

Undervisningsportfolio

1. Undervisnings-CV: Oversigt over undervisnings- og vejledningsopgaver med angivelse af fagområder, omfang, undervisningsniveau (bachelor, kandidat, efter-/videreuddannelse, ph.d.). Type af undervisningsform angives, f.eks. forelæsning, holdundervisning, øvelse, vejledning, eksamination, censur, fjernundervisning, internetbaseret undervisning og evaluering af undervisning. Undervisningssprog angives.

Summary

At Associate Professor level, I was supervisor for 25 MSc theses (completed on time) in IT Product Design, SDU. 3MSc theses sustainable design engineering, AAU. Co-supervisor for 3 PhD, Univ. of Aarhus, Univ. of Southern Denmark, Univ. of Dundee (completed on time); Main supervisor for 1 industrial PhD Kolding School of Design & Dong Energy (completed on time); Advisor for 1 PhD Univ. of Aberdeen (completed on time). Thesis Supervision (in English), MSc Final marks evaluated using the Danish 7-point scale. All supervision was conducted in English.

Approach to learning and teaching

Central to my research inquiry is a close connection between theory and design practices (engineering and architectural), research and teaching. As such, undergraduate, masters and doctoral students in design engineering have been involved in the interdisciplinary research projects I have been working on as part of their education, and have collaborated with me in joint publications, workshops, public engagement, and dissemination activities. Involving a wider grouping of people within research processes; students alongside different levels of professorial expertise, I propose should learn to relate to ongoing societal challenges and environmental change and build practical and strategic skills required to do so. As a direct result of this approach to learning, collaborations between universities, the public and private sectors will create sustainable growth, while at the same time raising awareness of the long-term benefits of such collaborations in the private and public sectors. Students and faculty have much to gain from such collaborations in terms of collaborative design and staging of design processes in the bachelor and master programmes of the engineering design education Sustainable Design. In particular providing bachelor and master students with a robust training to enable them to develop practical skills and valuable experience in order to formulate practices of future making, which are progressive, while promoting socially and environmentally sustainable practices which are consistent with the principles of active citizenship and sustainability.

Integral to my research and teaching, I develop cross-disciplinary workshops and seminars for researchers (assistant professors, post-doctoral, PhD and master's students), academics and professionals. The workshops, seminars and lectures I have developed as part of my research activities provide a context for research into collaborative design in design engineering and requires joint exploration by students and researchers working together. This novel approach to teaching/learning opens up debate concerning how knowing through doing, leads to particular ways of understanding sociotechnical relations. Moreover, these workshops have contributed to my research aims of testing whether learning can be a way of doing research and practice a way of doing theory.

An example of this was a multidisciplinary workshop I developed for the Department of Anthropology, University of Sussex (April 2016). Working with two master students in IT product design, and twelve first year IT product design students, we engaged multidisciplinary groupings of architects, design engineers, social and health scientists in how they could contribute to improving air quality in hospital interiors. The workshop explored ecosystem service infrastructuring engaging different disciplines in multidisciplinary research through collaborative design activities.

During these dialogic contexts of intra-action involving individuals from a diversity of disciplinary and methodological positioning(s) from social sciences and humanities, science, technology and engineering and health sciences we explored collaboratively the possibilities for integrating ecosystem infrastructure in future sustainable hospital design. Workshop materials were based upon key findings from interviews constructed with medical staff in Denmark, Germany, Croatia and Norway and engineering design The engineering design experiments made for the workshop by first interaction design engineering students in collaboration with Battle McCarthy Consulting Engineering and Landscape Architects and Green 9 architects in London, were not only a way of testing hypotheses but also of passing on skills and learning between people in a collaborative design process. Importantly, findings from these workshops, whereby collaborative design experimentation is the process of inquiry enabled workshop participants through their engagement with the challenge of improving air quality within hospitals involving ecosystem infrastructure to recognize the potential of conducting future interdisciplinary research projects together. Importantly, such research has also potential to engage universities in partnership with public and or private partners to address global challenges and to contribute to ecological, economic and social sustainability.

Summary of workshop and seminar development

Participation and presentations (2017-2018) at AIDA - Architectural design dialogue with dis-ability weekly research seminars, Research[x]Design Group, Dept. of Architecture, KU Leuven; Participation (2017) in PhD Phenomenology Colloquium. Institute for Philosophy, KU Leuven; Participation and presentations (2010-16) at SPIRE Sønderborg Participatory Research Centre and SDU Design Research seminars, Mads Clausen Institute, SDU; Design Anthropology Research Group (2007-2010) Monthly meetings. Alslon, SDU. The research group is aimed at senior researchers, post-doctoral researchers and doctoral students with a background or interest in engineering design, design anthropology, architectural design, IT product design or service design; Participatory Innovation. April 11th, 2008. 1-day seminar. Danish Design Anthropology Network Meeting. Alslon, Sønderborg. The seminar is aimed at practitioners from industry and consultancies in Denmark; Skilled Practice: Bridging the Gap Between Use and Design. Seminar Exhibition. 2007. 1-day exhibit curated with first year ITPD graduate students, Research Park, Alslon, SDU (9 students). Curatorship: research

