Skjemainformasjon

Skjema

SFU

Referanse

1006663

Innsendt

12.05.2013 19:57:59

Host

Information about host institution and center

Name of centre

TransARK

Host institution

UNTN

PO Box address

UNTN

Postal code / City/place

7491 TRONDHEIM

Telephone

73595000

E-mail address

postmottak@adm.ntnu.no

Contact person

Contact person

Name

Fredrik Shetelig

Title

professor / Vice dean

Telephone work / mobile

73550567 91567187

E-mail address

fredrik.shetelig@ntnu.no

About the centre

About the centre

Is the centre already established at the time of

No

application

Describe briefly the plans for establishing the centre (maximum 1500 characters)

TRANSFORMATIVE LEARNING IN ARCHITECTURAL EDUCATION (TransARK), will be established shortly after recieving financial funding (spring 2014). Most of the educational activities attached to the centre are already running, the centre will attach focused research, development of pedagogic methodology and practice in addition to dissemination. During the first half year administrative staff will be hired in addition to attracting three PhD's. The centre will be up and running in full format at the end of 2014, arranging the first scientific conference spring 2015. Personnel permanently attached to the centre in addition to administrative staff are: ass.prof Bjørn Otto Braaten (centre leader/WP leader), prof. Leif Martin Hokstad (deputy leader/WP leader), ass.prof Gro Rødne (WP leader), ass.prof Steffen Wellinger (WP leader) and ass.prof. Hans Skotte.

Describe briefly the aims and current as well as planned activities of the centre (maximum 1500 characters)

TRANSFORMATIVE LEARNING IN ARCHITECTURAL EDUCATION (TransARK), hosted at NTNU by AB together with UNIPED has the aim to open the troublesome "Black Box" of the learning experience when the student exposed to extreme complexity of aesthetical, ethical, technical, economical, functional challenges suddenly "gets it" and becomes an architect. This formative aspect is also relevant for all higher education. To be able to relate to the challenges of our time a "big rethink" is called for, architects need to develop skills, knowledge and attitude that can adjust to rapid change based on emphatic responsiveness. In our architectural education we have the last years experienced an empowerment of the students, intervening with society by action based initiative. Our aim is to reinforce this trend to develop and redefine knowledge on transformational learning to a higher level of precision in methodology and practice, disseminated both nationally and internationally and based on trans-disciplinary research. The activity is organized in four interlocked WPs: individual "Making is Thinking", collective "Live Studio", synthesis "Dealing with Complexity" and the general troublesome aspect of "Threshold Concept". TransARK has attracted excellent professionals in the field of architecture and pedagogics for the scientific committee and has the ambition to contribute to the deep shift in higher education by placing trajectory and transformation of the students learning experience in focus.

Application Document

Application Document

Upload application document

profile Application SFU

TransARK.pdf

Timeline and budget

Timeline and budget

Upload planned timeline and the activities to be conducted

timeline_TransARK timeline.pdf

Upload plan for financial resource acquisition

financial TransARK financial

aquisition plan.pdf

Upload budget

budget_TransARK budget.pdf

Attachments

Attachments

- Organizational_Chart.pdf
- CVs_of_attached_personnel.pdf
- Documentation_student_works.pdf
- budget_TransARK budget.pdf
- financial_TransARK financial aquisition plan.pdf
- timeline_TransARK timeline.pdf
- profile_Application SFU TransARK.pdf
- References.pdf

Comments

Comments to the application form (maximum 1500 characters)

Application for Centre of Excellence in Higher Education (SFU)

TRANSFORMATIVE LEARNING IN ARCHITECTURAL EDUCATION (TransARK)

"Knowing-Acting-Being" in becoming Architect

TransARK, hosted at NTNU by the Faculty of Architecture and Fine Art (AB) in collaboration with the Unit of Educational Development (UNIPED) has the aim to open the troublesome "Black Box" of the learning experience when the student exposed to extreme complexity of aesthetical, ethical, technical, economical, functional challenges suddenly "gets it" and becomes an architect. This SFU center will therefore have the aim to go in depth on this formative aspect, influencing all activities in architectural education and relevant for all higher education.

Motivation:

We live in times of major transitions. Climatic change, economic crises and big scale environmental crises in many different areas have come to a point where we a forced to seek solutions that are outside of the paradigm that has created these problems. In architecture leading voices call for A BIG RETHINK (The Big Rethink-series through all issues of Architectural review 2012, by Peter Buchanan) to develop new ways of thinking and practicing in the discipline, and also in the education of future architects. The faculty conducted an abstract-based symposium to this effect in April 2013, "Six questions on becoming architect", with contributions by Peter Buchanan and Juhani Pallasmaa. Architecture is a main contributor in shaping our environment, not only in a physical way, but in an emotional, structural and artistic way. To be able to relate to the challenges of our time, architects need to develop skills, knowledge and attitude that can adjust to rapid change. Equally important is the need of developing emphatic responsiveness. Only by an attitude of responsiveness and responsibility towards our environment can our profession be a part of the solution and not the problem.

Educational vision - from best practice to next practice:

In rethinking the role of architecture, the field of architectural education is a crucial part of the discussion. In the last fifty years many interesting educational explorations have been seen within the field in Scandinavia. New schools with programs colored by regional contexts have emerged. The challenges we face today however are issues of global concern and can no longer be neglected as such, without severe consequences. The situation calls for an urgent need of rethinking also architectural education and to bring it towards a new level of pedagogical practice. This process may be termed developing the *dual professional*, a professional equally skilled in the discipline and the educational and teaching skills.

Architecture is a highly interdisciplinary field. At its base is the need to deal with complexity; to oscillate between details and "the big picture", and to move across discipline borders in search of patterns and intersections. Issues of complexity now attract increasing emphasis in educational and

societal research (Rasmussen 2004, Qvortrup 1998, Luhmann 2000, Mason, M. 2008). In Barnett's terms the world is super complex, and the role of the university is to prepare students for a world where the learner is constantly exposed to several and sometimes conflicting frameworks for understanding. Certainty and truth is replaced with flux, unpredictability and uncertainty. The challenge for higher education is now to prepare students for multiple frameworks and competing values, ill-defined problems and open ended situations (Barnett 2000). Architecture deals with humans and social contexts as much as houses and buildings. It is a field where aesthetic, tactile experience is crucial, and creative practice is a way of thinking and a way of understanding. Becoming an architect is to develop as a complete human being.

In rethinking architectural education, new perspectives, new models and new methods need to be developed. To frame these challenges, new theoretical perspectives need to be aligned with new methodological and didactic approaches. Contours of this are already being developed as an emerging pedagogical, explorative practice at our faculty. Several project- and PBL- based methods, in particular the Live Studio approach, have been already implemented. To this foundation we will draw upon various frameworks to enhance and further develop the teaching and learning environments. These may be traced in partly overlapping models developed in different areas within the last 15-20 years, each addressing different aspects of the teaching and learning environments. Meyer and Lands Threshold Concepts framework focuses on the learner's relation to the learning content, and investigates into the need for a change in ontology for a learner to pass through a portal of difficulties (Meyer and Land 2006). A comprehensive literature on methodology, research and results has now emerged, and an international research community has been established, complete with specific conferences and frequent and increasing publications (Flanagan 2013). Preliminary research on threshold concepts in architecture has already started at the faculty. Additionally, Ken Wilber's Integral Approach (all sciences, art, ethics) that addresses issues of integrating knowledge from different disciplines and practices, will be consulted (Wilber 2007). Otto Scharmer's Theory U framework suggests how change and innovation is necessitated by institutional and personal change, and suggests a methodology for development that will be investigated (Scharmer 2009). Becks & Graves' Spiral Dynamics addresses issues of human development that bear relevance to this project (Becks & Graves). The concept of Making is thinking (Sennet 2008) addresses a much needed reexamination and re-description of how to understand and develop the concept of skills reconnecting body and mind. The common denominator of these approaches is the focus on understanding the trajectory and transformation of the learner, encouraging a partnership between educationalists, students and discipline specialists, with an emphasis of developing a dialogue between the three (Cousin 2010). Together these approaches may significantly change the way the teaching and learning environment may be evolved.

Given the present challenges, architectural education no longer can be seen merely as a vehicle for a professional career, but as a developmental process that educates the individual as well. This is a comprehensive process that involves the development of physical awareness, emotional and empathic responsiveness, mental flexibility, intuition and artistic sense.

Quality in established educational activities (see enclosed documentation of excellence in work by students)

The centre has two main partners, both at NTNU: The Faculty of Architecture and Fine Art (AB) and the Section Unit of Educational Development (UNIPED).

UNIPED has a dual function; one is to give courses and assistance to new faculty members, second to give strategic advice to departments, faculties and the central administration. The section also conducts research and publishes in the following HE topics; collaborative learning, learning with ICT, threshold concepts, assessment and evaluation in HE, to name a few. UNIPED also takes part in pedagogical network of Nordic 5 Tech (NTNU, DTU (Copenhagen), Chalmers (Gothenburg), Alto (Helsinki), and KTH Royal Institute of Technology (Stockholm). AB at NTNU represents the oldest and largest institution educating architects in Norway, with a broad specter of specialization courses in the master program of Architecture and collaboration with additional master programs at the faculty, such as Fine Art, Sustainable Architecture, Urban Ecological Planning, Physical Planning and Real Estate Development. The faculty has extensive international contacts in the form of exchange agreements and collaboration on education and research.

Result factors: The architectural education at NTNU is popular with a steady ratio of 4 primary applicants per each of the 75 available admissions, and with a high grade score (58,4/54,2) qualifying entry. The AB-faculty has a good flow of students with 94,5% of committed credits produced in 2012. Our 2013 survey on quality in learning outcome and professional relevance of the architectural education at NTNU shows from three different parties (present students, examined candidates 2003-2012 and employers) that the education is well regarded and professionally relevant.

Of a more specific significance we have experienced an increased activity and level of quality in externally oriented student projects, both as arranged semester courses and as independently organized student activities. In quite many cases this entrepreneurship leads the students to establish their own organizations or companies. Quite many of these activities has been published and received positive acclaim while still students, such as TYIN tegnestue (widely internationally published and prize winning young architect studio), Studio Tachloban (internationally published and in collaboration with Architectural Association in London) and RALLAR architects (at present third year students with two building commissions) to name a few. The architect students at NTNU have also played an important

role in establishing the national student workshop "Tre-stykker", shortlisted for the Mies van der Rohe awards 2013 for the RAKE visningsrom in Trondheim.

