



## Feedback to applicants for Centres of Excellence in Education 2013

NOKUT received 24 applications for the status of SFU. The international expert panel assessing these applications consists of the following members:

- Professor Duncan Lawson, Newman University, Chair
- Director of Academic Affairs Jørgen Thorlund, University College Lillebælt
- Professor Trudie Roberts, Leeds University
- Professor Mats Benner, Lund University
- Musician and Assistant principal Helena Gaunt, Guildhall School of Music, London
- Student Trine Oftedal, The National Union of Students in Norway (NUS-Norway)

The overarching aim of the Centres of Excellence in Education (SFU) arrangement is to contribute to the development of excellent quality in higher education and to highlight the fact that education and research are equally important activities for higher education institutions. It is an important aim to act as a stimulant to excellent Research and Development (R&D) based education.

According to the “Standards and Guidelines for Centres and Criteria for the Assessment of Applications” academic communities that are awarded the status of SFU must be able to present documentation of excellent quality in established educational provision, have good and feasible plans for further development and innovation in their educational activities and for the dissemination of knowledge about good educational practices.

In particular, the SFU arrangement is meant to stimulate and reward work that takes place in the interaction of students, teachers, support services and the knowledge base of the education. This means that the committee has also put great stress on the R&D base for all types of educational provision. For educational programmes aiming at specific professions, both the R&D base and relations with the professional field is of central importance in the assessments.

The applications are assessed with grades on a scale from 1 to 6, where 1 is very poor and 6 excellent.

The expert committee has assessed the applications as follows:



## 1: Buskerud University College – Science Centre Health and Technology

### Concept

The application is based around the already established Science Centre Health and Technology at Buskerud University College, with the goal of providing a framework for health care professionals via a variety of activities such as virtual interaction and collaboration opportunities, education clinics, simulation training environments, technology applications in health care and evaluation models.

### Strengths and weaknesses

The Centre will be facilitating a range of research and pedagogical initiatives and providing a framework for education. The application is relevant and well in line with policy intentions for health care reform. It is based on a coherent and relatively active academic environment with a good national network and with strong support from the host institution.

The proposal is founded on a strong rationale for developing patient-centred health care. The work packages cover three particular fields, although little explanation for the choice of these is given. The proposed plans are interesting but no novel concepts or measures are afforded – hence, additionality of the proposed centre is limited, and it appears that a SFU would primarily support already existing activities. A weakness in relation to documented quality of existing activity is that the application provides only limited information on outcomes, student feedback mechanisms and articulation with practical knowledge interests. External dissemination is primarily planned to take place via a yearly conference. Furthermore, the application is relatively unstructured and does not provide all the requested information. The proposal would have been much stronger with a better structure and more innovative plans for the work packages.

**Grade: 2**

**Site visit: No**



## 2: Hedmark University College – CoHealth: Centre for Collaborative Health Education

### Concept

The proposed Centre for Collaborative Health Education aims to develop a three party interactive model (student, practitioner, teacher) for formation and transfer of knowledge and knowledge-based education. The aim is to promote innovative interaction in practice and health education for tomorrow's welfare, through laboratory and practical training.

### Strengths and weaknesses

There are good connections to external and professional interests and strong articulation with the professional field. The science base is relatively strong, but not spectacular. The planned centre appears to be embedded in the Higher Education Institution's (HEI's) plans and strategies. The physical location of the centre is a benefit, creating a strong link to existing practice. Leadership is adequate for the task. The pedagogical aspect that brings student in contact with practitioners is interesting and offers potential, but this aspect should be placed in a framework with pedagogical principles underpinning the whole course.

Limited information of processing of student feedback was presented. Little detail is given on the achievements of the students, and learning outcome descriptions should be referred to. Assessment of learning outcomes should also be included in the application. The R&D base of the courses seems limited, and is not evaluated to any depth. The student involvement in the increased research is not described and systemised knowledge about quality factors is lacking. Partnerships and international connections could have been stronger. The overall aims could have included greater innovation and ambition, which reduces the potential for the Centre to achieve a major breakthrough externally. The project is firmly based on a three-party pedagogical model that is only briefly explained and not located in any pedagogical literature.

Some parts of the work-packages lack focus, and the element of digital engagement is not clarified in terms of the learning outcomes it will support. The added value of the centre is not made clear. The dissemination plans are quite traditional, and it would be interesting to see some more adventurous plans to reach specific audiences.

**Grade: 2**

**Site visit: No**



### 3: Oslo and Akershus University College – Lærerutdanningslaben – The Teacher Qualification Lab

#### Concept

The Teacher Qualification Lab (TQLab) aims to further and extend the main quality assets from the four local programs and build networks for exchange of good practice and research locally, nationally and internationally. The vision of the TQLab is to implement and explore practices and structures that enhance coordination and understanding across subject knowledge and pedagogies, research-based and experience-based competences, and institutional boundaries of college and professional practice. A key concern is to develop collaboration across sub-fields in relation to students' professional qualifications and repertoire. The TQLab will give priority to development efforts in three areas: Integrated didactic design, based on the new EQF pattern for National curriculum guidelines, analysis and development of assignment pedagogies, and uses of placement periods.

