

**Evaluation of the design research
of Designskolen Kolding
2004-2009**

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1. Introduction and summary

1.1 Introduction

This report presents the outcome of the evaluation 2010 of the design research 2004-2009 of Kolding School of Design (in this report Designskolen Kolding and the acronym DK).

The evaluation of the design research of Designskolen Kolding is part of an evaluation of the design research 2004-2009 under the Ministry of Culture, carried out in 2010 by a Nordic evaluation panel. The Panel has thus evaluated the design research of Danmarks Designskole, Det Kgl. Kunstakademis Arkitektskole and Arkitektskolen Aarhus, besides of Designskolen Kolding. For each of the four educational institutions the evaluation of the design research includes evaluation of the institution's share in Danish Centre for Design Research (DCDR).

The evaluation is included as an item in the *Performance Contracts* for the architect and design schools under the Ministry of Culture. The result of the evaluation is a separate evaluation report of the design research of each of the four schools, together with an overall evaluation report, which summarises the four part evaluations.

The assessments and recommendations, including the overall conclusions of the Evaluation Panel, as regards the design research of Designskolen Kolding are summarised in chapter 1 in the present report. Chapter 2 describes briefly the purpose and process of the evaluation and the evaluation Panel. Furthermore the chapter briefly explains the political and regulatory framework for the design research at the institution, including the research strategy of the Ministry of Culture and the Panel's view on design research in an international perspective. Finally chapter 2 contains a factual description of Designskolen Kolding and its design research.

Chapter 3 presents the Panel's assessments and recommendations concerning the research of Designskolen Kolding. These are structured in compliance with the five evaluation topics indicated in the Terms of Reference for the evaluation.

In accordance with the Terms of Reference the Panel has assessed Designskolen Kolding's research activity in the evaluation period and given recommendations for the future research at the school, with a main focus on the latest years of the evaluation period.

Eight annexes are attached to the report, including the Terms of Reference for the Evaluation, list of background documents and other annexes relevant for the evaluation.

1.2 Summary of the Panel's assessments and recommendations

In spite of the short history of research at this rather small design school, the Panel finds Designskolen Kolding's governance of the research, its research community and research output of having both quality and coherence. In the prioritised focus areas the level of research is found to be good and its relevance very good both for internal purposes, in developing the institution, and externally in its outreach towards external stakeholders. With good reason the level can be seen to

meet international standards of design research conducted at institutions of design education worldwide

DK's perception and use of the concept of research meet the concept of research as defined in the research strategy of the Ministry of Culture, while at the same time the school has an explicitly declared focus on practice based design research, i.e. research by/through design, with priority on the designer as researcher. The focus on practice is in our view a good strategy as it in the long run guarantees solid links both between research and design education and between research and professional design practice.

We thus find the achievements of the school, in terms of its research results and its establishment of a design research activity and environment, very good, with excellence in certain areas – particularly in view of the short history of the research at the school and the small volume of the activity.

DK has succeeded with establishing a very sound and transparent organisation and a promising environment for its design research and for the further development of the research. The school is well on the road in terms of prioritisation of research areas, and it has established excellent networking and collaboration with public institutions and industry, including good contact with industry in the region in which the school is located. DK also has a sound collaboration with other design research institutions, including some international collaboration, although the international *research* collaboration still needs to be further developed. The school's broad dissemination of knowledge from the research takes place via several channels and appears very sound in view of the limited resources of the school.

Furthermore DK has a good collaboration with, and benefits from the services of, DCDR in several of the abovementioned activities, particularly in the later years, after the re-organisation of DCDR.

Design research is a relatively new discipline in the institutions under the Ministry of Culture, initiated in 2003, and the design research activity of Designskolen Kolding can mature further in the coming years. Among others, the school still tends to lean towards external research and methods from other research areas. This is neither surprising nor criticisable in view of the history of the design research. For further increasing the school's research profile in the future, though, it is important to get more pro-actively involved in "research through design" by contributing to its definition and practice in a more explicit way. In addition, the school exhibits a rather broad range of research directions and themes in view of the rather small number of research staff. Furthermore, a fully mature research environment could reflect a more significant internal extent of PhD supervision.