Process factors (partially integrated with input factors): Problem Based Learning is the predominant leaning situation for our architect students. Three established learning contexts at the faculty are incorporated in the WP's in the center: 1) full scale building in the first semester - followed by more advanced full scale building in master courses, 2) "bottom up" action planning in south countries in the context of the master program in Urban Ecological Planning and 3) student initiated projects supported and facilitated by the faculty. "Arkitekthjelpen" is in this regard a customer oriented help portal established at the faculty to help the students getting in touch with small private projects. The balance of confidence in skills and knowledge and being exposed to a productive level of risk is of vital importance as a generic pedagogical method. Most of the student projects are related and exposed to external parties informing and discussing the projects with the students keeping a high degree of actuality and relevance in the learning process. R&D and artistic work integrated in the learning processes by knowledge transfer, sharing of cases and use of students' work as part of research projects are practiced at the faculty in a wide range of contexts, exemplified by:

- The Research Centre on Zero Emission Buildings (FME-ZEB), taking part in research projects and participating in "Solar Decathlon" with design projects
- By receiving funds from Innovasjon Norge for the Tre|Nova project, the faculty will engage students in innovation processes for development of the Norwegian wood industry for a future excellent Norwegian wood architecture
- The faculty has invested approx. NOK 6 mill the last years in establishing an advanced digital wood workshop and additional mobile scanning and production facility for research, innovation and full scale building
- As one of ten UN-habitat partner universities in the world, students develop knowledge in collaboration with students in south countries in contexts such as the Federation of Slum Dwellers in Uganda and by exhibiting student works at the World Urban Forum in Naples 2012.

For internal discussion, development and dissemination of pedagogical thinking and methodology at the faculty we have held "PED-PEPP" seminars once a year in collaboration with UNIPED.

Input factors, available to the center at start up:

Academic leader of the center, Associate Professor Bjørn Otto Braaten, also leader of WP3: architect and former partner in the architecture office 70grN, former program coordinator for architectural education at NTNU, nominated for the SINTEF Award for outstanding teaching at NTNU in 2012 by the students, reformed the pedagogic structure in basic courses in the architecture program, established

improvements on quality assessment procedure for the program, research activity on embedded knowledge in the students developed throughout the five years of study. His master course "Deep Structures in Architecture" will be attached to the center with 15 students.

Professor Leif Martin Hokstad, assistant center leader and leader of WP4: researcher and lecturer at the Unit for Educational Development, and has a solid background in international and interdisciplinary research projects.

Associate Professor Gro Rødne, leader of WP1: architect and founding partner of Agraff architect office, central contributor on the Tre|Nova project and board member at the Wood-center in Trondheim, responsible for the first semester course ARK1 including full scale building which will be attached to the center with 75 students.

Associate Professor Steffen Wellinger, leader of WP2: architect, received the SINTEF Award for outstanding teaching at NTNU in 2010, founded the help portal "Arkitekthjelpen", mentor for many of the "Live Studios" initiated by the students. Establishment of an incubator and facility arena for supporting student driven initiatives will be attached to the center with approx. 10 students per year.

Associate Professor Hans Skotte, assistant leader of WP2: architect, teaching and research in Urban Ecological planning, huge international network on planning in south countries, member of the steering committee of the UN-Habitat University Partnership Initiative, mentor for many of the "Live Studios" initiated by the students.

Other academic staff that will be attached to the center are: University Lectors Andreas Gjertsen and Yashar Hanstad of TYIN tegnestue and Professor Sami Rintala, having for many years arranged full scale building workshops and master course "Design in Context" all over the world together with university lector Pasi Aalto, and been mentors for many of the "Live Studios" initiated by the students. A master course with 20 students in collaboration with local students will be attached to the center. One Ph.D. attached to the center will be funded by the AB faculty in addition to two funded by the external financing. One of the three Ph.D.'s will be designated for action research.

In addition, the Centre will draw upon the resources of other relevant environments available at NTNU with particular relevance to the Center and establish collaboration with these. This is i.e. the rich PBL environment at the Medical Faculty, and the trans disciplinary course at NTNU: EiT (Experts in Team).

Organizational plan (see also enclosed organizational chart)

The centre will be established at NTNU, Faculty of Architecture and Fine Art under the direction of Associate Professor Bjørn Otto Braaten. Section of Educational Development (UNIPED) will be

partner in the centre with Professor Leif Martin Hokstad as assistant leader. The centre direction will be supported by one dedicated administrative staff.

A steering committee will monitor the overall progress of the centre, with representatives from the NTNU rectorate, Deans of the two faculties AB and SVT, program coordinator of master program of Architecture and student representative.

An international scientific committee will in connection with the yearly conference hosted by the centre, give critique and advice on the scientific progress. Members having accepted to be asked to participate in the scientific committee: **Juhani Pallasmaa**, architect, former professor and dean of the architecture department of Helsinki University, former director of the Museum of Finnish Architecture and one of our times most influential writers in architectural philosophy with the books "The Eyes of the skin" and "Thinking hand" read by architects all over the world / **Kjetil Trædal Thorsen**, architect and founding partner of Snøhetta architects, honorary doctor at NTNU 2011/ **Peter Buchanan**, architect, urbanist, exhibition curator, writer and architectural critic, former deputy editor of The Architectural Review, author of the essay series "The Big Rethink" encouraging a re-evaluation of how we address the major challenges our times / **Professor Ray Land**, director of centre for Academic Practice in the school of Education at Durham University, former higher education consultant for the OECD and European Commission, and has published widely in the field of educational research, is particularly known for research on "Threshold Concept" and "Troublesome Knowledge", published books and organized conferences on these themes.

A reference group with participants representing institutions for architectural education in Norway and the Norwegian Architectural Association (NAL) will establish a forum for dissemination, check of relevance and access to valorisation of the SFU's impact on educated architects absorbed in the market. The reference group will have a national focus at start-up of the centre, but will be expanded internationally if relevant.

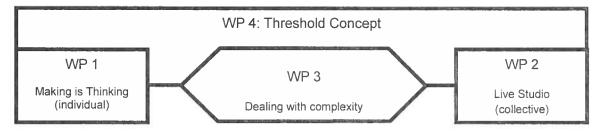
The program council for the architectural education is directly linked to the centre direction for easy coordination and planning.

Work package overview:

The research and development activities will be organized in work packages, and the collective effect of the work packages is to enable a research based redesign of courses given at the faculty. The following courses are targeted for this project: Architecture I- and Master courses with the same content, the "Live Studio" projects and Master course in architectural design (deep structures in architecture "dealing with complexity"). The work packages are chosen because they are already in a process of development at NTNU and are having a mutual impact on each other.

While WP1 ("Making is thinking" Full scale building) is focused on the *individual* perspective, the body and mind connection, WP 2 ("Live studio") has the social perspective and concern about community / the relationship to society but do not necessarily imply building. It is easy to assume that the "Live studio projects wouldn't appear without the "Making is thinking", which have emerged as a result of an intentional priority area especially on wood as a building material the last 10-12 years. This, along with the priority area of urban ecological planning (international master programs in Tibet, Uganda, Nepal i.e.) has possibly been giving the students the necessary competence to implement the Live Studio projects. Prior to the full scale building we hardly had no such activity as the "live studio" represent. This would be an obvious task to investigate in research and implement in the redesigning of the courses. WP 4 (Threshold Concepts) will use both WP1 and WP2 and WP3 as target of research. The challenges and potential troublesome areas in the students learning trajectories are connected both to the disciplinary issues, but also to develop the ability to move between disciplines.

The relations and interdependencies between the work packages may be illustrated as follows:



WP 1: Making is thinking.

Acknowledging that Architecture belongs to the "Making disciplines" and the connection between mind and body, we emphasize to give the students an embodied experience by working in full scale from the very beginning of the study. Full scale building projects continue in several assignments throughout the curriculum as a result of an intentional priority area especially on wood as a building material the last 10-12 years. By working full scale, they will gain a knowledge that not only cover professional and academic skills, but also remains as tacit knowledge (Polyani 1966). Literally it is also building their self-confidence to later implement projects on their own. Full scale building projects continue in several assignments throughout the curriculum and our students carry out high quality full scale building projects on their own, throughout the world. In rethinking WP1 it would be an aim to make use of the experiences from WP2, WP3 and especially the research in WP4, in the development of the didactic tools. This way of learning by doing, could have impact on other assignments and courses at our Faculty and possible deployment on to other disciplines.

WP 2: Live Studio.

Live Studios are conducted to challenge the students; to bring them out of the 'academy' and into real-world situations that enable them to gain insights, skills and understandings that cannot be academically 'taught'. By 'being in the situation' where solutions are sought both physically and socially, they not only learn much more efficiently by having to engage all their senses, but they

acquire a much wider understanding of what architecture is and what it does. Being outside the academy the problems students confront are embedded in real-world constraints, social and material, that trigger ingenuity, innovation and creativity all according to the principles of problem-based-learning. The experience we have gained so far shows that the students acquire a capacity to improvise, to communicate effectively, and to respond architecturally within a responsible social setting. The Live Studio approach is grounded in the recognition that architecture is a deeply practice based and social endeavor aside from being rooted in the arts and in technology. Hence it is rooted in the writings of Freire and Lakoff & Johnson as well as on the doings of Rural Studio of Auburn University and the Mass Design Group, ex-Harvard (Freire 1987, Lakoff & Johnson 1980).

WP 3: Dealing with complexity and change.

One of the characteristics of the field of architecture is to deal with complexity. Not only technology becomes more and more complex, but the overall context of the design - and building processes are developing into still higher levels of complexity. Even more challenging is this situation, because it is also continually changing. To deal with high levels of complexity and change calls for new ways of thinking, both about the role of the architect and the role of architectural education.

This work-package will focus on developing pedagogical tools for dealing with high levels of complexity and change. The Integral Approach, as it is formulated by Ken Wilber, provides a map and a method (Integral Methodological Pluralism) that can be used as a tool of orientation in complex matters. As an interdisciplinary field, the architectural perspective in itself is a kind of integral approach. In a time where specialization and fragmentation is a main trend, it is crucial to develop understanding of the relationship between the details of things and the whole picture.

The other aspect of dealing with complexity and change is to be grounded in basic knowledge and experience of the field. For an architect to deal with high levels of complexity and change, it is crucial to master the simple fundamentals that make architecture to something more than mare production of buildings and physical manifestations of system logic. Architecture deals with the meaning- aspect of our build environment. This starts with the embodied experience of space, the tactile and physical quality of materials, constructions, light and space. The physical, emotional, structural and artistic aspects are the fundamentals for making meaningful buildings. This work-package will focus on developing methods that corresponds to these fundamental aspects of architecture.

WP 4: Threshold Concepts.

Aim: The aim of this work package is to identify, characterize and categorize threshold concepts amongst students of architecture, and to use this insight in the redesign and development of courses.