#### Strengths and weaknesses

A strong conceptual framework for the centre's strategies and plans is presented but there is weak documentation of organizational implementation beyond a number of related projects. There is strong institutional backing from the HEI for the planned activities of the centre – indeed the HEI has a key role. The documentation on individuals and partners is strong. The key players in the project seem to be appropriate. An important aim of the project is to build partnership networks, but no further international partners are mentioned.

The TQLab will have varied strategies for bridging institutional arenas. Evidence provided is relevant and interesting. Some aspects such as reference to expert functions of senior staff would benefit from greater detail and specificity. OAUC has been recognized as a pioneer in HE for minority students, which is an important achievement.

There is some good indication of outcomes. However, the information about student progress into work or the satisfaction of schools is limited. Although there is clear evidence of strength in R&D, it is not clear how this informs educational programs and permeates students learning. The documentation describing the collaboration with the professional field is weak.

The plans for dissemination through seminars and workshops are good, but they could be more specifically described. Digital storytelling is very interesting, but only mentioned in a sub-sentence. There is no clear indication of the additionality that SFU status would bring.

The bid talks about the importance of exchanging experiences within teaching, but there is not enough substance and detail added to this to make the application credible. The sub-project areas identified are huge and vague – more detail was needed to make clear more precisely what was to be achieved and how to it was planned to go about doing this.

**Grade: 2**

**Site visit: No**



#### 4: Sør-Trøndelag University College – Centre for student-centred technology-based learning

##### Concept

Sør-Trøndelag University College, Bergen University College and Oslo and Akershus University College applies for the establishment of a centre to educate engineers who are prepared not just for today but also for the future - developing a scholarly approach to student-centred and technology-based learning environments. The Centre will focus on teaching the students self-regulating learning to bring awareness of learning strategies and to increase motivation.

##### Strengths and weaknesses

The application is well-written and refers to modern learning ideas. The work packages are very detailed and the already existing partnership is strong. Good discussion of newer teaching methods is included. The ideas are very relevant to stakeholders and major players in the field. The R&D base is of acceptable quality, but further information could usefully have been provided. The academic leadership seems involved and committed in the centre. The bid is based on a pre-existing partnership, with links to an impressive international set of institutions.

In terms of documented evidence of quality, there are some indications of high quality and others of more average quality. There is limited documentation of learning outcomes. Whilst recruitment to the programmes within the consortium is clearly positive, and one area has received a NOKUT award, rather little is said in concrete terms about existing teaching and learning factors. The main goal is 10 years from now, but the milestones to get there are not well described. The application is lacking information on collecting and following up student feedback, student achievement and assessment of learning outcome descriptions. It would have been useful if there had been a more clear statement about the added value of SFU status. The specific competencies of the three different educational communities could have been described better. The proposed development of student learning skills is exciting, but the overall ambitions of the centre appeared more limited than necessary – the centre could have aimed for a more transformative impact. For example, dissemination to other disciplines could have been considered as the issues raised in the application seem to apply beyond engineering. The dissemination strategy in general could be elaborated more; it would be helpful to see a stronger strategy at an international level and an approach to building further partnerships.

**Grade: 3**

**Site visit: No**



## 5: Stord/Haugesund University College – Centre of Excellent Interaction in Health Education

### Concept:

The Centre aims to develop and disseminate knowledge about how interaction between research, education and health services can create innovative and relevant health education.

### Strengthens and Weaknesses:

The project will build on existing collaboration between the partners through an Research (R) and Development (D) unit. The R and D unit has already demonstrated apparently valuable interventions within student programmes.

Very little is said about levels of achievement i.e. outputs etc within the education programmes. The information on assessment of students is sparse. The collection of feedback is not described specifically, but the student's opinions apparently are taken in account throughout the application and a good appendix is included showing the feedback from students based on learning outcomes.

There are some good examples of ways in which the work of the R and D unit has informed pedagogy, although the narrative of success would benefit from a stronger evidence base. Given that the centre has been in existence since 2009 there could be more information on the added value of SFU-status.

There are some well-qualified people within the core team, and they have experience in developing pedagogy. There is some national collaboration proposed, but nothing at an international level. The proposed management structure is clear and makes sense.

The proposal itself is somewhat vague, although it is well located within current policy directions. It has overarching aims to "generate innovation in the health services" and then 3 more specific goals, but these remain rather abstract in conception, and it is hard to ascertain what actually would be done to realise these goals. For example, the objective to "create models of student involvement in practice-oriented R and D projects" is laudable, but some ideas about how this will be done are needed to get a sense of how valuable and realistic this is.

The proposal indicates that the partners will provide financial support alongside funding made available through this bid. Taken together with an R and D unit already in operation, this suggests that the project may well be sustainable in the longer term.

In terms of dissemination the suggestions here are fairly standard. They will undoubtedly ensure some appropriate dissemination, but perhaps could be more dynamic and imaginative. Little is said about publications, their nature and potential impact. The student conference is an interesting plan.

**Grade: 3**

**Site visit: no**



## 6: Norwegian Academy of Music – Centre of Excellence in Music Performance Education

### Concept

This Centre will develop new knowledge and experience to support music performance students in developing artistic excellence and professional competencies to be able to work in a diverse and rapidly changing, globalised music community. The Centre will involve teachers and students in seven discrete research projects, each of which will utilise different methodologies.