The Panel has the following **recommendations** regarding the research of Designskolen Kolding:

- ⇒ In light of the present political focus on design as an important innovation promoter, the basic funding for the school should be better balanced with the political targets for the design research and education.
- ⇒ DK should continue to pursue and achieve external funding for research. At the same time, the Panel acknowledges the school's awareness of maintaining a significant share of basic finances, or self-financing, with the aim of ensuring stability of the research activity and coherent development of the research competences. In connection with external financing the school should thus place main focus on funding of research which contributes to strengthening the focus areas and competences of the school.

- ⇒ The research profile of DK should be strengthened by building up more knowledge and experience from “research through design” and from connecting better to the international discussions regarding theory and methods in the field of design research, aiming at a level where the school can contribute internationally to the field.
- ⇒ The school should aim at more focused research and more in-house supervision of PhD scholars. Development of in-depth research in a couple of areas could mark out DK as a prominent research institution on the international design research scene. We wish to emphasise that DK seems to be well aware of this need for further focusing and development of common themes, and that this development needs more time and stable funding.
- ⇒ DK should continue to increase its promising scientific collaboration with international research groups. This collaboration can enrich the school’s knowledge on theory and methods in the field of design research and support the school’s own research capacity.
- ⇒ At a longer term DK should build up dissemination of knowledge from research more directly to the core groups of design practice, design-related production and the users.

1.3 Introduktion og sammenfatning

Introduktion

Denne rapport er resultatet af den internationale evaluering 2010 af designforskningen ved Designskolen Kolding (DK) 2004-2009.

Evalueringen af Designskolen Koldings designforskning er en del af den evaluering af designforskningen under Kulturministeriet, der er blevet gennemført i 2010 af et nordisk evalueringspanel. Panelet har således evalueret designforskningen ved Danmarks Designskole, Det Kgl. Kunstakademis Arkitektskole og Arkitektskolen Aarhus ud over ved Designskolen Kolding. For hver af de fire institutioner omfatter evalueringen endvidere institutionens andel i Center for Designforskning (CDF).

Evalueringen er et af målene i resultatkontrakterne for arkitekt- og designskolerne under Kulturministeriet. Resultatet af evalueringen er en evalueringsrapport for hver af de fire skoler samt en overordnet evalueringsrapport om designforskningen under Kulturministeriet.

Ud over den korte introduktion indeholder kapitel 1 en sammenfatning af evalueringspanelets vurderinger, anbefalinger og overordnede konklusioner vedrørende forskningen ved Designskolen Kolding. Kapitel 2 præsenterer kort evalueringspanelet samt evalueringens formål og gennemførelse. Kapitlet redegør endvidere kort for de politiske og lovgivningsmæssige rammer for designforskningen, herunder for Kulturministeriets forskningsstrategi og Panelets syn på designforskning i et internationalt perspektiv. Endelig indeholder kapitel 2 et afsnit med faktisk information om Designskolen Kolding.

Kapitel 3 omfatter Panelets vurderinger, konklusioner og anbefalinger struktureret i overensstemmelse med the fem evalueringsemner, som er anført i kommissoriet for evalueringen.

I overensstemmelse med kommissoriet har Panelet evalueret Designskolen Koldings forskningsaktivitet i evalueringsperioden og givet anbefalinger for den fremtidige forskning og dens organisering ved skolen, med hovedfokus på de seneste år af evalueringsperioden.

Der er tilknyttet otte bilag til rapporten, inklusive kommissoriet for evalueringen, en liste med baggrundsdokumenter og andre bilag, som er relevante for evalueringen.

Sammenfatning af Panelets vurderinger og anbefalinger

På trods af den korte historie for forskningen ved denne forholdsvis lille designskole, finder Panelet, at Designskolen Koldings forskningsledelse, forskningsmiljø og forskningsoutput har både kvalitet og sammenhæng. Forskningens niveau er godt inden for de prioriterede fokusområder, og forskningen har stor relevans for både interne formål, i udviklingen af institutionen, og eksternt i engagementet med eksterne interessenter. Niveauet kan med god grund betegnes ved, at det svarer til de internationale standarder for designforskning udøvet ved designuddannelsesinstitutioner verden over.

DK's brug og forståelse af forskningsbegrebet stemmer overens med forskningsbegrebet som defineret i Kulturministeriets forskningsstrategi, idet skolen samtidig har et eksplicit erklæret fokus på praksisbaseret designforskning, dvs. forskning ved/gennem design med prioritet på designeren som forsker. Dette fokus på praksis er i vores øjne en god strategi, da den på langt sigt garanterer solid forbindelse både mellem forskning og designuddannelse og mellem forskning og den professionelle designpraksis.