The 'threshold concepts' framework has in the last few years been introduced into a large number of pedagogical settings and research initiatives in higher education (Flanagan 2013). However, little research has been conducted as of yet in the field of architecture. The threshold concepts framework focuses on those aspects of the intended outcome that is particularly difficult or troublesome to the learner, especially those needed to move ahead in the subject or discipline. This position the learner

finds himself in is described as standing in front of a portal or a gate through which the learner finds it difficult to pass. The main focus is, from the point of view of designing a learning trajectory, on the world of the learner, and the effort to grasp what the world looks like to a learner who is entering into a new ontological and epistemological terrain. They represent deep aspects of a discipline and are frequently associated with tacit knowledge. First and second year students, and their teachers, will be the target of research. A methodology based on seminal work in the field (Land & Meyer 2006, M. Flanagan 2013, Mangan and Davies 2010), will be appropriated to the context of architecture. The activities taking place in WP 1 and WP 2 will provide the basis of study.

The figure below shows the timeline and relationship between the tasks in the various work packages, and the overall approach of development of methodology, pilot testing, small scale deployment, integration of research into redesigned courses, and evaluation plans (see also the more specified timline enclosure). In addition, WP specific tasks that build on the common work are described.

Year 1	Year 2	Year 3	Year 4	Year 5
*Development of	*Data	*Data gathering	*Pilots/small scale	*
methodology of	gathering	and analysis (all	deployment of redesigned	Deployment
investigation (all	and analysis	WPs)	courses (WP1, 2, 3).	of
WPs)	(all WPs)	*Development of	*Integrating WP results	redesigned
*Establish and	Development	pilots /small scale	into design (WP 1,2,3)	courses (WP
activate international	of on-going	deployment (all	*Deployment of incubator	1, 2, 3)
network of	full scale	WPs).	& business models (WP	*Evaluation
researchers. (all	projects (WP	*Development of	2).	studies of
WPs)	1,2,3)	evaluation design	*Evaluation studies of	effects
* Pilot deployment		(all WPs)	effects to be fed into	(WP1, 2, 3)
of methodology (all			redesign of courses (WP	
WPs)			1, 2, 3)	

Dissemination and impact

The challenges in architecture are of an interdisciplinary nature, and many of the issues addressed in this project are shared by other disciplines. The research and development efforts in the project will therefore have impact on the discipline specific educational issues, yet with a strong generic component with high relevance for other disciplines outside architecture. The dissemination efforts will therefore serve several purposes; to participate in the *discipline specific development* (i.e. architecture and architecture education), to through generic aspects of the project contribute to the field or research and practice in *higher education*, and add to the body of knowledge in other disciplines thereby contributing to an *interdisciplinary discourse*. The dissemination will thus target *local* (i.e. NTNU, through the redesign of courses in architecture and in-service courses for faculty), *national* and *international* channels. The methods will be as follows:

- 1: Two biannual series of conferences with publications arranged in alternating years will be the main means for scientific and public dissemination:
- a: a biannual international conference on architectural education planned to be in collaboration with "TAF celebration of Architecture at Røros" http://rorosarch.wordpress.com/
- b: a biannual international cross disciplinary conference on education with a broader scope encompassing architecture and other "making/performing disciplines" such as music and fine art in addition to neuroscience, engineering, to name a few.

Both conference series will address discipline development and pedagogical/ methodological/ theoretical development for architectural education, cross-disciplinary education and in higher education in general. The conferences will produce a steady flow of in-house and external publications that will be collected in anthologies and books on architectural education and education in general. Additional participation on national and international conferences and publications will be part of the centres activity.

- 2: WP 2, "Live studio" as already practiced at the faculty, will disseminate directly one to one, with external partners such as universities, NGO's and municipalities. The activity can be compared with "Design without borders", managed by Norad, Fredskorpset and Norsk Form, though not only aimed at "south" countries.
- 3: The Scientific Advisory Board represents the highest quality in their respective fields. Their presence in the project will in itself contribute considerably to the attention of the project in the dissemination efforts. They will also take part in conferences arranged by the project.
- 4: The reference group described under "Organizational plan" will be a forum for planning and performing dissemination on educational development especially for architecture on a national level, involving all three institutions educating architects in Norway: AHO, BAS and NTNU. The National Architects Association NAL will in addition be involved in discussions on relevance and valorization of impact on quality in absorbed graduates in the market.
- 5: A web-portal will be established for a broad dissemination of R&D and activities.
- 6: Scientific papers and articles targeted at channels for architecture, HE and trans disciplinary research.

The TransARK centre will be an effective national platform for the following contributions:

- Developing and redefining an old teaching tradition (master apprentice) in education, so far based on tacit pedagogical knowledge on transformational learning, to a higher level of precision in methodology and practice.
- Dissemination on national and international level as contributions for development of architectural education specifically, but also in a broader sense all relevant Higher Education.
- Establishing international and trans-disciplinary collaboration at top level on research and development of "next practice" in transformational learning in Higher Education.

Application for Centre of Excellence in Higher Education (SFU)

TRANSFORMATIVE LEARNING IN ARCHITECTURAL EDUCATION (TransARK)

Lists of references

Litterature:

Barnett, R. (2000). *Realizing the University in an Age of Supercomplexity.* Buckingham: Open University Press.

Becks & Graves (1996): Spiral Dynamics. Blackwell Publishers.

Buchanan, Peter (2011-2012): *The Big Rethink*. 12 Essays. Web: <u>www.architectural-review.com/home/the-big-rethink</u>.

Cousin, G. (2010) Neither teacher-centred nor student-centred: threshold concepts and research partnerships, *Journal of Learning Development in Higher Education*, Issue 2: February 2010.

Flanagan, Michael Thomas (2013): *Threshold Concepts: Undergraduate Teaching, Postgraduate Training and Professional Development. A short introduction and bibliography.* Web: http://www.ee.ucl.ac.uk/~mflanaga/thresholds.html

Lakoff & Johnson (1999): Philosophy in the Flesh. New York: Basic Books. .

Mason, M. (ed.), (2008): Complexity Theory and the Philosophy of Education. Malden, MA: Blackwell Publishing

Meyer, J. and Land, R.(eds) (2006) Overcoming barriers to student understanding: threshold concepts and troublesome knowledge. Abingdon: Routledge.

Land, R., Meyer, J.H., & Smith, J. (Eds.) (2008): *Threshold Concepts within the Disciplines*, Sense Publishers.

Luhmann, Nichlas (1984/2000): *Sociale systemer. Grundris til en almen teori.* København: Hans Ritzels Forlag

Pallasmaa, J. (2009): The thinking hand. Southern Gate: Wiley

Rasmussen, Jens (2004): *Undervisning i det refleksivt moderne*. København: Hans Reitzels Forlag.

Sennet, R. (2008): The Craftsman, New Haven: Yale University Press, 2008

Qvortrup, Lars (1998): *Det hyperkomplekse samfund. 14 fortællinger om fremtiden.* København: Gyldendal

Wilber, Ken (2007): Integral Vision. Boston: Shambahala Publications Inc.

Scharmer, Otto (2009): Theory U. San Fransisco: Berrett-Kohler Publishers.

Polyani, M. (1966): The Tacit Dimension. Glouchester, MA: Peter Smith

Freire, P., & Macedo, D. (1987): Literacy: reading the word & the world. London: Routledge and KeganPaul Ltd.

Lakoff, George & Johnsen, Mark (1980): Metaphors We Live By. Chigago: The University of Chicago Press.

Websites for attached personnel

Associate Professor Steffen Wellinger: http://steffenwellinger.blogspot.no/

Associate Professor Gro Rødne: http://agraff.no/

Professor Sami Rintala: http://www.ri-eg.com/

Websites for student projects & activities at NTNU (selection):

TYIN tegnestue architects, established as students in 2008: http://www.tyinarchitects.com/

RALLAR, architect studio established by students: http://rallararkitekter.com/

Studio Tachloban, reformed as WS, design and building in the Fillipines and India: http://projecttacloban.blogspot.no/ and http://wrkshp.org/

TYIN TAHITI, students designing and building bakery in the earthquake ruins of Port au Prince: http://www.tyinhaiti.com/

Project Niafourang, designing and building community centre in Senegal: http://www.projectniafourang.com/

FRIROM, master thesis in architecture, a space for solace at St. Olavs Hospital in Trondheim, to be opened for use 7th of june 2013: http://frirom.no/

Rever og Drage, architect office established on basis of master thesis in architecture: designing and building herring smoker at Strømsholmen: http://www.rdtw.no/prosjekter/stromsholmen/

RAKE visningsrom, showroom designed and built by students from all three architectural educations in Norway (AHO, BAS and NTNU): http://rake.trondheim.no/visningsrom/

Budget

TOTAL BUDGET	2013	2014	2015	2016	2017	2018	TOTAL
Personell costs management and staff	272	1 824	1913	1 995	2 054	2 180	10 268
Personnel costs academic staff	136	2 286	2 668	2 779	2 577	2 699	13 144
Personall costs PhD and past docs			2 670	2 790	2910	3 030	11 400
Personnell costs other stuff		-		1 - 1 - 1			
SUBTOTAL PERSONELL COST	408	4 110	7 251	7 564	7 571	7 909	34 812
Lab costs	-	-	- 1	-	-	- 1	-
Procuremnet of research services	-	180	180	180	180	180	900
Investment equipment	- 1	-	-	-	-	-	_
Travel and seminar expenses	- 1	650	650	650	650	650	3 250
Other operating expences	- 1	100	378	783	387	392	2 041
In-kind from partners	- 1	~	-	-	-	- 1	_
Other projects	-	-	-	-	-		
TOTAL COST SFU	408	5 040	8 459	9 176	8 788	9 131	41 003

Planned input factors per year financed by the faculty for Architecture and Fine Art (AB) faculty of Social Science and Technology (UNIPED):

- Five persons at professor/associate professor level at AB equivalent to 1,7 full-time positions. Including 0,9 full-time position for the center leader. This input factor is predominantly research time (only exception is center leader). Teaching time on courses directly and indirectly attached to the center is not included in the budget, but will represent an added input factor financed by the faculty directly influencing the capacity and output from the center.
- One person at professor level at UNIPED equivalent to 0,3 full-time position (research and deputy center leader).
- One phd + tutoring for all three phd's
- Access to and use of equipment, laboratories, studio/teaching-space and office-space is financed by AB-faculty, but not calculated into the budget.

Planned activities per year financed by resources at central administration at NTNU (0,7 mill) and NOKUT (3 mill):

- One full-time position for administration and coordination
- 10% replacement of center leader teaching time
- Two phd's (three year research + one year teaching)
- Costs for hosting one conference pr year including publication costs.
- Fees and travel expenses for scientific committee and reference group.
- Travel costs for academic staff, phd's and "Live Studio"

Financial acquisition plan

FUNDING	2013	2014	2015	2016	2017	2018	TOTAL
Resourses from central NTNU admin.		700	700	700	700	700	3 500
Other NTNU resources	408	2 900	4 656	4 853	4 740	4 953	22 510
NOKUT financing	1 1	3 000	3 000	3 000	3 000	3 000	15 000
Cash financing exsternal partners		_					_
In-kind financing exsternal partners	1	-		-	-	-	_
Other projects	.	-	- 1	_	_		_
EU grants (own financing)		-	-	-	-	-	-
TOTAL FUNDING SFU	408	6 600	8 356	8 553	8 440	8 653	41 010

The TransARK center is planned funded by NOKUT financing (3mill/year), financing from central NTNU administration (0,7mill/year) and the funded by faculty of Architecture and Fine Art at NTNU in addition to 0,3 full-time position at professor level from faculty of Social Science and Technology (UNIPED)

In addition the center will represent a platform for additional national and international applications for research and educational grants relevant for the center.