content, exhibition, poster and pamphlet design guidance; Seminar organization and development *Interacting Timelines* (2007) 2-day lecture and seminar programme, SDU. Aimed at M.Sc., ITEV, PhD research students and senior academics; Student exhibition development: Danish National Research Day. 2006. 2-day exhibit curated with first year IT product design graduate students. Alision, SDU (12 students). Curatorship: research content, exhibition, poster and pamphlet design guidance; Lecture and seminar programme development *User Centred Design Research Seminar Series* SDU 2006 (once), 6 weeks. 2nd year IT Product master students, mechatronics engineering students and PhD researchers (20 students). Development and facilitation of seminar curriculum development, delivery, facilitation and evaluation; *Place Making Workshop*. 2006. 4 days. SDU IT Product Design, (20, 1st and 2nd year MSc. students); PhD Research Seminar (2005) 1 day. User Centred Design Group, SDU, doctoral research students, associate and assistant professors, senior academics, practitioners from industry and consultancies (25 participants); Research presentation and development of position paper *Modes of Becoming and Models of Creativity*. 2 x one-day research seminars and evening lecture. Visual Research Centre, University of Dundee & Department. of Anthropology, University of Aberdeen. Seminar (16 Academics) Lecture (60 researchers from across the technical, natural and social science disciplines). Development and facilitation of seminar and lecture programme; *Making, Finding and Responding to Places* workshop, lecture and seminar series (three x 2-day workshops: Lumsden 2002, Glasgow 2003, Lumsden 2003). In addition to involving professionals (from the following organizations: Scottish Environment Protection Agency, West of Scotland Archaeology Service, The Lighthouse: Scotland's Centre for Architecture, Design and the City) and academics (from the following disciplines: Town Planning, Architecture, Anthropology, Environmental Engineering; Design, Landscape Architecture, Psychology) the series attracted masters and PhD research students. International contributors included Craig Dykers and Jenny Osuldsen, both from Snøhetta Architecture and Landscape, Norway/USA, Development and facilitation of seminar series; *Ways of doing: Landscapes of making*. 2003. Two-day research seminar. Hospitalfield House, Arbroath. Participants (20) included doctoral and post-doctoral researchers, academics and professionals from the fields of anthropology, design, architecture, history and psychology. Development and facilitation of research seminar; *Landscape Perception and the Architectural Design Process*. 1998. One-day interdisciplinary workshop, Department of Social Anthropology, University of Tromsø, Norway. The workshop involved philosophers, architects, urban planners, historians of craft and technology, anthropologists and doctoral research students from these disciplines. Development and facilitation of research seminar. Teaching experience

I have over sixteen years of experience of supporting international and multidisciplinary groupings of students including undergraduate, masters and doctoral students through individual and joint teaching and supervision. This has involved developing talent in terms of building knowledge, skills, and competencies of undergraduate, master, and doctoral level students from engineering design backgrounds, and helping these students to develop and achieve their potential so that the organizations they are/ or will be working with to achieve their aims and objectives in a responsible and sustainable manner. My teaching experience has also involved developing content; resources and tools to help design engineering students to accomplish such work. I have built up my teaching experience from primarily fixed positions, as an architectural design unit leader and associate professor at UK and Danish Faculties of Engineering in higher education institutions concerned with teaching architectural design and design engineering.

From 2005-2017, I devised and led multidisciplinary workshops aimed at involving PhD students in ongoing live research projects. The workshops, through stakeholder engagement and participatory methodologies, aimed to instigate learning across universities, industry and the public sector and to broaden social impact in terms of both research and teaching. In parallel, I collaborated with colleagues in the development of design engineering teaching programmes. For example, the PhD course in Design Anthropology (2010) The course addressed thematic issues by PhD students' direct involvement in collaborative design experiments and co-analysis of participating faculty ongoing research. Engineering design experiments were contextualized with recourse to theories from anthropology, science and technology studies and design philosophy. My role was to collaborate internationally across EU participating universities to design course content, connect to ongoing research agendas, delivery and develop methods of assessment for collaborative design inquiry. The course attracted over sixty doctoral students globally and the course outline continues to attract many readers on multiple social media platforms. During 2016, I co-designed with colleagues at SDU a MSc course focusing on *Multi-stakeholder Innovation*. The course first ran in 2016 and was developed in collaboration with researchers working on the EU funded project, *Prometheus*. The *Prometheus* project was a multi-party project to address empowerment of cancer patients, through the engagement of stakeholders such as doctors, nurse educators, self-tracking experts, healthcare consultants, and design researchers. The project had five partners: Universitätsklinikum Schleswig-Holstein, Klinik für Urologie und Kinderurologie am Campus Kiel, Lillebælt hospital, University of Southern Denmark, and Aarhus School of Architecture. The *Multi-Stakeholder Innovation* course offered the opportunity to develop skills in project management, stakeholder involvement, design facilitation, teamwork, and communication. The course placed emphasis on understanding that innovation does not happen by individuals ideating alone, no matter how good the ideas might be, but requires the involvement and engagement of various stakeholders.

Recent course teaching and supervision at AAU Copenhagen.

In addition to undergraduate (11) and master thesis (3) supervision, in sustainable design engineering, I have taught and supervised on the following courses:

02.11.2023. Module. MSc Sustainable Design Engineering. Production systems and Sustainability. MSc Sustainable Design Engineering. MSc Sustainable Design Engineering. Reuse and Remanufacturing: Extending Product, Component and Materials life.

