspondence between formal qualifications acquired through education and the qualifications demanded by society? Does today's curriculum incorporate knowledge development in areas of key significance for society? In this context, research should focus on the educational system's financing, organisation and structure, as well as on its content and practice.

Growth in productivity through the development of new technology or increased efficiency is one of the most important sources of long-term *economic* growth and prosperity. This requires knowledge and skills that may be achieved only through investments in expertise. Educational policy is therefore a vital part of policy on growth and sustainable development, and is directly linked to policy on innovation. For instance, the government's ambitious goals for research activity, both in general and within priority areas, can only be fulfilled if the educational system as a whole is capable of providing a sufficient number of high-calibre researchers. Knowledge about the interaction between educational policy and research policy is lacking and should be strengthened.

Thematic priority area D involves issues that are also addressed under other Research Council programmes, and this thematic area should therefore not be given higher priority than the other areas. It is especially important to view this thematic area in relation to the new Research Programme on Welfare, Working Life and Migration (VAM) and the new research initiative on cultural conditions for social development (SAMKUL).

# 6 Strategic priorities

#### 6.1 Varied, focused funding instruments and forms of support

To follow up on the programme's primary and secondary objectives, the programme will utilise a variety of targeted funding instruments and forms of support intended to achieve these objectives. The variety of strategic-oriented project types and measures available to the programme will depend on the budget. It is the programme board's responsibility to prioritise on an ongoing basis the funding instruments and strategic measures that will be implemented throughout the programme period based on the programme's budget framework. If a decision is taken to merge the UTDANNING2020 programme with the PRAKSISFOU programme which concludes in 2010, the funding instruments and objectives will need to be reassessed. Forms of support and funding instruments must also be viewed on an ongoing basis in connection with the Research Council's guidelines and the special challenges of the thematic areas addressed by this programme.

It is important to note that the research institutions are also responsible for meeting the research challenges within the sector, and it is crucial that the funding instruments prioritised under the programme are coordinated as much as possible with the institutions' strategies and measures. The institutions should also be required to contribute some of their own resources when they are awarded project funding under the programme.

The programme's primary objective is to give a qualitative and quantitative boost to Norwegian educational research by providing targeted allocations of research funding. The programme will therefore mainly award funding to large-scale projects that will promote the development of dynamic research groups which can also make a significant contribution on the international research front. This funding priority is in keeping with the Research Council's overall policy, and it is an important means of counteracting fragmentation within the research field. In this way, the programme will also carry on the KUL programme's focus on the systematic development of sustainable research groups and communities.

Integrated researcher projects combine many different types of projects that individually address the programme's objectives. The utilisation of doctoral and post-doctoral research fellowships strengthens recruitment at the entry as well as top level. When fellowship-holders are affiliated with a larger research group with strong research management, they are able to complete their training and gain additional qualifications more quickly, which also leads to the development of more dynamic research communities. Researcher projects should include funding for research stays abroad in order to encourage the internationalisation of Norwegian educational research. To strengthen research cooperation across institutions both nationally and internationally, large-scale researcher projects may also be awarded funding for networking activities.

Although large-scale, integrated researcher projects will be the programme's main funding instrument, researcher projects of a more moderate size should also be considered for funding. This project type is suitable both for pursuing the programme's objective of developing multi-and cross-disciplinary projects and as an instrument for developing the discipline. Viewed from a ten-year perspective, the programme should also use researcher projects to attract younger, especially talented researchers and give them the opportunity to establish their own

research groups. The programme should consider issuing special funding announcements or other direct measures to attract these talents. The programme must also target particularly original and creative research, and allow latitude for this type of researcher-initiated project.

The field of educational research is faced with the challenge of building strong research communities within and across the institutions. There is a need to strengthen research cooperation across research communities, including internationally, and it is a special challenge to establish research cooperation between the universities and university colleges. To encourage the development of joint research projects, the programme will award a limited amount of funding for *networking activities* or for *pre-projects* that develop project concepts particularly relevant to reaching the programme's objectives.

As mentioned above in the discussion on challenges for the sector and research field, there is a need for synthesised studies, or state-of-the-art reviews, of various sub-areas of the broad field of educational research. This form of knowledge synthesis may serve as a basis for new research projects and in this context may be regarded as pre-projects. As the costs of such projects will be relatively modest, the programme should give priority to funding these.