TransARK: application	TransARK: application for Centre of Exellence in Higher Education	2013	20	2014	20	2015	20	2016	20	2017	2018	8
Timeline		autumn	spring	autumn	spring	autumn	spring	autumn	spring	autumn	spring	autumn
General activities	Establishing the centre		本題を開学									
	Development of methodology of investigation (all WPs)		A COLUMN TO SERVICE STATE OF THE PARTY OF TH	新								
	Establish and activate international network of researchers and educators (all WPs)											
	Pilot deployment of methodology (all WPs)						OF THE PERSON NAMED IN					
	Data gathering and analysis (all WPs)				1000年度に		がはいる					
	Development of evaluation design (all WPs)					24,112,113						
	Pilots/small scale deployment of redesigned courses (WP 1,2,3)											
	Evaluation studies of effects to be fed into redesign of courses (WP 1,2,3)								O.F. Series			
	Deployment of redesigned courses (WP 1,2,3)										100776	
	Evaluation studies of effects (WP 1,2,3)						CHIEF THE	The Homester			-	
	phd's		Announcement	ment	2 phd's on	phd's on transformational learning, inclu	ational le	aming, incl	uding teachin	hing one ve		THE PERSON NAMED IN
	phd's		Announcement	ment	4 phd on	phd on action research, including teaching one year	ireb, fineli	ding teach	ing one ye			
Specific activities	WP1 "Making is thinking" development and deployment in course ARK1	UKA		Tresuler		UKS		Martin		E S		
	WP1&2 Establishing of full scale workshop facility for external and internal workshops			AL campil	DESCRIPTION	/Illitra			- Action Control			
	WP2 "Live Studio" development and deployment in mastercourses on the global arena		melestrati									
	WP2 "Live Studio" development and deployment in mastercourses on local arena		Holystu		Rindail						APPLICATION OF THE PERSON OF T	
	WP2 "Live Studio" establishing facilities for student incubator for entrepreneurship	March College	THE STATE OF	On eampe	2			1 200				
	WP2 "Live Studio" development and deployment in student incubators and entrepreneurship	Studio Bells										
	WP3 "Dealing with complexity and change" development and deployment in master course											
	WP4 "Threshold Concept" development and deployment in all attached courses	State of the state	The second	Services and the services are the services and the services are the services and the services and the services are the services are the services and the services are the servic	Accountant Town		Section and		のから	Section 1	The second	
	Diciplinary Conference on Architectural Education in collaboration with "TAF international celebration of											
Dissemination	Architecture at Røros"											
	Transdiciplinary Conference on Transformational Learning in Higher education											100
	Meeting with international scientific committee											
	Meeting with national reference group for planning activities on national dissemination in architectural											
									4			
	Publication of scientific papers on all four WPs		Position Papers	apers	Articles	TO HER CO				all again	THE COLUMN	
	Annual report of the centers progress and production									•		
Evaluation	NOKUT evaluation									٠		

Explanation of details in "Specific activities":

WP1 ARK1 has established a long time collaboration with the bi-annual student-festival "UKA", building scenography for the opening seremony of the festival

WP1 & 2. Having established a mobile building equipment workshop, there will in addition be established more permanent facilities able to serve international courses and student workshops at campus or Hopsig/Hitra WP1 ARK1 has also collaborations with the bi-annual art & technology fesival Meta. Morf. In 2014 ARK1 will collaborate with the international conference on wood: Forum HolzBau Nordic in Trondheim

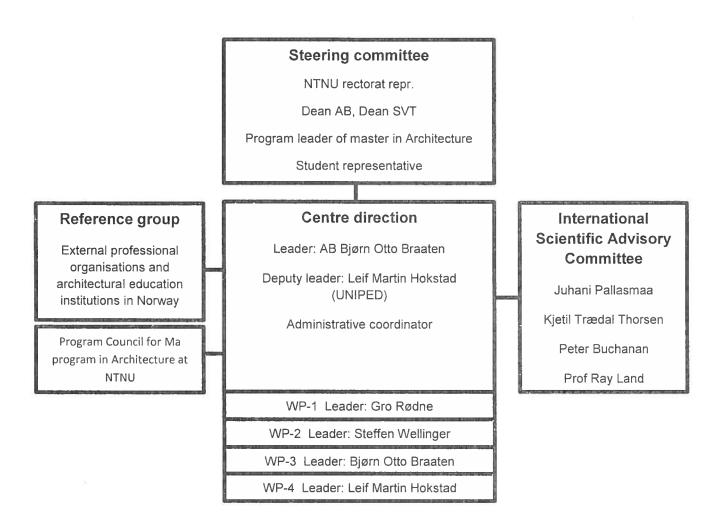
WP2 One set of "Live Studio" courses travelles all over the world. For spring 2014 there is established partner-relations with the aim to run a "Live Studio" in Jerusalem

WP2 One set of "Live Studio" courses operate in Norway only, and have built two full scale installations in Rindal municipality. The course will design & build a look-out tower in Rindal in 2015.

WP2 "Live Studio" plans to design & build installations i collaboration with Forum HolzBau Nordic in Trondheim

WP2 AB-faculty supports student initiative (Studio Beta) to establish an incubator in Trondheim city autumn 2013. The faculty plans to establish a similar incubator on campus in 2015

Organizational chart



Application for Centre of Excellence in Higher Education (SFU)

TRANSFORMATIVE LEARNING IN ARCHITECTURAL EDUCATION (TransARK)

CV's for attached personnel

Centre leader/WP3 leader: Associate Professor Bjørn Otto Braaten

Deputy centre leader/WP4 leader: Professor Leif Martin Hokstad

WP1 leader: Associate Professor Gro Rødne

WP2 leader: Associate Professor Steffen Wellinger

WP2 attached: Associate Professor Hans Skotte

CV Bjørn Otto Braaten, born.15.03.59 Master in architecture at NTH in 1988 Associate professor at NTNU in 2003

Teaching:

NTML 01.06 Course responsible for ARK1 and ARK2 first year introduction to architecture at backelor level and tutoring master theses	08-13 spr/aut 07 autumn 07 spring
00-0	

Bergen School of	FArchitecture (BAS)	
BAS -	01 autumn	Course responsible for semester course at master level: "Compensation space", assisting teacher at bachelor level and tutoring master theses
BAS	97 autumn	Guest teacher at bachelor level: Urban Space
BAS	BAS 96 autumn	Guest teacher at master level: Norlandica course at Island

Guest teacher at bachelor level: Urban Space	Guest teacher at master level: Norlandica course at Island	workshop leader at master level	Course responsible for semester course at master level "Narvik,- peace city in the north?"	Assistant teacher at bachelor level: Complex buildings	Assistant teacher at bachelor level: Complex buildings	
97 autumn	96 autumn	95 autumn	95 spring	93 spring	91 spring	
BAS	BAS	BAS	BAS	BAS	BAS	

Workshops:

"Sami Cabin", 14 students from NTNU with professor Sami Rintala	"Biáfrost", 8 studenter from NTNU + 20 from Univ. of Oulu, Dep. of Arch, with professor Sami Rintala and Lena Kourelahti	Japan 2002 culture week "The Spirit of the Japanese Tea House" 10 students from NTNU and 10 from Tokyo. 9 days	(Dublished in SHINKENCHIKT) no 1, 2003, Japan)
20	04	02	
Kåfjord	Rognan	NTN	

	(MONARCH 98) 5-days
	"Fragile,-handle with care" (MONARCH 98) 5-days
	98
Univ. of Oulu,	Dep. of Arch

Examiner:

Examiner at various courses in architecture at NTNU External examiner at semester course at master level in architectural design "Outward bound school" / Elin Corneill External examiner at semester course at master level in architectural design: Housing / Brantenberg- Høyem External examiner at semester course at bachelor level in architectural design: Complex Buildings/ Steen External examiner at semester course at master level in architectural design: Housing/ Brantenberg	External examiner at semester course at master level in architectural design v Fredrik Lund External examiner at semester course at master level in architectural design v Fredrik Lund
01-13 00 autumn 98 autumn 97 spring 96 autumn	öteborg 01 spring öteborg 97 spring
N N N N N N N N N N N N N N N N N N N	Chalmers, Göteborg 01 Chalmers, Göteborg 97

Administrative and leader experience at University

Leader of program council for the Master program in Architecture at NTNU	Deputy leader of department of Architectural Design and Management at Faculty for Architecture and Fine Art at NTNU
2010-2012	2009-2013
NTNU	NTNU

Publications:

(Red: Anna-Lena Østern, Geir Stavik-Karlsen, Elin Angelo) Universitetsforlaget 2013 NTNU Faculty of Architecture and Fine Art 2012 Byggekunst 3, 2007 Arbok 2002-2005 Transactions on architectural education: no 19, EAAE 2005	on site review 11, Canada 2004 SHINKENCHIKU no 1, 2003, Japan
«Kunstpedagogikk og kunnskapsutvikling» AAR 4565 Timber Construction Nidarosdomens nye besøkssenter Fakultet for arkitektur og billedkunst, NTNU Monitoring Architectural Design Education in European Schools of Architecture.	Architecture in the circumpolar regions Workshop in Norway
«Det første forsøkets magi» «Bird-watching Tower in Rindal» "Nyanser i grått" "Tre i grunnundervisningen i 1.klasse" "Structure; Space and Form"	"The Landscape and Architecture of 70°N" "The Spirit of the Japanese Teahouse"

Practicing architect:

1995-2000	1993-95.	1992-93.	1990-91.	1988-89.	1987-88.
Own practice: partner at architecture office 70°N arkitektur as, Tromsø	Own practice: architect studio Braaten/ Løkken/ Nash, Tromsø	Employed as departement architect at city planning office in Tromsø municipality	Employed as architect at Sigurd Hamran's architect office in Tromsø	Employed as architect at Steinsvik architect office i Tromsø	Employed as architect at bia strek arkitekter as i Tromsø