### Strengths and weaknesses

This is an exceptionally well-written proposal that clearly and concisely presents the ideas of the centre and the work it will carry out. The work is well-structured and highly relevant to the current landscape of Higher Music Education. The Norwegian Academy is already preeminent for its research and development relating to pedagogy. This serves as an excellent foundation for the proposed Centre which has the potential to deliver real value internally and in international contexts.

The Norwegian Academy clearly recruits excellent students who then go on to achieve well in terms of completions, ECTS points and employment. There is some evidence in the proposal of existing pedagogical practices being reflective and innovative, although these aspects could have been considered in more detail. The proposal does, however, articulate advanced quality assurance systems involving all teaching staff, a substantial performance programme for the students and a developed exchange programme for staff and students. A particular strength is that student feedback is explicitly built into the education processes in a rigorous way.

The proposed governance and management structures for the Centre appear to be sound. All seven projects are promising and have been considered in sufficient detail to make them deliverable. Dissemination activity proposed, both explicit and (perhaps in many ways more usefully) implicit, is quite strong. It is quite traditional in its focus on “telling” about the results emerging from the projects, and it could be beneficial to think further about modes of dissemination with different audiences, particularly considering the diverse needs of academic and non-academic stakeholders, and of Higher Education and professional music communities.

**Grade: 6**

**Site visit: Yes**



## 7: Norwegian University of Science and Technology (NTNU) – Center for Excellence in Engineering Education (C3E)

### Concept

This centre is proposed by NTNU, University of Agder and Ålesund University College. The C3E initiative is a response to the challenge of the next generation of engineers: combining existing initiatives and experts to jointly push the boundaries of engineering education. The partners are closely integrated with industry, as experts in interdisciplinary and practice-oriented education with a focus on mechatronics and the maritime industry. NTNU's programs use innovative teaching methods that foster the creativity and analytical skills required to conceptualize, develop and optimize challenging designs. EiT (Experts in Teamwork) will be an arena for experimentation, testing and optimization; UNIPED (pedagogy in higher education) has a national responsibility for engineering didactics. C3E's central task is to identify, test, understand and disseminate novel educational approaches and tools for engineering education.

### Strengths and weaknesses

The proposal recognizes the need for change in engineering education, based on a number of key features, including the need for engineers to work collaboratively in interdisciplinary contexts, and the imperative for creativity in the professional world. A clear vision is presented. Specific plans are reasonably detailed, although it was not always easy to see the connections between the plans and the vision.

The relevance of the educational provision appears high and stable, with employability also being high. There is some evidence of student achievement, although more would have been welcomed. Collaboration with the professional field is good.

Powerful claims are made for the quality of outcomes, although there is relatively little concrete evidence offered in support. There is a lack of quantitative data such as grades or completion rates. Also, the description of learning outcomes and of the role of feed-back from students was limited.

An important feature of existing practice is the collaboration of students within staff research projects. There is also evidence of the growing use of technology to support teaching. Entrepreneurship is now being offered within some programs, and a unit to support pedagogical competence amongst staff has been organized.

Case based documentation indicates capacity for interaction between students and R&D closely related to industry needs. The centre is a cluster of activities, many of which seem successful and with a great impact. However, the R&D component could have been expanded.

The proposal did not make clear the institutional leadership is engaged in the educational brief. Likewise the information related to resources was sparse. The organizational plan is quite complex but coherent. It includes funding a PhD student. There are some academic and industry partners, mostly in Norway, although some are international (from the USA).

The plans for innovation are strong. However, it would have been helpful to see more detail on measures to evaluate and disseminate innovation that has already been completed.

**Grade: 2**

**Site visit: No**





## 8: Norwegian University of Science and Technology (NTNU) – Centre for multimedia based learning environments

### Concept

The vision is to enhance student learning through the use of multimedia-based technology, particularly focusing on basic mathematics courses within other STEM subject programmes.

### Strengths and weaknesses

The proposal for this Centre could be more ambitious in scope. The focus is largely on videos of lectures, and yet multimedia learning environments offer so many more possibilities. It is not clear why some of these are not explored and used to address important pedagogical challenges that are undoubtedly present. Indication is given that approaches to teaching tend to be conservative within some programmes, and it is certainly positive that these current limitations are acknowledged. However, the current situation should really open the way for this project to embed some more innovative and student-focused approaches if the Centre is to be successful.

The evidence presented in relation to current outcome factors in the main text of the proposal is rather generalised. It would be helpful if the most relevant data that is contained in the references were explicitly highlighted, for example proportions of students who achieve "A" grades in their masters. There are, nevertheless, indications of compelling student outcomes and good connections made to the labour market and professional interests.

The proposed project team is quite large, with diverse research and teaching experience. The links to the Teacher Education programme are a strength that should ensure the pedagogical dimensions of the project remain at the fore. What is less clear is who would do what in the project, and how the diverse contributions would really come together to create a coherent whole.

The dissemination plan is also quite traditional and lacking in ambition. It consists almost exclusively of "telling" about the findings, and could be much improved by some initiatives to engage others more profoundly and directly in the work of the Centre.

Overall the impression is more of a closely focused research proposal than an expansive centre with a drive to have a major impact on Norwegian higher education more widely.