01.11.2023. Module. MSc Sustainable Design Engineering. Production systems and Sustainability. Reverse Logistics: Continued Product Responsibility for Returns and Repairs.

Sept – Jan 2022. BD3 – Co-design and user involvement-E22. BSc Sustainable Design Engineering Teacher and course content input. Lecture Prototypes and prototypes. Taught in a combination of Danish and English.

Feb- June 2022. Network and Change. BSc Sustainable Design Engineering. Teacher and course content input. Contribution to course curriculum revisions; lectures; evaluation of student deliverables. Taught in a combination of Danish and English.

Sept-Jan 2022. SD1 MSc Sustainable Design Engineering, AAU. Staging Collaborative Design. Project Supervisor for six MSc Sustainable Design Engineering: *Research European Regulatory Landscape on contaminated hospital plastic waste in collaboration* with The Healthcare Plastics Recycling Council Europe. Taught in English.

Sept 2021- Jan 2022. SD 3. MSc Sustainable Design Engineering, AAU. Internship supervisor for 5 MSc students. Each student collaborated with different companies, consultancies, and public organizations: Bang & Olufsen; Ramboll; Fritz Hansen; Mangol and Nigel Architects; DTU Waste management. Taught in English.

Sept 2022-Jan 2023. SD3 MSc Sustainable Design Engineering, AAU. Internship supervisor for 2 MSc students. Each student collaborated with different companies, consultancies, and public organizations: Danish Technological Institute; Danish Embassy in South Korea. Taught in English.

PhD Thesis supervision and evaluation (in English)

In 2022, I examined Grant Alan Fore's PhD, which focused on the role of ethics in STEM design education, University of Cape Town. In 2018 I examined Glen Wyatt's PHD *An Aesthetic Matters of Concern: The Traffic World of Ho Chi Minh City*, Queensland University of Technology. In 2015, I was the chair of the PhD evaluation committee for Ditte Nissen Storgaard's thesis: *Treatability: Social Material Configurations of Hearing Loss and Diabetes*, SDU. I supervised an industrial PhD thesis, Louise Buch Løgstrup, *Reconceptualising Understandings of Agency: Within the Demand Side Management in a Future Electricity SMART Grid Infrastructure*, Design School Kolding and Dong Energy (2012-2014). She successfully defended her thesis in 2014. In addition, I co-supervised with Prof Jacob Buur one PhD. Kyle Kilbourn successfully defended his PhD in December 2008 with his thesis entitled: *The Patient as Skilled Practitioner*, SDU. I have also co-supervised with Lotte Darsø, Jamie Wallace's industrial Ph.D. thesis, *Different Matters of Invention: Design Work as the Dissimilar Design Artefacts*, The Danish School of Education, Aarhus University (2010). Wallace successfully defended his thesis in 2010. In addition, I was advisor to Ray Lucas in his doctoral research, *Towards a Theory of Notation and Drawing as Thinking Tools*. Department of Anthropology, University of Aberdeen (2002-2005). From 2006-2013, I was an external censor at the Department of Management Engineering, Sections of Innovation and Sustainability and Socio-technical Design at the Danish Technical University. I examined final year undergraduate engineering students' course work focusing on how to engage with Science Technology Studies in engineering design of medical technologies and urban infrastructure throughout the scope of their problem-oriented project work, ranging from analysis and problem identification, to conceptualization and synthesis aspects. Projects included designing water sanitation units for UNICEF, a bar coding system for vaccine distribution in Uganda for UNICEF and a sustainable transport proposal for central Copenhagen. From 1999 to 2001, I was a research assistant to Professor Tim Ingold, Department of Sociology and Anthropology, University of Aberdeen and as tutorial assistant with the same department. From 1990-1994, I was an architectural design unit leader and had joint responsibility for design studio teaching of twenty-eight architectural and building design engineering students through their first, second, and final year of BArch education. This involved supervision, group teaching, workshop-based teaching, curriculum development, assessment, examination, and marking as well as developing and delivering design project briefs.

Censor activities

Graduate level, Civil engineering and architecture Censorkorps 2021-ongoing; KADK The Royal Academy of Fine Arts, Schools of Architecture, Design & Conservation, Copenhagen; Design School in Kolding; Aarhus School of Architecture 2014-present; LAICS (Master of Leadership and Innovation in Complex Systems), Dept. of Education, Faculty of Arts/ Univ. of Aarhus/ Copenhagen Business School) 2012-2014; Faculty of Engineering, DTU-Man.Eng., Innovation & Sustainability & Social-Technical design, Danish Technical Univ. of Denmark, Copenhagen, Denmark, 2006-2014; PhD examinations 2018. PhD examiner, School of Design, Queensland University of Technology; 2015. Chair of PhD Examination Committee, Dept. of Design & Communication, Univ. of Southern Denmark; 2014. PhD examiner, Faculty of Education, Univ. of Glasgow, Glasgow; 2011. PhD examiner, Department of Architectural Design, Form and Colour Studies, NTNU, Trondheim; 2008. Chair of Evaluation Committee Post-Doc Research Position in Design Anthropology, SPIRE, MCI, Univ. of Southern Denmark.