National graduate-level researcher schools may be an effective instrument for strengthening educational research by increasing recruitment, fostering constructive international cooperation, and stimulating more and better research in strategically prioritised areas. Through their organisational models, researcher schools may also foster positive interaction between universities and university colleges, which is an important challenge for Norwegian educational research. Several such researcher schools were launched in the wake of the evaluation of educational research. Additionally, the National Graduate School in Educational Research (NATED) is now being established with special funding set aside by the Research Council. In light of this, the programme should not prioritise funding for this purpose in the initial phase. However, since the programme seeks to develop educational research as a multi-and interdisciplinary field, the programme board should assess on an ongoing basis whether researcher schools should be used as an instrument for strengthening recruitment in relevant interdisciplinary thematic areas within educational research. This will also depend on the programme's budgetary framework.

#### **6.2** Internationalisation

The strategy for the Research Council of Norway up to 2010, *Research expands frontiers*, cites increased internationalisation of Norwegian research as one of six primary goals. Similarly, the government white paper *Commitment to Research* identifies internationalisation as a main research policy priority, emphasising in particular more active participation in the European Research Area (the EU framework programmes) and the need to strengthen bilateral research cooperation, particularly with countries in North America and Asia. The evaluation of Norwegian educational research and other studies of the field point out that Norwegian research is poorly represented in the international research arena. The new programme will follow up the KUL programme's objective to enhance Norwegian researchers' visibility and participation in international research cooperation. The programme will use a number of instruments to achieve this objective:

- Establish research groups that are attractive to international researchers;
- Actively encourage Norwegian researchers to submit grant applications to the EU and the European Science Foundation (ESF);

- Develop cooperation between this programme and other research programmes abroad;
- Require that grant applications be submitted in English;
- Require that the research projects aim to publish in international scientific journals;
- Provide funding for research stays abroad;
- Provide funding for guest researchers.

#### 6.3 Databases

Relevant, high-quality data is essential for conducting empirical research of high scientific merit. While the situation regarding data within Norwegian educational research is good, there is a need to establish new databases to enhance the ability to adequately investigate vital research questions. These may be created by compiling new information or by combining existing data. Establishing new databases is resource intensive, both in terms of funding and expertise. The programme will promote efforts to compile new data and establish new databases in connection with the research projects funded under the programme. It is necessary to ensure that the databases that are established may be made available to other researchers at a later point in time.

Educational research has the potential to generate a vast amount of data. There is extensive register data which may be made available for research purposes. This makes it possible to compile data sets that provide a detailed picture of pupils' and students' socio-economic background, attendance at educational institutions, results from educational programmes, and long-term outcomes related to education, such as participation in the labour market. Moreover, data are available from various administrative levels which shed light on resource use, such as the size of allocations for various types of special measures. One advantage with this type of data is that it often pertains to an entire population; another is that long time series are generated over the years. Another type of data relates to internal processes in schools and classrooms. These data are usually compiled through case studies and questionnaires, and may provide new information about areas for which register and administrative data are less useful. On the other hand, these are costly to compile and often cover only one segment of the population. They also offer only limited information about background and framework factors. Databases that combine various types of data could lead to more in-depth analyses than has been the case within a number of areas, as well as promote cooperation across subject areas and research traditions. The programme will therefore encourage research projects that combine data from register-based systems and data compiled through questionnaires, case studies, schools' internal systems and the like.

## 7 Knowledge-sharing and dissemination activities

The UTDANNING2020 programme seeks to promote educational research of high scientific merit and provide a better knowledge base for policy making, public administration, professional education and professional practice. In keeping with this, the new programme must have an offensive, innovative strategy for knowledge-sharing and dissemination activities directed at scientific groups as well as users within the sector. The programme must draw up a separate plan for knowledge-sharing and dissemination activities that outlines specific measures targeted at the various groups throughout the entire programme period. Here the programme must draw on experiences from other national and international research programmes, such as the Programme for Knowledge, Education and Learning (KUL) (2003-2007), the Programme for Practice-based R&D in Pre-school through Secondary Schools and Teacher Education (PRAKSISFOU) (2006-2010) and the Teaching and Learning Research Programme (TLRP).<sup>18</sup>

#### 7.1 Scientific publication and dissemination

Articles in international journals are the most important form of scientific publication. It is both a guarantee that the publications are evaluated in a critical, independent manner, and a prerequisite for participation in international research cooperation. Projects awarded funding under the programme must therefore aim to publish in international scientific journals. In addition to publication in journals, books are also an important scientific publication channel. Researchers who receive funding under the programme should be encouraged to have their work published by international publishing houses. Participation in international conferences by presenting papers and poster sessions is also a vital part of the scientific dissemination activity under the programme.