**Grade: 2**

**Site visit: No**



## 9: Norwegian University of Science and Technology (NTNU) – Centre of Excellence in Education: Collaborative Learning in Health and Welfare Education (CoLEARN)

### Concept:

The Centre's aim is to develop close collaborations between education and practice in order to develop, test, research and disseminate innovative collaborative educational activities designed to improve learning.

The centre is proposed by NTNU and Sør-Trøndelag University College.

### Strengths and weaknesses:

The students' output factors are not strongly documented and could have been better presented. There was a lack of information of students' achievements. There was no mention of learning outcomes. There is a strong emphasis on PBL and practice placements, which reflects the proposal theme of collaborative learning and cooperative health care.

The bid itself covers the important areas of health and welfare however the integrative perspective of the centre is not clear and there is a major concern that the centre may consist of simply a number of separate programs

The project team as outlined is fairly minimal, with appropriate research expertise. The motivation of the partners to work together is said to be a key strength of the proposal. It would have been helpful, therefore, to have some more evidence of the nature and basis for this motivation. The geographic proximity can facilitate such collaboration but is just one factor. The organisational plan seems reasonable. There are international partners on the advisory council.

The proposal is based on principles of collaborative learning and cooperative delivery of health care services. There appears to be an impressive focus on student-led learning and involvement in a wide range of activities within the project.

The work packages are closely aligned with the overall direction of the project, and appear to have potential to generate innovative approaches to teaching and learning. However some of the activities contained within the work packages were not clearly delineated and therefore appeared vague. It was also not always clear how the various outputs from the work packages would be used and integrated into future students' education.

In terms of dissemination there are some good ideas, although they appear to be in quite early stages of development.

**Grade: 3**

**Site visit: no**



## 10: Norwegian University of Science and Technology (NTNU) – Innovative teaching in Information Technology (2-IT)

### Concept

The centre, is a collaboration between The Department of Computer and Information Science (IDI) at the Norwegian University of Science and Technology (NTNU) and Nord-Trøndelag University College (HiNT). The vision for the 2-IT centre of excellence is to become a beacon for IT as an attractive study and career choice for both genders by making IT studies more motivating and yielding better learning.

### Strengths and weaknesses

The project aims in particular to make IT a more attractive choice for HE study, through developing industry partnerships and work placement, problem based collaborative work, and opening up communications channels with school aged students. Compelling evidence is provided of the need to increase numbers of students in IT, particularly women. This seems to be well thought through and timely, even if not hugely innovative in itself.

Evidence provided indicates the large size of the departments involved in the bid, high research ratings for staff, and good results from student surveys. There are well documented processes regarding education and research with strengths in IT-educational research. Plans for innovation clear and well worked up. Student involvement is clear. Timelines are reported.

The project will involve a wide range of staff with diverse expertise. Amongst the key members it is good to see a group of women, given the agenda to recruit more female students. Many of the key staff have published in relation to pedagogy.

Less strong documentation of industry relations is provided – but it would seem likely that industry will have a huge interest in the success of the centre. The proposal lacked clarity about precisely how the funding will be used. Although the presentation was somewhat unsystematic, the R&D basis appears solid but connection to labour market and professionals is less well documented, as is student feedback mechanisms. Assessment and evaluation methods and results of student achievements could have been described in more detail.

Publications from staff indicate that, to some extent, research is integrated into courses, but the proposers admit this could be better. Some elements of the work packages are relatively traditional and do not represent the 'cutting edge' in the area. Dissemination in educational programs are well argued and integration to program development although international arenas for dissemination are not considered in the bid.

**Grade: 5**

**Site visit: Yes**



## 11: Norwegian University of Science and Technology (NTNU) – Transformative Learning in Architectural Education – TransARK

### Concept

The institution applies for the establishment of a Centre for Transformational Learning in Architectural Education, with NTNU as the host institution in collaboration between its Faculty of Architecture and Fine Art and Unit for Educational Development. The idea is to transform the educational foundation of the synthetic field of architecture, based on various facets of 'transformational learning' (in Live Studios, complexity projects and individual learning).

### Strengths and weaknesses

The application is highly relevant and addresses in an innovative way issues that shape interdisciplinary and synthetic educational fields such as architecture. The academic environment is coherent and the research activities aligned with the knowledge frontier. The international connections are strong overall with a prominent advisory board, which will be of great significance for the success of the centre.

Most of the activities are already ongoing and the added value of centre funding should be further clarified. Furthermore, only limited information is provided about retention, and more information about outcome factors is needed, including information on assessment and methods of collecting and following up feed-back from students. The management of the centre is fully adequate and institutional backing is strong.

The overall pedagogical concept proposed is solid, and the work packages are clearly aligned with the conceptual framework. Given the strength of the collaborative networks, national and international dissemination beyond NTNU could have been addressed more fully.

**Grade: 5**

**Site visit: Yes**



## 12: University of Agder – Centre for professional studies in health and social work education

### Concept

A consortium of University of Agder, University of Nordland and University of Stavanger is applying for a Centre for Professional Studies in Health and Social Work Education. The vision is to educate knowledgeable health and social workers, skilled in R&D work and anchored with practical knowledge in order to take responsibility for continuous knowledge creation and innovation.