2. Administration og ledelse af uddannelse: Erfaring med uddannelsesledelse og –koordinering. Oversigt over studieadministrative opgaver, eksempelvis medlem af studienævn, studieleder, semesterkoordinator, fagkoordinator, akkreditering m.v. Erfaringer med planlægning af uddannelsesafvikling. Erfaring med udvikling af uddannelser. Deltagelse i udvalg, kommissioner m.m. vedr. uddannelse.

From 2014-2016, I took a lead position in developing an international, interdisciplinary research-training program proposal for doctoral students and professionals with backgrounds in anthropology, architecture and engineering design, *Making Futures: New Directions in Anthropology, Architecture and Design (MFAAD)*. I played a pivotal role in developing the EU Marie Curie Innovative Training Network (ITN) proposal. This included becoming familiar with EU funding mechanisms and working with EU funding specialists in the UK and Denmark; developing research and learning objectives, work packages, management structures and procedures across disciplines, institutions and different countries; In 2011, development and accreditation of new curriculum for the graduate studies programme in IT Product Design, MCI, SDU in the areas of Design Anthropology, Design Ethnography, Critical Reflection & Professional Roles; In 2010, co-development of the 1st PhD course in Design Anthropology SPIRE, SDU and Dept of Anthropology, Univ. of Aberdeen. The course attracted over 60 PhD students globally from a variety of disciplines including design engineering, computing science, architecture, health and social scientists; In 2009 Co-design of a collaborative design workshop series on indoor

climate and quality of life for the Designing Environments for Life Programme (DEfL), Scottish Institute of Advanced Studies (SIAS, now the Scottish Insight Institute), based at the Univ. of Strathclyde, Glasgow. The workshops attracted multidisciplinary international groupings of doctoral, post- doctoral and professionals from the fields of anthropology, architecture, engineering design, planning and policy. From 2005-2008, I was a member of the Steering Committee for Danish Design & Innovation Doctoral Training Research School.

3. Formel pædagogisk uddannelse: Oversigt over gennemførte universitetspædagogiske kursusforløb, PBL-kurser, workshops, udviklingsprojekter, kollegial supervision o.l. Udtalelse fra universitetspædagogikum. Deltagelse i konferencer om pædagogik og didaktik. Dokumentation i form af kursusbeviser, udtalelser m.m. vedlægges.

Although I have not completed the usual type of university pedagogics, associated with an assistant professorship, my rich career including working as Associate Professor level since 2005 within a Danish University system demonstrates rich teaching experience. In 2008, I participated in the 'Interdisciplinary design as an instructional discipline' National Science Foundation Design Science Workshop on interdisciplinary design education, University of Michigan, USA, 06-07 November 2008. Here, I became aware of the necessity for integrating more social science methodologies into engineering educations in order to instigate a better understanding of the interdependencies and mutual shaping of the social and technology. My research, teaching, collaborative design practice and writings have informed my development as a teacher (Gunn and Løgstrup 2014, Gunn 2008). Ongoing development as a teacher is enhanced through writing about teaching and learning in design engineering educations resulting in 2 x ISI quoted journal articles in peer-reviewed journals.

4. Andre kvalifikationer: Bidrag til konferencer, debatindlæg, videnskabelige artikler om pædagogiske emner m.v. Kollegasupervision, redaktørarbejde, erfaring som mentor og anden kompetenceudvikling.

I have been invited to deliver lectures, workshops and keynotes on my research (2002- ongoing) to undergraduate, graduate and doctoral students and faculty from the Social Sciences and Humanities, Science, Technology, Engineering, Architecture, Industrial and Interaction Design at international universities including: KU Leuven University; University of Lancaster; Kolding School of Design; Singapore University of Technology and Design (SUTD); School of Design, Zhenjiang University; Graduate School of Design and Radcliffe Institute for Advanced Study, Harvard University; FHNW University of Applied Sciences and Arts Northwestern Switzerland; National University of Bogotá, University of Leeds; University of Sussex; University of Hamburg; Aalborg University in Copenhagen; Bezalel Academy of Arts and Design; University of Edinburgh; RMIT; University of Aarhus; University College London; University of Manchester; University of St Andrews; Copenhagen Business School; University of Strathclyde; Glasgow School of Art; The Danish Royal Academy of Fine Arts; University of Cambridge; Danish Technical University of Denmark and the Royal College of Art, London; KADK The Royal Danish Academy of Fine Arts, Design and Conservation. Historically, my lectures and workshops have complemented design studio teaching by focusing on the relation between theory and practice through collaborative design practice-based inquiry. The workshops, seminars and lectures I have designed have provided a context for research into learning through collaborative design as well providing an opportunity for joint exploration by students and researchers collaborating together. This novel approach to teaching/learning opens up debate concerning how knowing through doing, leads to particular ways of understanding of sociotechnical relations. Moreover, the workshops I have developed working alongside undergraduate, graduate and doctoral students across the technical, natural and social science disciplines have contributed to my research aims of testing whether learning can be a way of doing research and practice a way of doing theory. This integrated approach to teaching and research highlights the importance of practical exploration as a valuable 'way of doing' theoretical investigation. My teaching portfolio contributes to three levels of teaching and supervision of undergraduate, masters and doctoral students. Studio based teaching and research through design experimentation involving ethnographic and creative methods is encouraged, as is the involvement of undergraduate, masters and doctorate students in my research, publication and outreach activities. As a supervisor, pedagogically, I help to set up individual and group projects alongside providing ongoing theoretical and methodological critique. An important aspect of assessing students learning in my courses is to ensure a balance between ongoing individual learning while contributing to collaborative research and design projects. I also respect and value collaborative engineering design activities and the challenges involving these activities presents for curriculum development and evaluation in terms of students' collaborative design efforts. In depth discussion of my reflections concerning how my approach has developed over the years and influence on students learning please refer to the following publications: Gunn, W and Løgstrup, L. B. 2014. Participatory observation, anthropology methodology and design anthropology research inquiry. In Arts and Humanities in Higher Education 13 (4) pp. 428-442. Within the design studio, and across multiple field sites, the authors compare involvement of research tools and design materials during collaborative processes of designing Their aim is to trace temporal dimensions (shifts/ movements) of where and when learning takes place along different sites of practice. They do so by combining participant observation, anthropology methodology and design anthropology research inquiry, engaging with collaborative based design experiments to understand if methods and methodologies, understood as being central to anthropological inquiry, can be taught to undergraduate interaction design engineering students studying in an engineering faculty and engineers working in an energy company. Gunn, W (2008). Learning to Ask Naïve Questions with IT Product Design Students. Special Issue on theory in the scholarship of teaching and learning. Eds. Huber, M. T. and P. Hutchings. Center for advancement of