Architectural competitions:

 prize: open national competition "Tøyen culture park", Oslo, prize: invited competition "Dwellings for elderly in Salsia", Hammerfest prize: NAL's special prize for students, "Settefiskanlegg i Lofoten" prize: open national competition "Hålogaland theater", Tromsø Purchase: open national competition. Idea plan for Eikelandsosen Purchase: open national competition at Nedre Elvehavn, Trondheim Purchase: open national competition. Protection envelope for the ruin of Hamar Cathedral 	1994 1998 1986 1997 1985 1986	(Braaten/Løkken/Nash/Ridderhus). (70°N arkitektur as) (master thesis NTH) (70°N arkitektur as) (medarbeider Gult felt/Svein Hatløy). (B.O.Braaten/J.i.Bruland/F.Lund) (medforfatter, blå strek arkitekter as)
Jury in architectural competitions: Head of jury in Plan and design competition for Sunndal Highschool/cultural school	2006	

Prizes, exhibitions and presentations:		
Nominated for SINTEF Award for outstanding teaching at NTNU	2012	NTNU/SINT

NTNU/SINTEF (70°N arkitektur as) (70°N arkitektur as) (Braaten, Løkken, Nash) (Braaten)	(70° N arkitektur as) (8raalen)
2012 1998/99 1997 1995	
Nominated for SINTEF Award for outstanding teaching at NTNU Norwegian Museum of Architecture "20 under 40" exhibition Galleri Rom, Oslo: separate exhibition Norsk Form (Foundation for Design and Architecture in Norway) young designers prize Galleri Rom, Oslo: "Young Norwegian Architectsr"	Year book (Rowhouses at Nøkken, Tromsø) Rowhouses at Nøkken, Tromsø Norwegian contemporary architecture Terraced housing, Alveveien, Tromsø Terraced housing, Alveveien, Tromsø Terraced housing, Alveveien, Tromsø Tøyen culture park Nordc tendencies (master thesis)
ard for outs nitecture "" e exhibition r Design a Norwegiar	2001 2001 2001 1998 1998 1996 1986
Nominated for SINTEF Award for outstanding teaching at NTNU Norwegian Museum of Architecture "20 under 40" exhibition Galleri Rom, Oslo: separate exhibition Norsk Form (Foundation for Design and Architecture in Norway) Galleri Rom, Oslo: "Young Norwegian Architectsr"	Arkitektur i Norge, NAM Byggekunst nr. 6 Byggekunst nr.2-3 Housing nr. 9, Italia Arkitektur nr.8, Sverige Byggekunst nr.1 Byggekunst nr.6 Byggekunst nr.6

Eksternal Lectures:

2011 2007 2006 1998 1997 1995 1995		1990 1986 1980 1978		1993 1983 1982		2006- 2006-	1997-98 1987-88, 1994-95
Deep-structures in architecture "Intuitive methods in creative processes"	Education:	Art History – foundation course, University of Tromsø Sivil architect/master in architecture NTH, Trondheim History – foundation course, Telemark regional college, Bø Kongsberg High School, science	Registration of Cultural Heritage:	De Sandvigske Samlinger, Maihaugen. - Commission at the project "Our old building technology" Antiquarian survey, Lærdalsøyri. Registration of Cultural Heritage (SEFRAK) in Nore and Uvdal municipalities.	Appointments:	Member of faculty board at Faculty of Architecture and Fine Art, NTNU Member of appointment committee at Faculty of Architecture and Fine Art, NTNU	NAF (Architectural association of Northern Norway): member of the board (leader of committee for new school) TAL (Tromsø Architectural association): member of the board

"The use of wood in the American North-west. A trip to Seattle to study the works of Arne Bystrom"

1999

Grants: Alf og Bergljot Kolflats Fund:

Leif M. Hokstad is a professor in digital competence in teaching and learning at the Norwegian University of Science and Technology (NTNU). His function at NTNU is twofold; as a professor at the Educational Development Unit he trains newly employed faculty in the teaching profession, gives advice to faculty, institutes and faculties on educational issues, such as evaluation of bachelor and master programmes. His assignments in the Unit is to develop courses in supervision, the use of technology in teaching and learning environments, assist in course design at programme and department level.

Since 2003 he has in addition been the director of the interdisciplinary program Programme for learning with ICT(LIKT) at NTNU, a sub-program of the trans disciplinary Strategic Area ICT at NTNU. His research interests gravitates around the enhancement of teaching and learning environments through digital technologies, and in enhancing interdisciplinary research in the intersection of technology, the humanities and the social sciences. His research and publications is in the areas of mobile learning, learning communities and collaborative learning in technology rich environments, serious games and virtual worlds, and the study of threshold concepts in serious games development and in higher education.

From 1984 – 1992 he had various assignments and engagements for the Ministry of Education in connection with the introduction of computers in schools program. He took part in the NFR funded research program FABULA (2006-20011), a joint project between three NTNU parts (LIKT, the Institute for Computer and Information Science, the Department of Telematics) and KTH Royal Institute of Technology, Stockholm, Sweden.

He was a WP and task leader in the TARGET project (European Commission Seventh Framework Project (IST 231717)), and was responsible for three deliverables on learning communities and threshold concepts. The project involved collaboration with major European Universities (Technische Universität Graz, University Colloege of London), Sintef, and industrial partners (Siemens (Vienna, Austria), and NOKIA (Helsinki, Finland).

His teaching experience is in addition to being a lecturer at NTNU, from upper secondary schools and the Norwegian School of Business (BI), where he gives courses in intercultural communication.

Selected publications:

Leif M. Hokstad: IKT I læring – et didaktisk perspektiv. In: Ludvigsen, Sten R. og Hoel, Torlaug (red): Et utdanningssystem i endring. Oslo: Gyldendal Akademisk 2002. (ISBN 82-05-3040-2).

Leif M. Hokstad: Epistemological Challenges – Some Pre-Study Considerations on Knowledge Development and Digital Epistemology. WCCE 2005, 8th 1F1P World Conference on Computers in Education, University of Stellenbosch, South Afrika.

Hokstad, Leif Martin; Hallen, Thorleif: Multiple Mobile Devices and Virtual Learning Environments. Paper presented to: "Universidad 2006: Virtualization in Higher Education", Havanna, Cuba 13-17 February 2006.

Hokstad, Leif Martin; Hallén, Thorleif; Strømme, Alex; Rismark, Marit; Sølvberg, Astrid Margrethe.

Enhancing learners through mobile access. In: Interactive Computer Aided Blended Learning. Floreanopolis, Brazil: International Association of Online Engineering 2007 ISBN 9783899582772. NTNU

Leif M. Hokstad: Literacy i nettbaserte læringsmiljøer. I : Hauge, Trond Eiliv; Lund, Andreas, og Vestøl, Magne (red): Undervisning i endring. IKT, aktivitet, design. Oslo: Abstrakt Forlag 2007 ISBN: 978-82-7935-226-6

Leif Hokstad, Calle Dons: Digital literacy – towards a re description of literacy for the digital learning environments. Interactive Computer Aided Learning, 26-28 September 2007, Villach, Austria

Hokstad, Leif M. et al. (2009): Community Methodology and Analysis Framework.

Deliverable D5.1 TARGET. Deliverable to the TARGET project. European Commission Seventh Framework Project (IST 231717)

Proceedings of Uniqual 2009 The 6th International Conference on Universities Quality. Perceptions of quality in higher education, rankings and benchmarking (Eds.: Hokstad, Leif M.; Bento, Fabio) ISBN for the hardcover version is: 978-82-519-2714-7

- L. Hokstad, M. Zimmerman, G. Ackerman, M. Fradinho, B. Andersen, M. Flanagan, "Transformational Learning and Serious Game Design", 3rd Biennial Threshold Concept Symposium, Sydney, 2010.
- L. Hokstad and E. Prasolova-Førland, "Analyzing and Monitoring Learning Communities in a Serious Games Context", 2nd International Conference on Mobile, Hybrid, and On-line Learning (eL&mL'10), Netherlands Antilles, 2010.
- L.Hokstad, E. Prasolova-Førland, M. Mikhail Fominykh: "The Creation of Learning Communities: TARGET International Summer School: Using 3D Collaborative Virtual Environments for Community Building". 2011 ICDE International Conference, UNQ, Argentina (April 12 15, 2011).
- L. Hokstad, E. Prasolova-Førland, Manuel Fradinho and Bjørn Andersen: "TARGET: An Innovative Technology Enhanced Learning Platform for Teaching and Learning Complex Concepts" ICELW 2011: The International Conference on E-Learning in the Workplace, June 8th 10th 2011, Columbia University, New York
- Hokstad, Leif M. et al. (2009): Community Methodology and Analysis Framework. Deliverable D5.1 To the TARGET project. European Commission Seventh Framework Project (IST 231717)

Flanagan, M., Zimmermann, M., Ackermann, G., Hokstad, L.M., Andersen, B., Fradhino, M (2010): Transformational Learning and Serious Game Design. Third Biennial Threshold Concepts Symposium; Exploring transformative dimensions of threshold concepts: The University of New South Wales in collaboration with the University of Sydney, Sydney, Australia, 1-2 July 2010.

Hokstad, Leif & Flanagan, Mick (2012): Threshold Concepts. Deliverable 2.5. Deliverable to the TARGET project. European Commission Seventh Framework Project (IST 231717)

Hokstad, L.M, Flanagan, M.T., Zimmermann, M., Ackermann, G., Andersen, B., Fradhino, M. (2012): *Comparative Academic/Industrial Professional Development Study of Threshold Concepts in Project Management*. Fourth Bienniel Conference on Threshold Concepts: From personal practice to communities of practice, Trinity College, Dublin, 28-29 June 2012.

Hokstad, L.M. and Gynnild, V. (2012) *Transcending Self-Reference - Disciplinary Integration as Threshold Concepts* (Poster). Fourth Bienniel Conference on Threshold Concepts: From personal practice to communities of practice, Trinity College, Dublin, 28-29 June 2012.

Hokstad, L.M, E. Prasolova-Førland, and _M. Fomynikh (2013) *Collaborative Virtual Environments for Reflective Community Building at Work: the Case of TARGET*. In: Computer-Supported Collaborative Learning at the Workplace (Eds Janke, I., & Goggins, S), Springer 2013.





Gro Rødne

Position: Date of birth Nationality Institute

Education

Master of Architecture Associate professor

28.04.67 Norwegian

Norwegian University of Science and Technology, Faculty of Architecture and Fine Art.

Department of Architectural design and Management

1993 Architectural education from NTH, Faculty of Architecture, Department of Architectural Design. 1994-1996 KIT. Academy of fine art. Department of Sculpture in Trondheim.

Professional experience

1993-1994 AS Kristiansen og Bernhardt, Tønsberg. Architectural practice 1994-1995

Department of Architectural Design, Form and Color Studies, NTNU. Course coordinator ass.prol. Jostein Klrkerud. University teacher. 1. Year

studies in form and color studies

1995 Buran og Raugland Arkilekter, Larvik, Architectural practice.

1996 Department of Architectural Design. MTNU. University teacher. 3 Year studies in complex programs.

1996-1998 Master of Architecture Ola Steen, Trondhelm, Architectural practice.