### Strengths and weaknesses

The range of programmes mentioned suggests close alignment with professional needs. An impressive set of research groups relevant to the centre are described and the centre appears to be strong and credible. The breadth, depth and scope of the programmes currently offered within the partnership is promising. There is a strong vision, but the proposed organisation appears overly complex.

Some parts of the application are unclear, especially on what elements are in existence already and when others are to be developed. There is a large number of collaborative partners, but very little description on how these will collaborate efficiently, for example how will specific strengths be utilised. The application is solid, but lacks a sense of real innovation. Nothing is said about student outcome factors or collecting or following up feedback from students. Information on varied teaching and learning methods is lacking, as are details of assessment of the students. There is no independent verification of claims for excellence and even though the academic credentials of the partners appear adequate, this is poorly documented.

An aim of the centre is to enable health and social workers to take responsibility for continuous knowledge creation and innovation in professional practice, but how the work packages will deliver on these objectives is not clear. At several points, the group's expertise in ethics is mentioned, but it is not clear how this will be embedded within this project. The dissemination plans seems both a little over-ambitious and lacking in detail, particularly on the means to reach specific target groups. More emphasis should be put on methods of dissemination, initially between the consortium partners but also more broadly.

**Grade: 3**

**Site visit: No**



### 13: University of Agder – Centre for Research, Innovation and Coordination of Mathematics Teaching

#### Concept

The proposal is concerned with improving the teaching of mathematics on “user programmes” (i.e. programmes in other subjects such as engineering and economics). The Centre will create networks that bring together university mathematics teachers, teachers from “user programmes” and employers of graduates from “user programmes.” A key goal is that as a result of their work there will be “motivated students who enjoy mathematics and appreciate the relevance of mathematics”.

#### Strengths and weaknesses

This is a well-written proposal that makes a good case for existing excellence. The proposal made good use of external evidence to support its claims across a variety of subject areas. The quality assurance systems are strong and there appears to be rigorous consideration of feedback received from students. A range of teaching and learning methods are employed. More explanation could have been given about the nature of some of the more innovative forms (for example digital simulations) and there was little evidence of evaluation of these approaches.

The proposers have a good pedigree of integrating mathematics and mathematics education (something which often does not seem to happen) and this close integration of educational research should be an asset to the proposal. However, it appeared that most of the proposed SFU team’s principal research strengths relate to teaching of mathematics in schools rather than in higher education to “user programmes”. A weakness of the proposal (which may be related to the previous point) is that it does not appear to build well on the substantial volume of work internationally that has been carried out previously (particularly in mathematical modelling and engineering mathematics). The networking element of the proposal, alongside the ideas of providing funding to individuals to visit international centres of excellence and “seed money” for small scale projects, provide good opportunities for involving others in the work of the centre.

**Grade: 5**

**Site visit: Yes**



## 14: University of Bergen – BioCEED – Centre for Excellence in Biology Education

### Concept

The institution applies for the establishment of a Centre for Excellence in Biology Education, with UiB and its department of Biology as the host institution in collaboration with the same institution's Higher Education Research Unit, the Department for Arctic Biology at University Centre Svalbard and the Institute of Marine Biology. The idea is to reshape biology education in a broad spectrum of biology programmes, to align it with changes in research, student behaviour and societal demand. It proposes to work via seven strategies that cover learning, learning environments, student motivation, leadership and dissemination.

### Strengths and weaknesses

The application addresses the transformation of biology education in a visionary way. It sets out to change a culture of 'teaching' to one of 'learning', and involves several central organizations in the field. The academic environments engaged together form a coherent whole and many if not all parts are of international scientific significance. Its educational track record is more varied, with a blend of educational models, and outcomes which vary between outstanding and average.

The plans are exciting for integrating a wide variety of biology programmes and could, if successfully implemented, propel biology education at these institutions to international pre-eminence. Integrating many institutions and programmes will confront the centre with a major organizational challenge. The structure of seven work packages might also be overly complex and difficult to implement. Bringing about a change of culture on the scale that is proposed here is a task of some magnitude and the road from vision to practice could therefore have been discussed in more detail.

International collaboration will be vital to the success of the centre and strategies in this respect could usefully have been included.

**Grade: 5**

**Site Visit: Yes**



## 15: University of Bergen – TVEPS – Centre for Inter-professional work place learning in Primary Care

### Concept:

TVEPS is established as a consortium between the University of Bergen, University College of Bergen and Fjell Municipality. The focus is on interprofessional training during work placements for senior students. The aim is to generate higher quality experiences through ensuring shared responsibilities between all stakeholders.

### Strengths and Weaknesses:

In the section on outputs discussion is limited to experiences of work placement learning that have already been implemented. Students report significant learning, but little detail is given and no quantitative measures are offered. It would have been helpful to have data on courses as a whole, completion rates etc.

The processes of education are rather poorly described. It is clear that the kinds of approaches to be tried in the project have already been tested, apparently successfully. However, no mention is made of systematic evaluation, or of how these methods fit within the wider learning and teaching environment.

The proposed management team looks strong, and includes a group that will be dedicated to pedagogical research. There is evidence of publication of pedagogical research. The consortium already has experience in workplace learning, and awards have been won for this, for example in dentistry. Management of the project has been thought through and looks likely to be effective.