Teaching and Learning, Stanford University. Arts and Humanities in Higher Education, Vol. 7: 3, October 2008. How does information transmitted through formal instruction relate to skill that learners develop through their own experiments? The article considers the role of design anthropology in developing studio-based engineering programs. Central to my discussion within situated contexts of learning, is the idea of practice-based exploration conceived as a way of enhancing collaboration between various disciplines and knowledge traditions. My focus is on the practice of interdisciplinarity, and I show how such practice is a way of doing anthropology with other disciplines rather than doing anthropology of these subjects. Through this anthropology with, I examine the learning and teaching of critical reflection skills between 2005 and 2007, as a requirement of a second-year interdisciplinary group of design engineering students, undertaking a master's education in IT Product Design at the University of Southern Denmark. I aim to show how learning itself can be a form of research that generates new knowledge and understanding, contributing thereby to a critique of institutionalized divisions in engineering education between theory and practice.

5. Pædagogisk udvikling og forskning: Udvikling af nye kurser, undervisningsmateriale, undervisnings- og eksamensformer eller andet udviklingsarbejde. Didaktisk og pædagogisk forskning. Samarbejde med eksterne samarbejdspartnere.

Curriculum development

Since 1990, I have experience of creating new courses and curriculum development both at undergraduate, graduate and doctoral levels related to my research inquiry. This involved evaluation and assessment of lecture-based tutorials in anthropology (1st year), lecture based and studio-based design teaching in architecture design (1st, 2nd and BArch), interaction design engineering students (1st year) and design engineering research-based teaching (MSc in IT Product Design) and research-based teaching (PhD course in Design Anthropology). In the design of courses, I aim towards a synthesis of theory and practice by combining literature, lectures and seminars with practical collaborative design engineering experimental investigations engaging external partners from private and public sectors. At an undergraduate level, my teaching includes lectures, seminars, collaborative design experiments, project work, evaluation. On a graduate level, my courses include lectures, seminars, essay writing, collaborative design project work. I also include student exhibitions as a format of student delivery. During 2011, I contributed to the major update of the IT Product Design MSc programme at SDU. This involved greater alignment of courses in the curriculum. The programme was successfully accredited in 2012.

A recurring issue in my approach towards course and curriculum development is a focus on communicating scientific knowledge to a broader constituency of users. This has involved students in designing outreach activities to attract, engage, network and nurture multiple stakeholders in order to foster capacity building around forming different forms of partnerships between the university, public and private sectors engaged in collaborative design in design engineering. In facilitating outreach activities, I combine theory, methodologies and methods from science and technology studies, anthropology, design anthropology and sensorial ethnography in the form of workshops to engage multiple stakeholders within collaborative research processes. This has involved the following practices: Sense-making: theory about observed practices, developed in collaboration with universities, public and private sector partners. These understandings are expressed in formats (design material) that make them available for ideation processes: collages, context mappings and dialogical tangible products. Co-ideation: generating ideas for strategic research in universities based on the understanding of peoples' practices in collaboration with university, public/ private sectors. Business modelling: establishment of business concepts for possible university futures in collaboration with university, public/ private partners. Co- Design: development of coherent strategic concepts in collaboration with external partners from universities, public and private sectors, including discussions of relevant preconditions and consequences of partnerships. Such concepts are visualized and concretised to allow for evaluating and communicating their potential, for example through concept sketches, tangible artefacts, scenarios.

Creating, renewing, or upgrading of course material

Course materials have been generated through ongoing interdisciplinary research and collaborative design in architectural and engineering design (1990-1994, 2005- ongoing). As a result, renewing, or upgrading course material is ongoing.

Course development

Since 1990, I have developed innovative new courses for a range of levels (BSc; BArch; MSc, PhD) in a variety of national contexts. Refer to Table (See Appendix 2) for an overview of new course development at Associate Professor level.

Course development involved developing course briefs, setting up projects with external partners; planning and implementation of courses of study; development of teaching materials; subjects and courses; delivery and implementation of new courses and developing assessment frameworks. Course development, as previously mentioned, was closely linked to my ongoing research, for example, I developed an undergraduate course for interaction design engineering students related to early investigations into Designing for Growth and Well-being, which laid the foundations for my Senior Research Fellowship at KU Leuven.