Vi finder således skolens resultater, for så vidt angår forskningsresultater og etableringen af en designforskningsaktivitet og -miljø, meget gode og på nogle områder fremragende – især i lyset af den korte historie for forskningen på skolen og det lille volumen af forskningsaktiviteten.

Det er lykkedes DK at etablere en meget sund og gennemsigtig organisation, og et lovende miljø, for designforskningen og for den yderligere udvikling af forskningen. Skolen er godt på vej for så vidt angår prioritering af forskningsområder, og den har etableret fremragende samarbejde og netværk med offentlige institutioner og erhvervsliv, herunder god kontakt med erhvervsliv i det område, hvor skolen er lokaliseret. DK har også et sundt samarbejde med andre designforskningsinstitutioner, herunder internationalt samarbejde, om end det internationale *forskningssamarbejde* stadig bør udvikles yderligere. Skolens brede formidling af viden fra forskningen foregår via adskillige kanaler og lader til at være glimrende i lyset af skolens begrænsede ressourcer.

DK har endvidere et godt samarbejde med og udbytte af CDF og CDF's services, i flere af ovennævnte aktiviteter, især i de senere år, efter omorganiseringen af CDF.

Designforskning er en forholdsvis ny disciplin i Kulturministeriets institutioner, startet i 2003, og Designskolen Koldings designforskningsaktivitet kan modne yderligere i de kommende år. Blandt andet tenderer skolen stadig til at hælde mod ekstern forskning og metoder fra andre forskningsområder. Dette er hverken overraskende eller kritisabelt i lyset af designforskningens historie. For yderligere at øge skolens forskningsprofil i fremtiden, er det dog vigtigt at involvere sig mere pro-aktivt i "forskning gennem design" ved at bidrage mere eksplicit til dennes definition og praksis. Skolen har desuden en forholdsvis bred vifte af forskningsretninger og -temaer set i lyset af det forholdsvis lille antal forskningsmedarbejdere. Endvidere kunne et fuldt modnet forskningsmiljø afspejle et større omfang af intern phd-vejledning.

Panelet har følgende **anbefalinger** vedrørende forskningen ved Designskolen Kolding:

- ⇒ I lyset af det aktuelle politiske fokus på design og dets potentiale for innovationsfremme bør basisbevillingen til skolen være i bedre balance med de politiske mål for designforskning og uddannelse.
- ⇒ DK bør fortsætte med at opsøge og opnå ekstern forskningsfinansiering. Samtidig anerkender Panelet skolens opmærksomhed på at bibeholde en væsentlig andel af basisfinansiering, eller selvfinansiering, med henblik på at sikre stabilitet i forskningsaktiviteten og sammenhæng i udviklingen af forskningskompetencerne. I forbindelse med ekstern finansiering bør skolen således primært satse på støtte til forskning, som bidrager til at styrke skolens fokusområder og -kompetencer.
- ⇒ DK's forskningsprofil bør styrkes gennem opbygning af mere viden og erfaring fra "forskning gennem design" og gennem bedre forbindelse til de internationale diskussioner vedrørende teori og metoder inden for designforskning – med henblik på at nå et niveau, hvor skolen kan bidrage internationalt til dette område.
- ⇒ Skolen bør satse på mere fokuseret forskning og mere indenhus vejledning af phd-stipendiater. Udvikling af dybdegående forskning inden for nogle få områder kunne markere DK som en fremtrædende forskningsinstitution på den internationale designforskningsscene. Vi ønsker at understrege, at DK lader til at være meget opmærksom på dette behov for yderligere fokusering og udvikling af fælles temaer, samt at denne udvikling behøver mere tid og stabil finansiering.
- ⇒ DK bør fortsætte med at øge det lovende videnskabelige samarbejde med forskningsgrupper internationalt. Dette samarbejde kan berige skolens viden om teori og metoder inden for designforskningsområdet og understøtte skolens egen forskningskapacitet.
- ⇒ På længere sigt bør DK opbygge formidling af viden fra forskningen mere direkte til kernegrupperne inden for designpraksis, designrelateret produktion og brugere.