The project is not particularly wide-ranging and there is a sense of limited ambition given the current experience of the group. However the proposal is firmly based in recent literature and growing understanding of the value of communities of practice in stimulating learning and facilitating timely high-quality feedback.

Dissemination through the consortium industry partners will be powerful. The proposal also mentions dissemination to other disciplines, given the transferability of the model of interprofessional learning. This is certainly important, although it is doubtful that much will be achieved through the incidental conferences mentioned. Something more innovative, for example involving colleagues in the project work itself could usefully be considered.

**Grade: 3**

**Site visit: no**





## 16: University of Bergen – Centre for Joint Sciences and Humanities Education

### Concept

UiB has applied for the establishment of a centre for Joint Sciences and Humanities Education, making interdisciplinary, voluntary educational courses challenging traditional boundaries between nature and culture, science and society and the different scientific cultures. The aim is to become a hub for the development of R&D based educational provisions that facilitate formation processes (dannelsesprosesser) to address Grand Challenges.

### Strengths and weaknesses

The proposal has been developed at the interface between sciences and humanities, which is an incredibly important area. However, the proposal lacks clarity and specificity and it is not easy to understand how much of the planned activity is new and how much is already in place through other means. The centre is seen as vital to the university as a whole. Varied teaching and learning methods are described strongly and the existing academic competence is satisfactory. The organisation of the project looks reasonable, although the steering group seems to be constituted entirely within the university; the absence of significant external input is a weakness.

Current status on the educational quality is difficult to assess on the basis of the information provided, but appears to be of average quality. A small amount of detail is given in relation to the existing modules being run as part of wider courses. It is said that students have been satisfied, however no statistics are provided. The relevance and collaboration with the professional field is not described in detail. The plans for the centre are not concrete enough, and therefore not convincing in terms of innovation. Some of the plans are ambitious, but there is not a clear-cut structure of implementation. The application lacks a focused purpose, and even though it is addressing some issues of quality in regards to the Bologna process, it is unclear what success for this centre will look like or what it will achieve for student learning or the understanding of higher education more generally. The dissemination plans are fairly standard and limited to a national context. The plans should also be more explicitly connected more to other educational communities.

**Site visit: No**

**Grade: 2**



## 17: University of Bergen – Centre of Interaction-based Physics and Technology Education (CIPTED),

### Concept

The institution applies for a centre dedicated to the interaction between theoretical and experimental studies in physics and other natural sciences (involving students and staff) and between academic studies and practical activities. It targets recruitment, the introduction and integration of new students, interactive learning and meta-level research on learning models.

### Strengths and weaknesses

This is a viable proposal from a strong academic environment. It is firmly supported by the host institution, and potentially a very important project to modernize education in the natural sciences. The proposed project would enable students to be more engaged in project work as well as with the academic staff. The application showcases an impressive array of international partners, although it is not clear what role they will really play in the Centre.

Outcomes are only partially documented, but student satisfaction and labour market interaction seem to be of good national standard, and with good but not outstanding relevance documented. The application affords a mixture of traditional teaching and more innovative methods. Seemingly, student feedback has only a limited impact on teaching and organization. The dissemination plan is relatively traditional in its philosophy and execution, and it is difficult to see how this will deliver external engagement in the work of the Centre, particularly at an international level. The proposal, while of a high calibre, would therefore have benefitted from a more thorough and innovative dissemination plan in particular, and a more clear-cut description of the role of the international network and plans for international impact and visibility.

**Grade: 3**

**Site visit: No**



## 18: University of Oslo – Centre for Entrepreneurship

### Concept

The institution applies for the establishment of a Centre for Entrepreneurship. The idea is to take new teaching methods and practice-orientation to an already excellent focus on entrepreneurship, in order to both improve the quality of the education locally and the academic knowledge base internationally. This includes a radical change in the approach to entrepreneurship, exploring the concept of science-based entrepreneurship.

### Strengths and weaknesses

UiO has written a strong application that is well documented, structured and well argued. There is a great connection between academia, innovation and the professional field, something that is sometimes lacking in entrepreneurship education. Students have the opportunity to go to an impressive set of international destinations and the programme has received several prizes and awards. The centre is very strongly embedded in the university environment and benefits from strong commitments from the university and its various parts.

The application describes an ambitious model of implementing the programme, including international connections and connections to industry and health care among others. There is a strong scientific foundation and also a great focus on pedagogy. The nature of the proposed activities is heavily research focused in the first phase, although it is planned that the research should directly inform pedagogic practice. The considerable amount of scholarship taking place at the centre informs the student learning experience.

The proposal included no documentation of how learning outcomes are assessed nor of the process of collecting and following-up student feedback. It was also somewhat vague regarding the result factors. The plans for the centre are ambitious, but also somewhat vague in the ambition to link entrepreneurship with organizational learning. The application is lacking specific strategies to reach international audiences and the added value of becoming a centre is hard to assess. The plans for dissemination are not elaborated sufficiently. There is a concern that the amount of reliance on PhD students may be a threat to the success of the project.

A key challenge is to expand this centre to all disciplines, not only those in business and engineering.

**Grade: 5**

**Site visit: Yes**



## 19: University of Oslo – Centre of Excellence in Music Education- CEMUS

### Concept

The Centre will be used to develop a radical reorganisation of the way that music is taught, using a competency-oriented and strongly research-based approach.