#### 7.2 Dissemination to users and the general public

Today the results of research have too little impact on professional education programmes and on professional practice in the field. One possible explanation for this may be that research results are not published in media that reach these target groups. It is also possible that some research is based on issues that are viewed as having little relevance for the field of practice. Only on rare occasion does research generate empirical findings that can easily be implemented in practice. It is therefore crucial to enhance the ability of professionals in the field to request, interpret and utilise research-based knowledge that is relevant for practice. The UTDANNING2020 programme will have an offensive strategy for knowledge-sharing and dissemination activities, but it should be emphasised that other players are also responsible for ensuring that research-based knowledge is utilised and that other instruments must thus be used to help support the programme.

To ensure productive communication between researchers and users, the programme will compensate for the lack of incentives to disseminate results to users and the general public by building such incentives into the programme. To reach key user groups, top priority will be given to dissemination activity targeted at those who educate the professional practitioners

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<sup>&</sup>lt;sup>18</sup> TLRP is a large-scale British educational research programme launched in 2000. It is organised under the Economic and Social Research Council (ESRC). See <a href="http://www.tlrp.org/">http://www.tlrp.org/</a>

and the professional practitioners themselves. The programme will use a wide range of information channels targeted at users and the general public, such as the Research Council's website, newsletters, coverage in the daily media, professional journals, etc. The programme will require the individual projects to disseminate their own results, but to achieve even greater impact and confidence among users the dissemination activity should also include results from several projects.

#### 7.3 Programme seminars and conferences

In addition to establishing new meeting places, there is a need to use and improve existing networks of electronic and printed dissemination material to ensure that an exchange of experience and dialogue takes place among researchers and between researchers and users throughout the programme period. The new programme will give priority to organising frequent information and dialogue meetings, seminars and conferences that target users as well as researchers. National, Nordic and international conferences are crucial forums for establishing contact and sharing knowledge, and the programme plans to organise both national and international conferences on a regular basis throughout the programme period. To achieve the desired level of activity, it should be clarified early in the programme period which types of conferences the programme board will take responsibility for and what seminars the programme's projects will initiate.

#### 7.4 Establishment of a knowledge resource centre

Due to the substantial challenges facing the education sector and educational research, the planning committee sees the need to consider establishing a knowledge resource centre for education, cf. Report No. 31 (2007-2008) to the Storting: *Kvalitet i skolen* ("Quality in the schools") and Proposition No. 1 (2008-2009) to the Storting regarding the national budget. The establishment of such a centre should also be considered from a Nordic perspective. The Research Council will be a key dialogue partner in further discussions about this.

### 8 Organisation

#### 8.1 Programme board and administration

The overall responsibility for the programme lies with the Research Board of the Division for Strategic Priorities, which appoints the UTDANNING2020 programme board. The programme is headed by a programme board that should be organised according to the Research Council's principles for such boards. The programme board acts on behalf of the Research Council and is charged with ensuring that the programme meets its designated objectives and is implemented as optimally as possible in accordance with the stipulated plans and within the parameters approved by the division research board.

Depending on the programme's budget framework, there needs to be a discussion of whether to establish expert advisory committees under the programme board to address specific thematic areas, cf. models from other large Research Council programmes. Education represents a major social sector and the challenges for research are many. To ensure a cohesive perspective and effective management, it would be beneficial to appoint a relatively small working board in accordance with the Research Council's practice for programme boards. Should the programme expand in relation to the challenges and the planning committee's budget proposal, there will be a need to support the programme board's efforts through the establishment of an organisational model that strengthens scientific expertise and user involvement in the programme's activities. For instance, reference groups or thematically oriented advisory committees could be set up under the programme board. Organisational models should be assessed when it becomes clearer what the size of the programme's budget will be. In the start-up phase of the programme, however, it is recommended that the programme board have sole responsibility for implementing the programme.