1998-2001 Department of Architectural Design, NTNU, Research assistant, 2, year, Studies in housing 2001 -> Agraff as. Founder, partner and member of the board. Architectural practice, www.agraff.no University teacher in set design. Department of Architectural Design, Form and Color Studies. University teacher, First year studies. Department of Architectural Design, Form and Color Studies. 2002 2003

2004 - 2005

Associate professor. Master students. First year studies. Department of Architectural Design, Form and Color Studies.

Associate professor and course coordinator first year. Master students. Dep.of Architectural Design, Form and Color Studies. Agraff as. Founder, 2005 -2008

2008 -> partner and chairman of the board. Architectural practice.

Associate professor. Master students. 2. Year studies in housing. Department of Architectural Design and Management. 2010 -> 2011-> Associate professor. Master students. Course coordinator 1. year. Department of Architectural Design and Management.

Other relevant practice/ Management experience and board positions

1998

The state scholarship for young working artists. For one year.

2000 - 2001 Member of the board in Ateller lisvika 2003 -2004 Chairman of the board in Atelier Ilsvika 2002 -> Member of the board in Agraff as 2002 - 2003 Member of TAF's nomination committee.

Chairman of TAF's nomination committee. 2003 - 2004 2002 -> Assessor at Faculty of Architecture and Fine Art.

RSU representative for TAF 2003

2004 - 2006 Treund. Representative for Department of Architectural Design, Form and Color Studies. NTNU.

2004 - 2003 ViT Trøndelag - Value creation in the wood Industry in Trøndelag. Reference group. 2005 Member of the board in KOKO architecture as

2006-2008 Columnist in Adresseavisens Fridays supplement: HJEM. Theme: Architecture.

Chairman of the board Agraff AS 2008-> Member of the board in "The independent widow project" 2008->

2009-> Chairman of the board in Sverresborg football 2010-> Member of the board In Sverresborg sports club 2010-> Member of the board in Havsteinbanen as Assessor at BAS. Bergen School of Architecture. 2010->

2010-> Reference group representative for NTNU. Statens vegvesen's document to follow-up «Arkitektur NÁ»

Chairman of the board in Tresenteret. Horwegian center in wood competence 2011->

key experience

The interface between architecture, art and landscape. Architecture education and PBL problem based learning.

post-qualifying education

1994-96 Academy of fine art. Department of Sculpture in Trondheim.

1996 Endringer i Plan- og bygningsloven, NTNU

2003 Massiv tre. Nabu 2003 PBL - Ansvarlig søker.

2006 Pedup- Pedagogical education. NTNU. 2007 Course in writing academic texts. NTNU 2008 Professional management, NTNU Course in writing academic texts. NTNU Div. courses in Archicad, Photo shop

Language

English: Fluent speaking, reading and writing. German: Conversational listening and speaking

Selected projects Agraff

S. Flatasen borettslag

2003-2004

Selected projects Agra	14	
Trondheim cinema	2010	Trondheim clnema. Art wall installation in 5 auditoriums. Project Manager
Nina	2010	New research center for the Norwegian Inst. for Nature management, Roof garden. In cooperation with Pirll, Team Member/Project Manager
Sorgenfri utvikling AS	2010	Development of new housing typologies. Sorgenfri. Invited competition. Project Manager
Atelier Ilsvíka	2009-2010	Reconstruction of old Industrial building Into an artist studios, workshops and office building. Project Manager
Trondhelm parking		POT. Environmental impact assessment. Parking under Olav Tryggvasons road. Project Team Member.
Lerah AS	2009-2010	Development of landscape, residential areas and new housing typologies. Oreid in Halden, Project Team Member.
PEAB bolig as	2009	Development of residential areas and new housing. Sjøhagen og Dalgård. Project Manager.
Bergen council	2009	Rådalen, Urban development, residential areas and new housing typologies with 3RW. Project Manager for Agraff.
Roros hutel	2009	Kjerkgårdshagan. Development of landscape, residential areas for leisure homes. 32 new apartments, Project Manager
Roros hotel	2008->	New access and gateway Rebuilding and new building. Lobby shop and reception, Project Manager
Roros hotel	2008->	Fiellværeanlegg, Bathing facilities, filness center, Project Manager
Rema elendom	2005->	Landscapes plan, Kyrksætergra, Project Manager
Skanska bolig	2004	Development of landscape, residential areas and new housing typologies Halset. Project Team Member.
Porsgrunn council	2004	Mæla school, School yard. In cooperation with Pirll, Built. Project Team Member.
Asolan Viak sor	2004	Water treatment factory in Bodg. Project Team Member.

New in old. Redesigning existing housing residential areas. Project Manager



Selmer Skanska bolig Scott Wilson Consultant St. Olavs Hospital Rema / Njord elendom as Steinerskolen i Trondheim Selmer Skanska bolig Selmer Skanska Bolig. Rema elendom SINOTEC Vegkontoret i Oppland Vikásen SFO AS Anlegg Quality Hotel Roros Quality Hotel Roros Ouality Hotel Roros Sinlef matertalteknologi	2003/ 2004 2003 2003 2003 2003- 2004 2003 2002 -> 2003 2002 2001/2002 2001-2002 2001-> 2001 -> 2001 2001	3 residential housing in Stjordal. Project Manager Pavilions, Hae He River Parc i Tianjin, China LAB. Landscape design and design of fountain. Project Team Member/ Project Manager Signal element / sculpture. Project Manager Steiner school Ita. New school garden. Project Team Member/ Project Manager 2 projects. Residential housing/, industrial buildings in Melhus, Haakon VII gt. Project Manager Elvehavn brygge. In collaboration with Svein Skibnes Arkitektkontor. Project Team Member Design guide. Landscape. Project Manager Service building. Tourist Route in Chung Teh, Taiwan. Project Team member National Tourist Routes in Norway. Valdresflya. Parking and services at Smorkollen and Heimdalsmunnen. Project Team Member Reconstruction, SFO- Vikåsen Oppvekstsenter (school). Project Manager Bassengtomta. Landscape. Roof garden. Project Team Member Fitness and spa. Røros. Expansion and rebuilding of existing building. Project Manager Expansion and rebuilding of existing building. Røros. Foajé, lobby bar and restaurant. Project Manager Residential leisure buildings, Røros. 25 units. Project Manager Sintel Material technology. Rebuilding department. Project Manager
awarded competitions	2003 2004 2004 2004 2003 2003 2000	Havstein cemetery in cooperation with Riss landscape. Prequalified competition/ 1. prize. Lock system in Porsgrunn. In cooperation with artist Brit Dyrnes. Invited. Mebond school, Selbu. In cooperation with HSØ architects. Prequalified competition/ 1. prize. Mæla School, Porsgrunn. In cooperation with Pir II architectsr. Prequalified competition/ 1. prize. Rebuilding Nedre Flatåsen cooperative housing, Trondheim. Prequalified competition/ 1. prize. Hommelvik school, Art and landscape. In cooperation with artist Brit Dyrnes. Invited competition. 1. prize. Ecological playground, BO 01 MALMØ. Open Nordic/European architect competition/ 4. prize.
Scientific, academic and artistic work	2012 2011 2007 2006 2005 2004	«Lyd-bryter». Full scale building. AAR4300. Architecture 1. In collaboration with : Meta.Morf./AB- Faculty.Musikkteknologi NTNU. Course coordinator "Trommerom". Struktur i landskap. Full scale building. AAR4300. Architecture 1. In collaboration with: Uka-11/AB-Faculty. NTNU. Course coordinator "relasjoner I rom – rom i relasjon". Full scale building. AAR4300. Architecture 1. In collaboration with: Uka-07. AB. NTNU. Course coordinator «Konstruksjon som beskytter og eksponerer- et møtested». Full scale building. AAR4410. Architecture 2. Campus Gloshaugen. Course coordinator «Paviljong for morgenrituale». Full scale building. AAR4410. Architecture 2. AB- Faculty. NTNU. Campus Gloshaugen. Course coordinator "Rom i dialog – dialog i rom". Full scale building. AAR4300. Architecture 1. AB- Faculty. NTNU; Dødens Dal. Course coordinator "Galleri for UKA-plakater". Full scale building. AAR4300. Architecture 1. In collaboration with: Uka-05/AB- Faculty NTNU. Course coordinator "Et sted å møtes". Struktur i landskap. Full scale building. AAR4300. Architecture 1. AB- Faculty t. NTNU. Associate professor.
Lectures	2013 2012 2009 2008 2007 2006 2005 2003 2002 2001 1994	"Making is thinking". Lecture at Rerosseminaret 2013. The 14th International celebration of Architecture "Making is thinking". The conference "6 questions on becoming architect". Subsequent talk with Juhani Pallasmaa and Peter Buchanan. "Hands on". Full scale building in the first year. Visit from the Alvar Aaalto university, Helsinki. Full scale building in the first year. Visit from the university in Budapest. Building in wood. Full scale building in the first year and AB- faculty emphasis on wood. Visit from Lycksele council "Develop your own practice." Incubator for creative business sectors. Stift bedrift. Atelier Itsvika. Building 1:1. Development of the architectural education at NTNU. Styringsdialogmete. Meeting with the headmastership at NTNU. Presentation of Tresenteret and NTNU/AB- faculty emphasis on wood. At the Ministry of agriculture and food. Wood as idea and experiment in art and architecture. Trendelag Centre for Contemporary Art. TSSK. Increasing the wood building—from national policy to council decision. Mjosens skog. Building with wood and the basis of architecture. Lecture for the 3. years civil engineer students at NTNU "The interaction between architecture and art." NAL. Academy. National Association of Norwegian Architects. Workshop and lecture in connection with Norwegian state visit and the signing of a joint venture agreement between UNAM and NTNU. Mexico Building in wood. First year. Tresenteret. Annual meeting. "INTNU and architect students working with wood" Conference: Nordic wooden cities. "Unconventional connections between form, function and ideas. NLA Conference. National Association of Norwegian Landscape Architects. "Space". Architecture 1. NTNU "Own practice" Fellesforelesning. The weekly laculty lecture of the Faculty of Architecture and Fine Arts at the NTNU. "Kindergartens and playgrounds" for schoolteachers and school managers in Trondheim council. "Kindergartens and playgrounds" for schoolteachers and school managers in Trondheim council. "Kindergartens and pl
Exibitions, arrangements and workshops	2006 2003 2002 2001 1995	Kulturfusjon 6. Therne Water. Multidisciplinary culture festival with exhibitions, concerts etc. Participant and organizer. Art and architecture. Hommelvik school. In collaboration with artist Brit Dyrnes. Installation in Quality hotel Raros. In collaboration with artist Brit Dyrnes. Kulturfusjon 3. Theme Light. Multidisciplinary culture festival with exhibitions, concerts etc. Participant and organizer. Kulturfusjon 2. Theme Sound Multidisciplinary culture festival with exhibitions, concerts etc. Participant and organizer. Kulturfusjon 1. Multidisciplinary culture festival with exhibitions, concerts etc. Participant and organizer. Couse in set design. Workshop. 2 weeks. Department of Architectural Design, Form and Color Studies. NTNU "Policy or hallo, it's me, is somebody there?" Art exhibition in Gallery Kit in collaboration with artist A.K. Dolven "10 KIT." Art exhibition in Østersund. Sweeden "Endelig kunst". Art exhibition in Galleri KIT. Building in ice: Strandtorget in Tromsø. Ice workshop 3 weeks. Winter cities arrangement 1990.
Publications	2011 2010 2009 2008-2011 2006	NTNUs representative in reference group In the Norwegian Public Roads Administration work in the following -up:"ARKITEKTUR NÅ" "Arkitektur i hundre". The Faculty's anniversary book. Architectural education in Trondheim 1910 - 2010. Editor Helge Solberg. Co-author Yearbook 2006-2008, Faculty of Architecture and Fine Arts at the NTNU. Co-author. Columnist in Adresseavisens (newspaper) Fridays supplement: HJEM. Theme: Architecture. Improved educational setting for NTNU in two - campus solutionmot towards 2020. Co-author.