### Strengths and weaknesses

This is a strong proposal, highly innovative in the collaborative research approach it advocates. The plan set out is ambitious and if successful could bring about a step change in Norway and internationally. A powerful vision is presented for the transformation of educational programmes through the various work packages, and it seems likely that the external and international partners will provide significant support.

The profile of the lead department is high, with excellent outcomes for students compared with other humanities departments within the university. Comparison with music courses at other Norwegian institutions would have strengthened the case further.

In terms of assessing current pedagogical processes, more evaluative rather than simply descriptive comment would have been valuable. For example, whilst a move to formative learning based on projects sounds commendable, no evidence is given about how the department has established whether this has actually improved quality. There is also no reference to student feedback, and it would be helpful to understand why certain elements of current practice are regarded as excellent and on what evidence these judgments are based.

The research pedigree of the team members proposed for the Centre is excellent, with several of them involved in educational as well as artistic R&D projects. The division of activities into the various work packages is well thought out with clear lines of responsibility assigned. It is clear that the sustained commitment of faculty members at an interdisciplinary level will be crucial to the success of the Centre. How this will be managed when inevitable challenges arise will need to be considered. Less evidence is presented in the proposal of existing expertise/experience within interdisciplinary projects.

The proposal brings together a number of different music disciplines, although it is not always clear how this will happen in practice. In addition, the nature of the music education model to be developed is in some respects confusing: how much will it be practical or theoretical in the end, how much truly interdisciplinary, and how much will this relate to education for professional music making or to music education in other spheres?

The element of dissemination through the emerging practice of graduates, as well as through publications etc. is powerful. The potential to expand the pedagogical model developed here into primary and secondary schools could be transformative if genuinely feasible.

**Site visit: No**

**Grade: 4**



## 20: University of Oslo – EDGE: Excellent Dental Graduate Education

### Concept:

University of Oslo, the Institute of Clinical Dentistry, has applied for a center in dental education with Centre for the Study of Professions, Oslo and University College, and Institute of Educational Research and the Dental Student union, University of Oslo, as its partners.

The aim is to provide a holistic education programme for dentists in order to meet the growing complexity of this profession. This bid focuses particularly on increasing dental students' research experience which it is expected will lead to improved research competence and engagement in post graduate practice. The centre is proposed by University of Oslo

### Strengths and weaknesses:

This seems to be a high quality department, and the proposal appears focused, and deliverable. Detailed statistics are provided that form a compelling narrative about high rates of completion, staff research levels, teacher-student ratios and opportunities for continuing interactions with alumni. The existing dental programme already appears to offer a good range of pedagogical approaches. There is rather little mention of student feedback. R&D seems not to inform provision as strongly as in other educational programs.

There is good prominence of input into the centre expected from the Student Union.

The organisational model for the project is coherent with strong leadership. However there is no steering or advisory group, which would probably be beneficial, particularly as a way of involving external expertise. No international engagement is highlighted.

The proposal for work package one is clearly presented but work package two is rather vague in outlining activities. It is unclear how work package three would improve dental research output.

This project is very relevant to others; especially the two other institutions that offer dentist education in Norway so it is a little disappointing that this was not a collaborative bid, or at least had some involvement from other HE institutions. Consequently this bid comes over as only producing local innovation.

The plans for dissemination are weak and there is no mention of publications. Again there is no mention about international engagement. There is no real plan to disseminate to other educational communities and the ambition to widen its scope is vague.

**Grade: 4**

**Site visit: No**



## 21: University of Oslo – Health and Social- Unlimited

### Concept

The centre is offered by a consortium consisting of the following members: Faculty of Medicine, University of Oslo, Faculty of Health and Faculty of Social Sciences at Oslo and Akershus University College of Applied Science and the Faculty of Health, Care and Nursing at Gjøvik University College. The centre will provide research-led innovations in health and social education through changes in curricula, new teaching and learning methods, interprofessional education, and the reorganization of how educational institutions collaborate. Significant emphasis is put on knowledge translation from research via education into practice.

### Strengths and weaknesses

Putting medical, health and social education areas together is an excellent plan and addresses several governmental agendas. The areas addressed - childcare and welfare, common chronic diseases and elderly care – are well chosen and represent very pertinent topics for all medical, health and social workers. The consortium is strong and its members have demonstrable excellence in many different and complementary areas.

The work strands are interesting and the centrality of research to inform the development of learning and teaching initiatives is a major strength.

In the way work strand one is described, it is not clear how the use of OSCEs is innovative, as many institutions use OSCEs. The computer based testing and case histories are reported as innovative but no evidence to support this statement is provided.

The development of methods for communicating with children, in work strand two, is interesting and potentially very useful across undergraduate and postgraduate education.

Work strand 3 appears as the most novel and innovative strand and potentially will add major understanding to how knowledge translation occurs.

Although each strand is interesting of itself it is difficult to see how the various strands link together. Consequently this application almost seems like a series of projects as opposed to the programme of work of a centre with an overarching vision.

The section entitled 'potential for innovation, dissemination and added value' is not well described. The use of student ambassadors is interesting but vague and it is not clear how this would work. The 'added value' alluded to in the heading is not clearly stated and needs further development. How e-learning models could be implemented and disseminated to low income countries also needs clarification.