Close cooperation between the UTDANNING2020 and PRAKSISFOU programme boards must be established early on to ensure a high degree of cohesiveness in all of the Research Council's efforts directed toward educational research. It follows as well that the Research Council's other instruments used to fund educational research must be viewed in connection with these two research programmes, including funding for independent projects administered by the Division for Science.

The objective of a cohesive, coordinated responsibility for developing the field of educational research is already being followed up administratively. An education team has been established across the Division for Strategic Priorities and the Division for Science, which together are responsible for the research programmes and other relevant instruments.

#### 8.2 Research manager

Experience from the KUL and PRAKSISFOU programmes shows that it may be beneficial to appoint a research manager or coordinator for the UTDANNING2020 programme. This would ensure better follow up of the research projects, strengthen contacts across projects, and increase the effectiveness of dissemination activity. However, the need for this must be discussed by the programme board in consultation with the Research Council's administration, and be viewed in relation to the administrative resources set aside for the programme.

#### 8.3 Contact with other research programmes

The new programme must cooperate with the PRAKSISFOU programme and establish contact with other relevant international research programmes. Because education as a thematic area crosses many other research areas, such as welfare, working life and migration research or culture and gender research, it will be vitally important for the UTDANNING2020 programme to establish cooperation with programmes responsible for those research areas. Cooperation may involve, for example, organising joint seminars, conferences or other dissemination activities.

#### 8.4 Calls for proposals and application processing

The deadline for submission of grant proposals under the programme will follow the Research Council's application deadlines and will be announced on the website. Funding will be awarded in accordance with the Research Council's established procedures for application processing.

# 9 Timeframe and funding

The UTDANNING2020 programme will run for a ten-year period (2009-2018). A mid-way evaluation of the programme will be conducted, which should be completed by autumn 2013 so that any change in focus may be implemented during the final five years of the programme.

Ambitions for the new programme are high, and the programme's primary objective is to give a substantial boost to Norwegian educational research. This requires a budget framework that provides sufficient latitude for implementing the measures needed to achieve the objectives. It is recommended that the programme be given a budget framework tailored to a gradual increase in the programme's activities. A situation should be avoided in which the programme starts out with such large budgets that the funds are not put in circulation in a satisfactory manner, and it should be possible to issue several calls for proposals during the ten-year period. A predictable budget framework will be crucial for successful implementation of the programme.

The planning committee has assessed the budgetary needs by estimating the cost of some of the proposed measures. The field of education is partly under-investigated, and the programme seeks to promote research of high scientific merit, encompass the entire range of the field, and produce results that will benefit the large education sector. The programme should therefore fund two to three large, integrated projects within each priority research area during the entire programme period. Based on an annual cost of NOK 5 million per project, the budget will come to about NOK 40-60 million per year, depending on the number of projects implemented. There is also a need to fund smaller research projects, which will require about NOK 10-15 million per year, as well as post-doctoral research fellowships (NOK 10 million), funding for networking activities and any national graduate-level researcher schools (NOK 2-3 million annually per school). Additional costs include knowledge-sharing and dissemination activities as well as programme administration and a potential research manager position. In total, this will amount to a budget of about NOK 100 million annually when the programme is in full operation. The planning committee recommends a gradual escalation during the first years of the programme. The committee has

estimated the funding needs, but the programme's budget must be established according to usual procedures in connection with the Research Council's annual budget process.

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
NOK	30	60	100	100	100	100	100	100	100	100
mill.										

# 10 Success criteria, performance targets and performance indicators

It is the task of the programme board to specify and follow up the programme's performance targets and indicators through annual action plans. The following targets and indicators will be important in this context:

#### Performance target 1: High scientific merit

The programme will promote educational research of high international calibre.

The programme will develop research groups that are visible internationally and that attract talented international researchers.

#### Performance indicators:

Number of publications in peer-reviewed scientific journals.

Number of publications in other scientific and/or professional journals.

Number of textbooks or monographs.

Number of presentations and/or poster sessions at international conferences.

#### Performance target 2: High relevance for practice and policy

The programme will promote educational research that is relevant for both practice and policy while maintaining high scientific merit.

#### Performance indicators:

Number of projects that strengthen the knowledge base for policy making, professional practice, and development of the practice fields.

Number of projects within each of the priority research areas.