Examples of new courses I have developed as an individual:

Value Enhancement in Modern Design: 01.04.20 April- 31May 2020

Eight Week Online Course aimed at MFA students Jiangsu School of Arts, Jiangsu University, China. MFA jewellery students attended the online course. The course operated on two levels for the students: a) gain experience of report writing to engage multiple stakeholders in the development of a SME jewellery design business case in Ghana, Africa b) development of writing skills necessary for MFA thesis preparation. The online course ran for the first-time during April and May. One weekly two-hour online tutorial meeting between students and Professor. Ongoing evaluation feedback of report writing was given by the Professor in charge.

Outcomes: Report to be delivered to relevant Ghana government department, ongoing oral online oral presentations.

Teachers name: Professor Wendy Gunn.

Assessment: 7-point scale

Language: English

Design Anthropology: 3 weeks and 14 weeks. 8-10 Interaction Design Engineering Students and 2-3 MSc IT Product Design students. 2010-2016, 6 times. The course was concerned with the design of technologies that build upon and enhance embodied skills of people with the aim of contributing towards sustainable futures. Assessment criteria: (Knowledge) Understand processes of transformation and change within social contexts, and how they are made tangible. (Skills) Observe and engage with human practices in social contexts. Co-analyze findings with research participants. Carry out research by means of design through experimental design practice(s) Engage a broader constituency of stakeholders in design processes. (Competencies) Strategic design and implementation of concepts, tools and analytical frameworks for sense making and designing. Content: Design Anthropology not only remains in the realm of critical discourse but also provides a constructive critique aiming towards rethinking what design and innovation could be. Working closely with industry, the course is organized around building relations between using and producing, designing and using, people and things, theory and practice. Lines of inquiry are investigated through designing tools, concepts and frameworks for: engaging people within collaborative processes of designing, exploring interrelations between human perception, skilled practice, gesture and embodied movement; enable people to express relationships, transaction, values, and tensions in their ways of knowing and doing; re-framing relations between designer and user, and multiple stakeholders. Structure: The course addresses thematic issues through field (offline and online) investigations, design experiments, research examples and literature. Students become familiar with a variety of anthropological and ethnographic tools, innovative methods, methodologies and non-representational practices e.g. fieldwork design, interviewing; participatory observation; grounded ethnographic inquiry; sense making and co-analysis of field materials involving design materials; generating lines of inquiry and design directions, communication of key findings through visualization, making of tool kits and writing reports, frameworks for movement of key findings into design processes. Design experiments are contextualized with recourse to theories from anthropology and science and technology studies, including anthropology of the senses, aesthetics of the everyday, skilled practice, knowledge production, exchange and personhood in the production and use of technology, medical anthropology. Assessment: 7-scale grading based on exhibition design of key group findings and/or design process documentation, design of collaborative research tools and oral exam, external co-examiner (5ECTS). Critical Reflection: 10 weeks. Seminar presentations and research paper development. SDU IT Product Design, postgraduate (8-10 MSc students). The course is also open to first year doctoral research students. Course leader: Curriculum development, delivery, and evaluation. 2005-2016 (11 times). The course aims to nurture skills of ongoing critical reflection within collaborative design engineering practice(s); exploring the relations between processes of designing and using, and to consider the frameworks by which findings from qualitative and quantitative methods are analyzed and presented to others. Seminars are held in the first semester of the second year in the design studio. My role as a teacher and researcher has been to create an awareness of social and sustainable aspects of design processes. This is achieved by ongoing reflections of studio collaborative design experiments and reflections upon internship experiences working in collaboration with company or industrial partners. Student internships have been held at Intel Ireland, Pitney Bowes, Philips, IDEO, Focon, Danfoss, Bang & Olufsen, Nokia, Danfoss and Novo Nordisk (5ECTS). Assessment: 7-scale grading based on individual class presentation and research paper submission, external co-examiner (5ECTS). Examples of courses I have co-developed with professors, graduate and doctoral students: PhD course in Design Anthropology. Two intensive five-day workshops: The first in Aberdeen, UK, 22-26 March 2010, and the second in Sønderborg, Denmark, 3-7 May 2010. Combining theoretical investigations and practice-based design experiments in a series of research seminars; this course addresses questions regarding the processes and practices of designing/ using things. The first part of the course in Aberdeen is weighted towards theory whereas the second part in Sønderborg will consider the relation between theory and practice. Focusing on the relations between designing, making and using, delegates will be introduced to a series of issues on the interface between theory and practice, building and using, gesture, craft and skill, property, ownership and transaction of products. The issues will be explored through collaborative team working, co-design, co-analysis, and cross-comparative study. In addition, students are required to read specified texts from detailed reading lists. This course has been developed in collaboration between the Department of Anthropology, University of Aberdeen and SPIRE, Mads Clausen Institute, University of Southern Denmark. To obtain 8 ECTS credit, attendance at both locations is necessary, along with preparations, literature study and project work in-between the workshops. Evaluation: Pass/Fail. Internal examination based upon written assignments, design experiments and oral presentations. Responsible professors: Tim Ingold (part 1) and Wendy Gunn: (part 2). In addition to the above, I have developed as an individual and co-developed with colleagues the following courses: Professional Apprenticeships (10 weeks). MSc IT Product Design, 2013-2016, 3 times. Each apprenticeship had a different theme related to my ongoing research. Each year, I have worked with two-master students and one PhD student and involved them in related Design Anthropology undergraduate courses working with first year interaction design engineering students. The three themes were: 2014 Instigating reflexivity and reflection within design processes and practices, 2015 Design as a process of research inquiry, 2016 Designing for growth and well-being. Results of the apprenticeships have been communicated through conference presentations and publication of research papers (10 ECTS); Multistakeholder innovation (10 weeks). The course first ran in 2016 (1 time) and was developed in collaboration with researchers working on the EU funded project, Prometheus. The Prometheus project is a multi-party project to address empowerment of cancer patients, through the engagement of stakeholders such as doctors, nurse educators, self-tracking experts, healthcare consultants, and design researchers. My role was to co-design the course and deliver lectures related to content and ethical issues related to engaging patients, staff and visitors in co-design research (10 ECTS); Professional roles (10 weeks) 2006- 2013 (seven times). Seminar presentations, organizational research, research paper development, engagement with industrial partners and consultancies (5 ECTS). MSc IT Product Design, postgraduate (8-15 students). Course leader: Curriculum development, delivery, and evaluation; Introduction to