2. Purpose and process of the evaluation

This chapter presents the purpose and process of the evaluation of the design research of Designskolen Kolding, including a brief introduction to the background for the evaluation and to the evaluation Panel. In addition the chapter includes a brief description of the political and regulatory framework for the institution and the design research. Furthermore the chapter introduces the Research strategy of the Ministry of Culture, including the Ministry's definition of the concept of (design) research, followed up by an international perspective on design research. A brief factual description of Designskolen Kolding and its design research ends the chapter 2.

2.1 Background for and purpose of the evaluation

The evaluation of the design research of Designskolen Kolding is part of an evaluation of the design research under the Ministry of Culture in the period 2004-2009, which is carried out in 2010 and also includes evaluation of the design research of Designskolen Kolding, Det Kgl. Danske Kunstakademis Arkitektskole og Arkitektskolen Aarhus. The evaluation of the design research of each of the four educational institutions includes evaluation of the institution's share in Danish Centre for Design Research (DCDR). The evaluation is included as an item in the *Performance Contracts* for the architect and design schools under the Ministry of Culture.

The Evaluation has been carried through in accordance with the *Terms of Reference for evaluation of the design research under the Ministry of Culture* of 26 January 2010 (annex 1), and in compliance with *Vejledende retningslinier for forskningsevalueringer under Kulturministeriet* (Guidelines for research evaluations under the Ministry of Culture) of 11 January 2007.

In accordance with the Terms of Reference, the purpose of the evaluation has been to establish an unbiased and independent assessment of the design research of the four institutions during 2004 to 2009. The Terms of Reference stipulate that, with basis in the assessment of the period 2004-2009, the evaluation must make status and provide recommendations for the future research and its organisation at the four institutions.

2.2 The Evaluation Panel

The evaluation was conducted by an external evaluation panel of Nordic design researchers, who hold relevant expertise in relation to the design research under the Ministry of Culture. The Panel was composed of the following five members:

- Vice Dean, Professor, PhD **Pekka Korvenmaa (Chair)**, MA Programme in Industrial and Strategic Design, Aalto University School of Art and Design, Helsinki
- Professor, PhD **Lars Hallnäs**, Interaction Design, the Swedish School of Textiles, University of Borås
- Professor, PhD **Sara Ilstedt Hjelm**, Department of Computer Science, KTH, Stockholm
- Professor, PhD **Birger Sevaldson**, the Oslo School of Architecture and Design

- Professor, PhD **Minna Uotila**, Department of Industrial Design, University of Lapland, Rovaniemi.

M.Sc.Eng. Pia Jørnø, independent consultant and science writer, served as process consultant for the Panel.

2.3 Method and process of the evaluation

In accordance with the Terms of Reference, the Evaluation Panel has made assessments of the different design research disciplines and of the design research as a whole, and the conditions and framework for the research, at Designskolen Kolding. The Panel has not evaluated the researchers of Designskolen Kolding individually.

In order to provide assessments the Panel has studied the research and its framework and conditions in a historical perspective (2004-2009). But in view of the rapid development of the field of design research and of the evaluated institution as regards design research, the evaluation has placed weight on the present situation and future trends for the institution and its design research. The Panel's recommendations refer thus mainly to the research and its organisation in the present and coming years.

The evaluation of the institution's research includes assessments and future-oriented recommendations as regards the following five topics indicated in the Terms of Reference:

- The conditions and framework for the research, including the economic framework, resources for research and possibilities for recruitment of researchers
- Planning and organisation of the research, including the research policy/strategy of the institution and its research management and research administration
- Extent, quality and relevance of the research
- The research environment and scientific collaboration with national and international research groups
- Dissemination of knowledge from the research

Under each of these five main topics the Panel has formulated a number of sub-topics, which have formed a supplementary and more specified basis for assessing the design research and its conditions. The sub-topics are indicated in annex 2. Furthermore, for each of the five main topics the Panel has formulated a number of keywords for issues, about which the Panel has enquired information from the evaluated institution. The keywords are presented in a document attached as annex 3.

Reference framework for the evaluation

In the evaluation the Panel has used the Research strategy of the Ministry of Culture as a reference framework for its assessments of and recommendations. The Ministry's Research strategy is summarized in section 2.5.

Furthermore, the Panel has included the political and regulatory conditions for the design research under the Ministry of Culture in its considerations during the evaluation. The political and regulatory framework for the design research is described in section 2.4.