Number of projects in which several academic and research communities conduct research on issues related to the education sector and to areas of overlap in other sectors, including working life.

#### Performance target 3: Enhanced researcher recruitment

The programme will stimulate recruitment at the doctoral as well as post-doctoral level within educational research.

#### Performance indicators:

Number of doctoral research fellowships funded under the programme.

Number of completed doctoral degrees based on funding under the programme.

Number of post-doctoral projects funded under the programme.

Gender balance in the number of researcher positions within the two fellowship categories.

#### Performance target 4: Larger percentage of researchers with top-level expertise

The programme will increase the percentage of professors within educational research and education studies.

#### Performance indicators:

Number of researchers funded under the programme who obtain top-level positions during the programme period.

#### Performance target 5: Enhanced multidisciplinarity of educational research

#### Performance indicators:

Number of projects of an interdisciplinary nature.

Number of subject areas involved in the programme's projects.

# Performance target 6: Strengthened national cooperation and distribution of responsibility

#### Performance indicators:

Number of projects that involve cooperation across research communities.

#### **Performance target 7: Strengthened international cooperation**

The programme will use a variety of instruments to promote the internationalisation of Norwegian educational research.

#### Performance indicators:

Number of publications in international journals.

Number of research stays abroad for doctoral and post-doctoral research fellowship-holders and permanently employed researchers funded under the programme.

Number of guest researchers funded under the programme.

Number of international conferences funded under the programme.

#### Performance target 8: Good communication with the programme's target groups

The programme will have an active, broad dissemination profile.

Communication measures must be specified by the programme board in a separate action plan for knowledge-sharing and dissemination activities.

#### <u>Performance indicators – examples:</u>

Number of meetings, seminars and conferences involving various groups of users and researchers.

Number of dissemination measures targeted at public administration.

Number of publications from the programme aimed at dissemination.

Amount of media coverage.

#### **Background documents:**

- Research Council of Norway (2004): *Norsk pedagogisk forskning. En evaluering av forskningen ved utvalgte universiteter og høgskoler* ("Norwegian educational research: An evaluation of research at selected universities and university colleges"), available in Norwegian only
- Research Council of Norway (2006): En nasjonal strategi for norsk pedagogisk forskning. Oppfølgingsutvalgets anbefalinger etter Forskningsrådets evaluering i 2004 ("A national strategy for Norwegian educational research: Recommendations by the follow-up committee subsequent to the Research Council's evaluation of 2004"), available in Norwegian only
- NIFU STEP report 15/2007a: *Utdanningsforskning. Fagdepartementets sektoransvar* ("Educational research: The ministry's sectoral responsibility"), available in Norwegian only
- NIFU STEP report 32/2007b: *Kartlegging av norsk utdanningsforskning* ("Survey of Norwegian educational research"), available in Norwegian only
- NIFU STEP report 40/2007c: *Læringsutbytte i høyere utdanning* ("Learning outcomes in higher education"), available in Norwegian only
- Rambøll Management (2007): *Norsk utdanningsforskning en systemutredning*. ("Report on Norwegian educational research"), available in Norwegian only
- Report No. 20 (2004-2005) to the Storting: Commitment to Research
- Report No. 16 (2006-2007) to the Storting: Early Intervention for Lifelong Learning
- Report No. 31 (2007-2008) to the Storting: *Kvalitet i skolen* ("Quality in the schools"), available in Norwegian only
- Proposition No. 1 (2008-2009) to the Storting regarding the national budget, available in Norwegian only
- Official Norwegian Report 2008:3: Sett under ett Ny struktur i høyere utdanning ("Viewed as a whole: A new structure for higher education" – the Stjernø Committee's recommendation), available in Norwegian only
- Work programme (2003) and final report (2008) from the Programme for Knowledge, Education and Learning (KUL), Research Council of Norway
- Work programme for the Programme for Practice-based R&D in Pre-school through Secondary Schools and Teacher Education (PRAKSISFOU), Research Council of Norway, 2006
- Information about the Strategic University College Programme (SHP), Research Council's website
- Programme for Regional R&D and Innovation (VRI), Research Council's website
- Work programme for the Programme on Welfare Research, Research Council of Norway
- Research Council's templates for designing work programmes and the guidelines for programme administration, available in Norwegian only

The report can be ordered at: www.forskningsradet.no/publikasjoner

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