Anthropology 1: (10 weeks) 1999-2001 (twice). Seminars and research paper development. Dept. of Anthropology, University of Aberdeen, undergraduate (10 students). Teaching assistant: Tutorial guidance, essay marking and feedback; Folk and place: Architecture, Society and Behaviour Lecture Series: 1990-1997 Dept. of Architecture and Building Science, University of Strathclyde, undergraduate (60 students). Contributing lecturer: Preparation and delivery of lectures; Design unit leader: 1990-1994 (three times). Department of Architecture and Building Science, University of Strathclyde, Glasgow, 1st, 2nd and B. Arch students and building design engineering students (28 students). Joint design unit leadership: Co-ordination of design unit. Development of design project briefs, documentation, delivery and evaluation of student architectural design projects. As design unit leader, I had joint responsibility for design studio teaching of twenty-eight architectural and building engineering design students through their first, second, and final year of BArch education. This involved supervision, group teaching, workshop-based teaching, co-ordination of architectural crits and student presentations, assessment, examination and marking.

6. Udtalelser om undervisningskompetencer fra foresatte og kolleger.

Undervisningsevalueringer og eventuelle udmærkelser for undervisningsvaretagelse.

Throughout my courses, students are asked to reflect upon their learning and teaching along the way. This occurs as an integral part of studio-based design teaching. I utilize this student feedback to ensure ongoing development of curriculum and course development. I have also integrated student feedback into my journal articles (Gunn, 2008).

Recommendations and statements from managers and colleagues:

1. 'I have had the pleasure of working with Wendy Gunn since she was employed as an associate professor with the Mads Clausen Institute, University Southern Denmark in 2005; in the SPIRE Centre of Participatory Innovation research 2008-13 and latest in the SDU Design Research Centre since 2014...Over the years Wendy has matured into a resourceful independent researcher, who competently drives our design anthropology efforts. She consistently functions as our 'theory anchor', providing a deeper reflective layer to our discussions. But she equally well embraces an experimental approach to design led research. She comfortably navigates between several research traditions, which makes her well suited for a cross-disciplinary environment. Wendy has rich experience of teaching undergraduate, graduate and PhD students. She uniquely combines the insightful humanistic lectures with participatory design pedagogics and studio learning' (Jacob Buur, Professor, Research Director, SDU Design Research, University of Southern Denmark, 29.06.16).

2. 'I also have come to know Wendy Gunn's capacities to communicate theoretical and methodological approaches in anthropology and design as part of her teaching practices as I worked as an external censor for her high-level master course of Critical Reflection preparing students for subsequent thesis investigations. This experience provided me with a unique insight into her high standards of teaching and capacity to guide students in their theoretically informed reflections over design approaches, to encourage them to reflect their professional role and how to understand, handle and reflect over the politicality of applying particular design approaches in organizational practice' (Christian Clausen, Professor Emeritus in Design, Innovation and Sustainable Transition, Aalborg University Copenhagen, Denmark, 17.10.17).

7. Evt. personlige refleksioner og initiativer: Personlige overvejelser knyttet til undervisning og vejledning, ønsker til og planer for pædagogisk videreudvikling, planer for opfølgning på undervisningsevalueringer m.v. Refleksioner over eget pædagogiske arbejde, dets målsætninger, metoder og gennemførelse. I refleksionen analyseres og motiveres dine pædagogiske aktiviteter i forhold til din pædagogiske forståelse og de studerendes læring. Tanker om undervisningsformen på Aalborg Universitet, der har et stort indhold af gruppeorganiseret projektarbejde og problembaseret læring (PBL).