The Panel has thus evaluated the research of the institution in relation to the specific traditions, methods and conditions for the design research under the Danish Ministry of Culture.

In addition, the Panel has taken the common international standards and practices for design research into consideration when formulating its assessments and recommendations. The international standards and practices of design research are briefly addressed in section 2.6.

The Panel has obtained the information from the institution by the following channels:

- Background documents, including annual reports, key data, research strategies and reports, selected scientific publications, etc. A list of the background material from the evaluated institution is attached as annex 6. The Ministry's request for background material is attached as annex 4.
- A self-evaluation report prepared by the institution. The Panel's guidelines for preparation of the self-evaluation report are attached as annex 5.
- Dialogue, including meetings, with management and researchers of the evaluated institution.
- Dialogue, including meetings, with management and employees at Danish Centre for Design Research, in which the evaluated institution has part.

The abovementioned meetings with Designskolen Kolding took place 15 April 2010. The meetings in Danish Centre for Design Research took place 17 March. The order of the meetings, and the participants in them, are indicated in annex 7. Annex 8 shows the overall time and work plan for the evaluation.

The meetings were started with brief introductory presentations by the attendants from the institutions followed by informal discussions and questions from the Panel with focus on information further to, or clarifying, the received written information, and with relevance for the topics of the evaluation.

During March-June the Panel completed the evaluation report, assisted by the consultant. The Panel's internal communication on the report took place in this period via e-mail, telephone and meetings. The completed report was e-mailed to the institution 10 June for commenting. Designskolen Kolding forwarded its comments 18 June by e-mail. The Panel, however, has retained the final decision as to the inclusion or exclusion of the proposed alterations or amendments in this final version of the report, which was mailed to Designskolen Kolding 30 June.

The planning and organisation of the evaluation were drafted in communication between the Panel, the Ministry of Culture and the evaluated institution with assistance from the process consultant. For planning, organisation and provision of relevant information, the institution had appointed a reference group and a contact person.

2.4 The political and regulatory framework for the design research

Legislation

The legislative framework for Danmarks Designskole and Designskolen Kolding is decreed in the Act on Artistic Higher Educational Institutions under the Ministry of Culture (Order no. 889 of 21 September 2000)¹. This act regulates all the artistic educational institutions under the Ministry of Culture, all of which are based on artistic development and/or research.

Before 1 January 2010 the Act did not include research and research-based education in the objectives of Danmarks Designskole. Nevertheless, since 2003, the school has a right to include research based education in its design education, according to the Order on Design Education at Danmarks Designskole and Designskolen Kolding². Furthermore the Act has been changed so that from 1 January 2010 the objective of Danmarks Designskole is “to provide education on artistic and scientific basis within design, arts and crafts and related fields until the highest level, to conduct artistic development activity and conduct research within the field of design”³. From 1 January 2010, the Act thus includes research and research based education in the objectives of Danmarks Designskole.

However, DD’s bachelor and master programmes must also be *accredited* as research based educational programmes before the formal basis is in place for the school being a “higher research based educational institution”. The Bachelor and Master programmes of Danmarks Designskole are thus intended to become accredited as research and art based educational programmes in 2010⁴.

Being a self-owning institution, Designskolen Kolding is regulated differently than Danmarks Designskole. The Act on Artistic Higher Educational Institutions does thus not include research and research based education in the objectives of Designskolen Kolding; and the Act has not been changed as concerns the objectives of DK.

However, like Danmarks Designskole, the tasks of Designskolen Kolding are regulated by the above-mentioned Order on Design Education, which means that DK has a right to include research based education in its design education since 2003.

It is the intention that the Bachelor and Master programmes of Designskolen Kolding shall become accredited as research and art based educational programmes in 2010 concurrently with the accreditation of Danmarks Designskole’s programmes.

With the aim of achieving this accreditation and move forward to legal status as a higher research based educational institution, a number of obligations to conduct research are laid down, for each of the two schools, in the so-called performance contract between the school and the Ministry of Culture. (The performance contracts are further described on page 13).

The two design schools can establish collaboration with a higher educational institution about doctoral education in accordance with the rules decreed by the Ministry of Science, Technology and Innovation on PhD education and the PhD degree⁵.

Until the two schools achieve regulatory status as higher (research-based) educational institutions, the doctoral education of the two design schools is taking place via the Danish Centre for Design Research (see later paragraph in this section). This is implemented by formally anchoring PhD scholars of the two design schools in the two architect schools.