/ cv steffen wellinger



www.steffenwellinger.blogspot.no

Born 1972 Nationality german

FAMILIY

partner Runa Bjørke Hedda 2001 Moritz 2005

TITEL

Associate Professor , master in architecture (Sivilarkitekt mnal /Dipl. Ing. Architektur)

LANGUAGE

norwegian (daily), german (native tongue), english

EDUCATION

Studies in architecture NTH Trondheim 1995-96

Studies in architecture at Univ. Stuttgart 1994-95

Studies in architecture at Univ. Karlsruhe 1992-94

SUMMARY

2013	Moholf 50 50 Moholf 50 50 competition for new "student town" in Trondheim 2013, Head of jury
2012-	Mentor incubatorproject of "frirom" pavilion at Cildrens Hospital in Trondheim www.frirom.no
2012	Realisation Clubhouse Trond in Trondheim http://www.archdaily.com/313774/trond-clubhouse-bjorke-arkitektursteffen-wellinger/
2013	Mentor gartnerfuglen architects in Oslo http://gartnerfuglen.wordpress.com/
2012-	Mentor for live studio "Rallar" with 1:1 boathouse in Vestern Norway www.rallararkitekter.no
2011	Partner Bjørke Arkitektur AS , Trondheim www.bjorkearkitektur.com
2011	Pedagogical training course at NTNU
2010	Sintef Award for outstanding teaching at NTNU http://www.universitetsavisa.no/notiser/article4745.ece
2008-	Founder Arkitekthjelpen (student driven practice) www.arkitekthjelpen.no
2006-	Responsible Professor for makster course in building design
2006-	Responsible Professor for complex building course 6th semester 22,5 ECTS www.ark6.no
2006-	Associate Professor at NTNU Trondheim
2004-	Teaching at NTNU Trondheim
1998-	Architectural practice
1992-98	Studies in architecture at University Karlsruhe, Stuttgart and Trondheim

Special interests: design methods - teaching and sustainability

Hans Skotte, Dr.Ing, M.Arch MNAL,

born July 14 1944, residence: P.A.Munchs gate 17, 7030 Trondheim telephone office +(47) 73 59 50 27, mobile +(47) 918 219 20, E-mail hornerly married to the late textile artist Sølvi Stornæss; children: Henrik, b.1970, Pernille, b.1973

Education - in selection:

- Dr.Ing. (PhD) awarded for research on *Tents in Concrete; What Internationally Funded Housing Does to Support Recovery in Areas Affected by War, the Case of Bosnia-Herzegovina*Dept. of Urban Design and Planning, Faculty of Architecture and Applied Art, NTNU, Trondheim
- 1967-73 M.Arch., Norwegian Institute of Technology, NTH, Trondheim
- 1965-67 Trondheim Academy of Art ('65-'66), and Trondheim College of Economics ('66-'67)

Employment - in selection:

- 2006 Associate Professor, International Studies, Dept. of Urban Design and Planning, Faculty of Architecture and Fine Art, Norwegian University of Science and Technology, Trondheim
- 2004-06 Post-doctoral fellow of NTNU's Multi-Disciplinary program on 'Globalization and Marginalization'
- 1998-03 Researcher, part-time lecturer Dept. of Arch Design, NTNU and Bergen School of Architecture
- 1995-98 Director for PGU, "Programme for Reconstruction and Development" Professional Extension Course at NTNU for Bosnian refugees
- 1987-94 Senior Architect, Head of Section for New Construction, (Secondary Schools, Hospitals and Health Buildings), The Regional County of Sør-Trøndelag
- 1984-86 Senior Architect, Head of Health Buildings Section, Buildings Department, Ministry of Works & Communication, Gaborone, Botswana.
- 1972-83 Architectural practice at private and public offices

Practice and ongoing projects - in selection

2004- RESEARCH (Beyond own doctoral research):

Ongoing longitudinal research in post-war Bosnia and post-tsunami Sri Lanka. Principal or associated researcher on completed or ongoing, interdisciplinary projects, funded by Norwegian Research Council "Property, Possession and Conflict in Re/Building Settlement"; "Post crisis recovery: researching and teaching across boundaries", "Beyond the knowledge-action gap: Research as an intervention into Sri Lanka's post-crisis reconstruction", co-funded by "FONT", a joint NTNU-FORUT unit for research and consultancy working in post-tsunami Sri Lanka. Principal advisor for two PhD candidates.

1996- LECTURES AND CONFERENCE CONTRIBUTIONS:

Papers and interventions on housing and reconstruction, on settlement planning, on development issues and planning methodology at universities and university colleges in Norway, at Oxford Brookes, University of York, University College London, UK; University of Sarajevo, Bosnia; University of Westminster, London; London South Bank University; Ardhi University, Dar-es-Salaam, Tanzania; Makerere University, Kampala, Uganda; Tribhuvan university, Kathmandu, Nepal; Delhi School of Planning and Architecture, India, Yildiz Technical University, Istanbul.

Presentations at conferences or meetings in NORAD, Ministry of Foreign Affairs, Norwegian Parliament and public institutions and non-governmental organizations in Norway.

1996- ACADEMIC & PROFESSIONAL COMMISSIONS:

Member of the Steering Committee (representing Europe) of the UN-Habitat University Partnership Initiative; Member of the Scientific Committee of NTNU's Program for Development Research; member of PhD commissions at universities in Sweden, Norway,

England and Belgium; member of Scientific Committees for conferences in Norway, Palestine, Turkey, Iraq; member of the Nomination College for the Aga Khan Award for Architecture, The Prince Claus Fund, of the national jury for the exhibition on Contemporary Architecture of Norway 1995-2000, and the editorial board for the Architectural Guide to Trondheim. Referee to three international 'Grade 2' academic publications.

1996- TEACHING:

Developed professional extension courses on Post-War Reconstruction in Bosnia, and similarly in (Northern) Iraq, funded by UDI. Assisted in establishing new university courses on 'Humanitarianism' at the Geography Department, NTNU and on 'Urban Sustainability & Development' at Faculty of Architecture and Fine Art. Program Coordinator for the International Master Program in UEP, Urban Ecological Planning (2007-2011). Responsible for developing and conducting live field studio programs for international students in Kampala, in part funded by UN-Habitat, Course conducted in collaboration with Makerere University and National Slum Dwellers Federation, Uganda, NSDFU, and with senior representatives from the Ministry of Lands, Housing & Urban Development, Kampala. Have been instrumental within the Faculty of Architecture in assisting initiatives by architecture students to study and realize (award winning) designs in international settings, e.g. Thailand, Haiti, Senegal, Uganda.

2002- PUBLICATIONS:

"Afritecture", Article in the catalogue for the exhibition on architecture in Africa at the Architekturmuseum, Pinakothek der Moderne, TU, München, forthcoming "Teaching to Learn, Learning to Teach" in *Unravelling marginalization, voicing change.***Alternative visions and paths of development, edited by C Bruun, P Blaikie & M.Jones, Ashbate, in press.

"Now, It's Mine. How the new post-war settlers justify their claims on self-settling in Sarajevo", accepted for publication in *Forum for Development Studies*, forthcoming.
"Global Tyin" in *Sustainable Design III: towards a new Ethics in Architecture and Urban Design*, ed. Marie Hélène Contal et.al., Actes Sud, in press. This article is also to be published in a forthcoming book by Christian Narkievicz-Laine on Tyin Tegnestue, published by The Chicago Athenaeum & The European Centre for Architecture Art Design and Urban Studies. *Returning Home*, co-author, published in 2005 by Sida on Sweden's housing contribution to post-war Bosnia.

Articles on architecture, planning and development regularly published in *ARKITEKTUR-N*, the Norwegian Journal of Architecture;

Articles on development, post-crisis recovery, urbanization in the Global South, planning and architecture, - and teaching, in *Forced Migration Review*; *Arkitektnytt*; Reuter's *Alert Net*; *Gemini*, 2012; numerous op-ed pieces in *Dagbladet* and *Adresseavisa*; *Year Book on the Faculty of Architecture and Art*, *2006*, *2009*; *Architecture Guide to Trondheim*, *2001*, *2010*; *Arkitektur i hundre*, *2010*; and then my thesis, *Tents in Concrete*, NTNU, 2004. Acting as key informant (and key figure) in the Swedish TV Special "After the Tsunami", shown internationally, and being featured as guest interviewee in "På Livet Laus", NRK2 on my experience of working with students in the slums, 2013 and 2013.

Other activities - relevant selection

Member of the Governing Board of the Faculty of Architecture and Fine Art, NTNU. Associated judge in the Norwegian Courts of Law on building issues (1996-). Chairperson or Board member of several civil society organizations in Norway (and Bosnia).

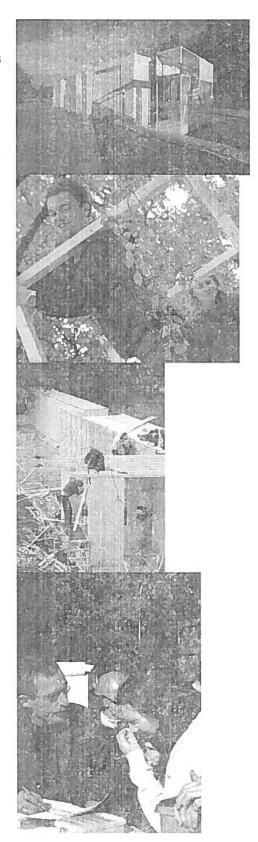
Documentation - "Making is thinking" and "Live studio"

Full scale building in first semester ARK1:

The pictures show first year students in action – designing and building full scale wooden constructions already in their first semester of studies in architecture.