As Associate Professor (2005-2017) at the University of Southern Denmark, I developed unique competences in organizing collaborative temporal spaces for participatory innovation, across university and industry settings and across professional knowledge practices and disciplinary boundaries within and between universities. This involved co-creation, co-production, participatory design and participatory innovation workshop activities engaging undergraduate, master and doctoral students in process facilitation of workshops concerning innovation potentials in sustainable engineering collaborative design processes and future making practices, for example: participation in collaborative design and prototyping activities in the design of configuration interfaces for industrial refrigeration control at Danfoss; co-design of tangible value network mapping method with the Joystick division at Sauer Danfoss (now Danfoss Power Solutions); co-design of workshops on defining and grouping parameters in a configuration system in cooperation with Danish Technical University and IT University of Copenhagen. Based upon results of the workshop and user interaction research, a series of prototypes for the configuration interface were developed. As a research supervisor working with the User Centered Design Group, Sønderborg Participatory Research Centre and SDU Design, I supervised MSc and PhD students and led multidisciplinary teams of researchers with varying levels of research experience in interdisciplinary research in collaborative design in engineering design involving company and public sector partners. Projects included: Innovating with Pre-users of Medical Devices (2009-12), Energy Sustainable Mine Sweeping (2009-11), Indoor Climate and Quality of life (2008-11), User Innovation in Value Chains, Design Anthropological Innovation Model (2008- 10), Participatory Innovation in SME's (2008-2009), Designing the Electricity Smart Grid (2012-2014), Designing for Growth and Well-being (2014-2016). During my post-doctoral research, I coordinated the 3-year research project Learning is Understanding in Practice: Exploring the interrelations between Perception, Creativity and Skill (2002-2005), I developed seven interdisciplinary workshops and seminars for researchers (senior, post-doctoral, PhD and master students), academics and professionals from design engineering, architecture, and anthropology. The workshops experimented with practice-

based collaborative design experimentation and provided the basis for developing research themes related to professional knowledge transformation (skills, competences and knowledges) necessary for sustainable transitions.

8. Andet.

Appendices

Appendix 1. Selection of Master of Science in Sustainable Design Engineering. Final marks evaluated using the Danish 7-point scale.

2023. Nanna Kent Refsing. Post-Climate Assemblies: Supporting Citizens to Continuous Long-Term Engagement in Local Climate Action (12).

2022. Siri Fritze Sørensen and Amanda Worsøe Andersen and. A case study of environmental and economic sustainability of using remanufactured ultrasound catheters. Department of Planning, AAU. Co-supervisors: Wendy Gunn & Monia Niero.(12)

2022. Marta Filipa De Matos Dias. Sustainability concepts in action during the design process: The case of an urban and architectural development project called Post Byen in Copenhagen, Denmark. Supervisor: Wendy Gunn (10).

Appendix 2. Selection of Master of Science in IT Product Design Thesis Supervision, Final marks evaluated using the Danish 7-point scale.

2015. Sandra Rós Bjarkardóttir. Not only surviving but living: Amputees' usage and experiences of artificial legs in daily practices. In collaboration with Ossur, Iceland and Amputee Walking School, Sweden (12).

2015. Wafa Said Mosleh. Designing for engagement: A design anthropological approach to the future design of public libraries. In collaboration with Sønderborg and Odense public libraries (12).

2014. Teeresa Nichols. Ungendering childhood: The role of reflective design materials against the gendering of children's toys. In collaboration with Let Toys be Toys (10).

2012. Irene Gonzalez Fernandez. Improving the user experience in museums through the use of new technologies. In collaboration with the Jewish Museum, Museo Sefardí, Toledo, Spain (7).

2012. Julija Labute. 2012. Designing playthings with hyperactive pre-schoolers. In collaboration with Riga Kindergarten No.81, Latvia. In collaboration with two public nursery schools in Latvia (10).

2011 Magdolna Puskás. Maintaining differences through crossing boundaries: Supporting multidisciplinary collaboration with performative tasks. In collaboration with Sønderborg Participatory Innovation Centre, SPIRE, Denmark (12).

2011. Raitis Linde. Distributed collaborative book production: Enabling interconnection between academic writers. In collaboration with academic writers across the field of anthropology, design and architecture (12).

2010. Tamin Shakeel. Local ownership: key to sustainability of technology development in Africa: An ethnographic study of alternative energy source for mine clearing in Angola. Academic Supervisor: Wendy Gunn. In collaboration with NGO: Folkekirkens Nødhjælp (10).

2008. Sebastian Wendlandt. On contextually convenient controls of hearing devices. In collaboration with Oticon, Denmark. Academic Supervisor: Wendy Gunn. Company Supervisor: Tim Larcombe, Oticon (10).

2007. Mark Asboe. What is the potential of user-driven innovation to Focon - a Danish SME? A case study of user driven innovation. In collaboration with Focon Electronic Systems, Sønderborg, Denmark. Masters Thesis Award Wall of Fame Prize 2007, Centre for Business Development in Sønderborg (12).

2007. Anders Hoff. Input tools for a search interface. Academic supervisor: Wendy Gunn. Company supervisor: Veronika Haderlein, In collaboration with FAST SEARCH & TRANSFER ASA, Norway (10).

2006. Swantje Pyrus. Cleaning for living: Enhancing user experience of vacuuming. In collaboration with BSH Bosch und Siemens Hausgeräte GmbH, Germany (7).

2006. Kanlayanee Kachornnamsong. ISY: Enhancing positive user experience in an airport transit area. In collaboration with Copenhagen Airport, Denmark (7).

2006. Using tangible and narrative forms for playful learning with a frequency converter. Esti Utami Povlsen. Supervisors Jacob Buur and Wendy Gunn. In collaboration with Danfoss Drives (7).