The two design schools’ employment of scientific staff is regulated by the directive of the Ministry of Culture on employment of artistic/scientific staff.⁶ Scientific staff members of Danmarks

1 LBK nr 889 af 21/09/2000 med senere ændringer LOV nr 1268 af 16/12/2009

2 Bekendtgørelse nr. 617 af 27. juni 2003 om designuddannelse ved Danmarks Designskole og Designskolen Kolding

3 LOV nr 1268 af 16/12/2009

4 Jf Den Danske Kvalifikationsrammes typebeskrivelse af grader ved videregående kunstneriske uddannelsesinstitutioner

5 Bekendtgørelse om ph.d.-uddannelsen ved universiteterne (ph.d.-bekendtgørelsen). BEK nr 18 af 14/01/2008. Kulturministeriet er pt. ved at få udarbejdet sin egen bekendtgørelse, som kommer til at sidestille phd-studerende ved de kunstneriske uddannelser fuldstændigt lovgivningsmæssigt.

Designskole are formally employed by Kunstakademiets Arkitektskole while the scientific staff members of Designskolen Kolding are formally employed by Arkitektskolen Aarhus.

Multiannual political agreements for the educational programmes and performance contracts of the Ministry of Culture

From 2003 to 2010 included, the higher educations under the Ministry of Culture have been embraced by four-year political agreements. Strengthened focus on design research has been an important political focus area in the whole period.

In 2003 initiative was taken, and funding allocated, to strengthen the design research and establish obligatory collaboration between the two architect schools and the two design schools on a joint competence centre, Danish Centre for Design Research (DCDR). The aim was to establish basis for the two design schools offering research based design education programmes which can become accredited in 2010 as research based Bachelor and Master programmes. Academic lecturer positions and doctoral education in the field of design research should be established concurrently, based on obligatory collaboration between the design schools and the architect schools or other research based higher educational institutions.

As part of the implementation of the multiannual agreements the design and architect schools are governed through performance contracts between the institution and the Ministry of Culture. The performance contract includes a number of targets which are the focus areas for the contract period (2007-2010 at present). The targets are areas which demand particular attention in the contract period in order to fulfil the strategy of the institution. The performance contracts of the two design schools include, among others, targets on research and doctoral education.

Danish Centre for Design Research (DCDR)

The Danish Centre for Design Research (DCDR). The Centre is an organisation under the Danish Ministry of Culture, established as a collaboration between Danmarks Designskole, Designskolen Kolding, Arkitektskolen Aarhus og Kunstakademiets Arkitektskole. The centre acts as an independent centre for the design research that takes place at the four institutions. DCDR is anchored at Kunstakademiets Arkitektskole (KA) in accordance with an agreement between KA and the Steering Committee of DCDR.

The aim of Danish Centre for Design Research is to build and promote design research in Denmark, to disseminate knowledge and building Danish and international networks among research institutions, enterprises and the general public.

The overall management of the centre is handled by the Steering Committee which comprises a Chair (appointed by the Danish Ministry of Culture), the rectors of the Danish schools of architecture and design, and two external, international members (from Oslo and Helsinki).

DCDR disposes of a pool allocated in the Danish Appropriation Act for design research. The centre's Advisory Research Committee, which is constituted by three impartial design researchers, review the grant applications and makes recommendations about the allocation of grants for specific research projects to the centre's Steering Committee on basis of a set of guidelines.

⁶ Bekendtgørelse nr. 1507 af 14. december 2006 om ansættelse af kunstnerisk/videnskabeligt personale ved visse uddannelsesinstitutioner under Kulturministeriet

The centre receives 12-15 grant applications a year. Until 2010 the centre has granted funding for a total of 57 research projects (one of which has never been realised). The total funding budget has been 12 million DKK in 2005-08, 3 million DKK in 2009 and 6 million DKK in 2010-12.

DCCR's annual reports account for the four schools' activities under the auspices of DCCR, so that these reports can be appendices to the annual reports of the four schools. The annual reports of DCCR thus contribute to the two design schools' reporting on fulfilment of the targets of the performance contracts.