**Grade: 5**

**Site visit: Yes**



## 22: University of Oslo – InterAct – Culture for Learning

### Concept

The proposed project extends the decade-long experience with CSE (Computers in Science Education) at the University of Oslo. It aims for enhanced articulation between education, research and practice, with a special emphasis on student-centred learning. The application seeks to extend the CSE 'model' to the entire spectrum at the Science Faculty in Oslo, with work packages comprising constructive alignment, relational learning, didactics, and staff development.

### Strength and weaknesses

The project focuses on developing collaborative and interactive skills among Bachelor and Masters students in the sciences, focusing on the importance of these skills in professional life and their significance to employers. A particular strength of the proposal is the inclusion of students in research very early in their studies. Another strength of the proposal is the stress on the teaching culture of the university and relationship between staff as well as learning outcomes for the students. The centre is intended to be a generic university-wide resource with impact on a broad range of educational programmes. It would function as a cluster of a large number of activities, many of which appear highly successful and with great impact and visibility, also beyond the host institution. It appears to be highly prioritized by the institution.

There are some weaknesses of the proposal. Limited attention is given to communicating information about the existing student profile, success rates and student feedback mechanisms, although evidence is provided for the quality of teaching and learning environment. Most of the activities are already ongoing, and the value added of the proposed centre is therefore not obvious. Very good internal impact has already been demonstrated but less emphasis is put on external dissemination and contacts. To sum up, this is a strong proposal that would have gained from a broader strategy of dissemination rather than assuming that this will happen automatically, as well as clearer arguments for the value added of SFU support.

**Grade: 3**

**Site visit: No**



## 23: University of Tromsø – Centre for Inter-professional Education in Health

### Concept

The centre is offered by a consortium consisting of the following members: University of Tromsø, Faculty of Health Sciences, University Hospital, North Norway and Tromsø municipality. The centre aims at developing, evaluating and researching a longitudinal interprofessional learning (IPL) programme in health education. Particular attention will be paid to exploring restraining factors, from the logistical to the cultural, in the enactment of IPL.

### Strengths and weaknesses

The centre is proposing a strong consortium relating university and professional fields covering full faculty and based on an existing partnership but also making strategic international connections. The range of international partners is interesting, bringing together a diverse range of expertise, and if effective, will support the centre in providing considerable new knowledge that will impact across several continents. There is particular expertise in interprofessional learning amongst the international partners. The case for current excellence by the partners is well made.

A strong and lucid vision is clearly articulated. The proposal seems practical and deliverable. A clear management structure is described. This is a focused application where the outcomes in terms of new course components have been clearly defined. The initiative is located in relation to the Coordination Reform and outlines a powerful rationale for developing interprofessional learning.

A further strength of this application is that IPL is not just centred on hospitals but looks at where patients were situated and also includes a range of patients and situations from those looking after younger fit individuals (University Health Centre) to the other extremes of life (University nursing home).

The inter-sim builds on the expertise already available and internationally recognized at the University of Linköping and yet brings in the element of innovation by using teaching and learning technology. There is perhaps potential to be more innovative particularly in the inter-sim area. Linköping already has an international reputation for its work in interprofessional ward based training so it would be good to see them build on this and produce some real cutting edge innovation here.

The research questions are well articulated and highly relevant. The dissemination strategy could be further developed. The budget shows workshops, but they are not described in the application, it is therefore unclear as to how these fit into the plan of activities.

**Grade: 6**

**Site visit: Yes**





## 24: Barratt Due Institute of Music – Centre for Excellent Education Barratt Due

### Concept

The rationale for this Centre is based on a perceived need to improve Norway's development of young musicians to more consistent international standards. The proposal is to extend and deepen an existing integrated programme, and essentially take a "kindergarten to podium" approach of musical talent spotting, development and education.

### Strengths and weaknesses

Barratt Due clearly attracts highly talented musical individuals, many of whom go on to become nationally or internationally known performers. Impressive lists of international artists are already involved in the teaching and are likely to contribute to the Centre.

What is less clear, however, is the pedagogical quality of the current programme, and the pedagogical principles and credentials around which the project is to be developed. In this sense it seems that the proposal has not really set out to address the key assessment criteria of the SFU programme. There is no evaluation evidenced of the efficacy of current pedagogical approaches beyond the fact that many of their students go on to be successful professional musicians (which, given the talent they have, is perhaps not surprising). Furthermore there is no mention of collecting or following up on student feedback. Very little is said about pedagogical R and D, and how this may develop or transform the learning process for the students at different levels. A short section towards the end of the application mentions the changing landscape of professional classical music. This would really benefit from detailed expansion to demonstrate how the work of this Centre could help to develop music students as performers who can flourish within increasingly diverse and complex cultural landscapes.

The proposed connections with international talent programmes are a strong idea, and the institutions are of high calibre. The nature of these collaborations could usefully be explained further. It appears that in general they have not actually been approached to confirm their collaboration. As the proposal stands, a lot of the activity planned appears to be simply an expansion of current practice into the regions of Norway. This is not particularly innovative, and the proposal offers limited additionality in terms of educational process.

**Site visit: No**

**Grade: No grade awarded since the incomplete nature of the application made judgment against some criteria impossible.**