Over the years themes and sites have changed: 2002 "Structure in landscape", University Campus 2003 "Structure in landscape", University campus 2004 "A place to meet", University campus 2005 "Gallery for posters", outside Student House 2006 "Spaces in dialogue - dialogues in space" 2007 "Structure in landscape" Invited by the Student's festival 2008 "Spaces in dialogue - dialogues in space" University campus 2009"The pavilion of dreams". In correspondence with launching cooperation with Tate Modern 2010 "Structure in landscape", University campus 2011 "Drumspace", opening ceremony of student 2012 "Noicesucker" Opeing ceremony for the biennale Meta.Morf

Tutors: Bjørn Otto Braaten Fredrik Lund Gro Rødne



Documentation – "Making is thinking" and "Live studio"

Full scale building in master courses

Rindal: bird watching tower, 2011

Teachers: Jan Siem Bjørn Otto Braaten Pasi Aalto Arnstein Gilberg Bendik Manum

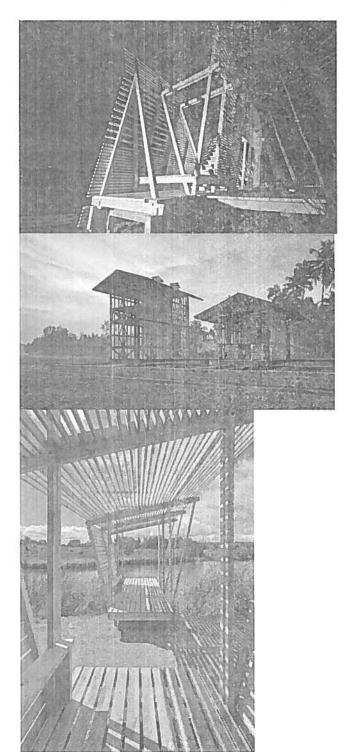
Published: Birdwatcing Tower in Rindal, NTNU ISBN 972-82-7551-077-6

"Hut-to-Hut", Karnataka, India, 2012

Teachers: Sami Rintala Pasi Aalto

Chile, February 2013

Teachers: Sami Rintala Pasi Aalto



Documentation – "Making is thinking" and "Live studio"

Rindal, public sauna, 2011

Teachers: Arnstein Gilberg Finn Hakonsen Helge Solberg

Published:

femXfem, learning in real life scale, building a sauna in Rindal, NTNU ISBN 978-82-7551-081-3

Selbu, pavilion to enjoy views, 2012

Teacher: Torbjørn Tryti

Published: Arkitektur N, 2012

Ringve botanical garden, bridge, 2007

Teacher:

Knut Einar Larsen

Published:

Arkitektur N, 2012

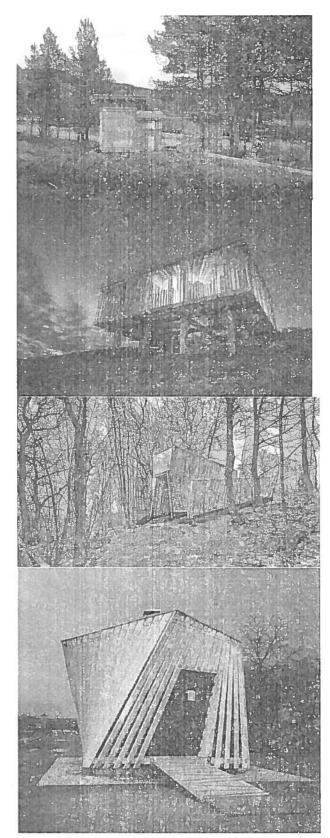
Trondheim: Camera Obscura, 2006

Teacher:

Knut Einar Larsen

Published:

Byggekunst, 2007



Documentation - "Making is thinking" and "Live studio"

Full scale building as self-programmed master courses: The students take ownership to the process and project. The faculty facilitates and gives guidance on formatting the boundaries and necessary knowledge input for the students to manage the task.

Old Market Library in Bangkok, 2009

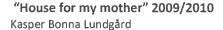
Tyin tegnestue: Yashar Hanstad and Andreas G. Gjertsen

Mentors: Sami Rintala Hans Skotte

Published: Arkitektur N, 2010 ArchDaily, 2009 Space, 2009

Awards:

The European Architecture Award 2012 Shortlisted for the Mies van der Rohe Award 2012



Mentor: Fredrik Lund

Published: Arkitektur N, 2012 ArchDaily, 2012 HomeDSGN, 2012 Plataforma arquitectura, 2012 Tønsberg Blad, 2013

Bakery in Port au Prince, Haiti, 2011

Lydia Høyem Anker, Olav Fåsetbru Kildal, Ida Johanne Andersen Ve, Anne Gjesdal Bjørndal

Mentors: Tyin tegnestue Hans Skotte

Published: Arkitektnytt, 2010

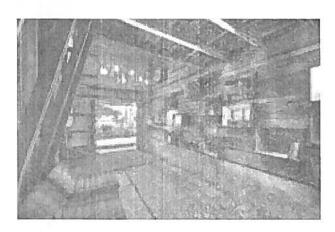
Barnehjem i Thailands jungel, 2009

Design og building of sleeping huts («butterfly houses»)

Tyin tegnestue: Yashar Hanstad and Andreas G. Gjertsen

Mentors: Sami Rintala Hans Skotte

Published: A-O, 2012







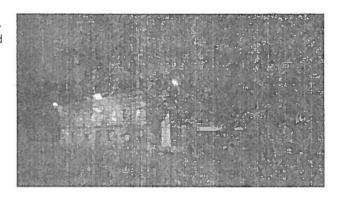


Documentation – "Making is thinking" and "Live studio"

Mark, 2012 Bauwelt, 2011 Arkitektur N, 2010 Area, 2009 Space, 2009 **Studiesenter for gatebarn, F**

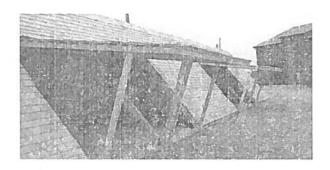
Studiesenter for gatebarn, Fillipinene, 2011 Alexander Furunes, Ivar Tutturen, Trond Hegvold

Published: Arkitektur N, 2012 MARK magazine, 2012



International workshops

Workshop theme: Structures in Building Culture – tectonic of wood, Hitra, 2005
Teacher: Finn Hakonsen together with teachers from visiting European architect schools.



Documentation – "Making is thinking" and "Live studio"

Full scale building as master thesis.

Master thesis: Strømsholmen, Grindeconstruction re-erected and rehabilitated as boathouse and fish smoker, 2008 Martin Beverfjord, Erik Lilledrange

Tutor: Ole Møystad

Master thesis: The world's most beautiful house", reuse of building materials, 2012

Ola Sendstad, Einar Bye

Tutors:
Finn Hakonsen
Gro Lauland
Published:
Arkitektur N, 2012

Master thesis: "chander nagar" for "Nanhi Dunya International Movement for Children and their Friends" in India. Improvement and annex to existing school, 2012/13 Alexander Furunes, Ivar Tutturen (Studio Takloban)

Master thesis: Sandbukta kindergarden, Moss, 2011/12

Håvard Holm Endresen

Tutor: Fredrik Lund

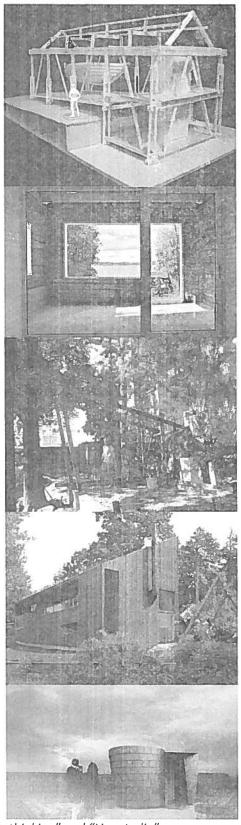
Published: BoBedre

Master thesis: "Fri-rom" – a free space- outdoor pavilion for people in vulnerable situations at St. Olav Hospital, Trondheim, 2011

Maren Storhilde Ødegård, Sunniva Vold Huus Under construction

Tutor:

Steffen Wellinger



Documentation - "Making is thinking" and "Live studio"

Documentation - "Making is thinking" and "Live studio"

Full scale building as student driven – independent – activity. The faculty facilitates and gives guidance on formatting the boundaries and necessary knowledge input for the students to manage the task.

Trestykker 2004:

52 meter long pier construction cantilevered above Nidelva.

Student workshop in Trondheim with students from AHO, BAS, NTNU

Tutor. Sami Rintala

Trestykker 2005:

Experimental apartment for three students. The house was exhibited until 2006 before it was sold as a cabin.

Student workshop in Trondheim with students from AHO, BAS, NTNU

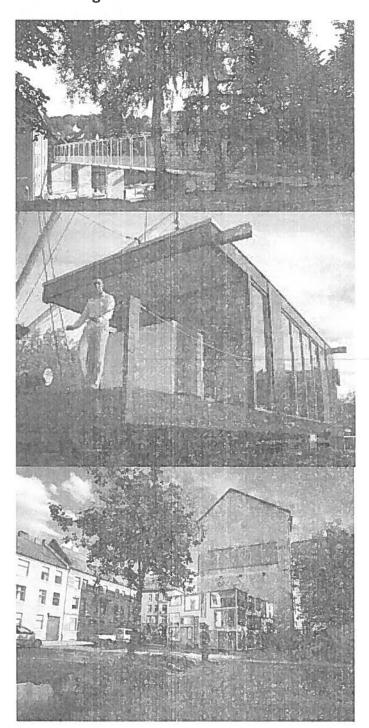
Tutor: Sami Rintala

Trestykker 2011:

A student workshop organized by four students from NTNU. 30 students from the three architecture schools in Norway gathered for one week in April 2011 to work out the design, then everyone met again for two weeks in August 2011 to build the gallery. The majority of the materials used in the design is from an old office block, set for demolition, 300 meters from the site

Student workshop in Trondheim with students from AHO, BAS, NTNU

Published: Architizer, 2011 Nominated to Mies van der Rohe Award 2013



Documentation - "Making is thinking" and "Live studio"

Boathouse for different uses in Haddal, 2012

Rallar architects: Six students designed the boathouse in spring 2012:Sije Ruud, Kristine Øvstebø, Steinar Hillersøy Dyvik, John Haddal Mork, Anders Gunleiksrud, Eiliv Andreas Myren Ribe.

During summer 2012 15 more students participated in building it.

Mentor: Steffen Wellinger

Published: Arkitektnytt, 2012

Informal space for gathering, Rjukan, 2013

Rallar architects have designed this meeting space and exhibition space to a Norwegian small town. Rallar architects consists of six students: Sije Ruud, Kristine Øvstebø, Steinar Hillersøy Dyvik, John Haddal Mork, Anders Gunleiksrud, Eiliv Andreas Myren Ribe.

During summer 2013 15 students will join them to build it.

Mentor: Steffen Wellinger

Published: Arkitektnytt, 2013