The Research Committee of the Ministry of Culture

The objective of the Research Committee is to provide advice and recommendations to the Ministry of Culture concerning the research at the research institutions under the Ministry, including advice on research programmes, research structure and important research political questions. The Research Committee prepares rules and guidelines for research evaluations and their follow-up. Finally the Research Committee administrates the Research Pool of the Ministry of Culture, funding from which the Ministry's institutions can apply for research projects.

2.5 The research strategy of the Ministry of Culture

A working group which was established in 2008 by the Ministry of Culture has formulated the present *research strategy* of the Ministry. The research strategy is published in the document "Forskningsstrategi for Kulturministeriets område" of 1 March 2009.

The purpose with the research strategy is to strengthen the research under the Ministry of Culture. The strategy forwards a number of recommendations, which can be summarized as follows⁷:

- It is important that each research institution of the Ministry of Culture **develops a long-term research strategy**. Each institution is therefore recommended to consider the following at long term – through research strategies:
 - o Which activities support the purpose and objectives of the institution;
 - o Which research activities can and should attain external support;
 - o To which extent there is need for development of new research areas, and how to define the interface with contiguous activities.
- The institutions are recommended to orient themselves towards a **common concept of research** in their strategic planning of the research effort – rather than towards specialist or/and institutionally specific concepts of research.
- The research institutions are recommended to establish a **joint research administrative advice service** with the purpose of building common knowledge on application procedures, quality assurance, networks, reporting of research statistics etc. for solid support of the research of the individual research institution.
- The research institutions are recommended to **actively and systematically disseminate their research to universities and industry** in order to **brand themselves as attractive collaboration partners**.
- The research institutions are recommended to establish new networks or expand existing networks to binding collaborative relations across the institutions of the Ministry, including universities and industry, nationally and internationally, where relevant.

⁷ Cf. page 9 of "Forskningsstrategi for Kulturministeriets område"

- The organization of PhD training within the area of the Ministry of Culture must be adapted in light of the restructuring at the universities in respectively PhD programmes and graduate schools. In this connection it is important to have focus on critical mass in the PhD training.

The concept of research

Particularly as regards the definition of research – or concept of research – the Ministry’s Research strategy finds a need for viewing research and development of the Ministry’s institutions in relation to research and development in the general research community⁸.

As mentioned in the summarized recommendations, the Research strategy finds it essential that:

- the institutions of the Ministry of Culture orient themselves towards a **common concept of research** in their strategic planning of the research effort – rather than towards discipline-specific or/and institutionally specific concepts of research – in order to being able to compete about the central research funds on equal terms with other research communities.

The Ministry’s Research strategy has thus focused on establishing generally accepted criteria for research. The criteria can be derived from the definition of research of both OECD and the Research Committee of the Ministry of Culture, and from the criteria for applications to the funds of the Danish Council for Independent Research.

The Research strategy formulates the criteria in relation to the dimensions originality, validity and transparency as follows:

- **Originality:** *that the research develops new knowledge, insight and understanding*
This may happen through:
 - development of new methods, models, concepts and theories
 - use of existing research results and methods in new contexts
 - creation of new, or significant improvements of existing, materials, products, processes, techniques and methods, systems or services.
 Research projects which can be characterized as experiments (afprøvning) and development may use artistic development competences and reflective data collection competences.
- **Transparency:** *use of relevant methods and construction of theories*
The research must be objectified through application of the methods and theory-constructions which are relevant for the research area in question. Possible methodological deviations or method developments in a research activity must be well documented, well argued and relevant in relation to the standards of the research area in question.
- **Validity:** *Account for the relation of the research to the relevant research areas*
The relation of the research to the relevant research areas must be accountable, and the research must be formulated in a way which is accessible for peer reviewing.

The Research strategy adds to the above criteria that reflection in written form is a precondition for dissemination of the research results and for assessment of the quality of the research.

⁸ Cf. page 55-57 of "Forskningsstrategi for Kulturministeriets område"

Furthermore the strategy emphasises that the focus on commonly acknowledged criteria for research should not remove attention from the other central tasks of the institutions or hinder development of new areas of research.

As implied in the summarized recommendations of the Ministry's Research strategy, the Strategy finds it essential that the institutions strengthen their research by clarifying their research and development activities, prioritizing the different activities and by working strategically with the organization and financing of the research. The Ministry's Research strategy therefore recommends that the institutions prepare research strategies and plans for their research and development activities in overall and long-term perspective: strategies for activities which support the purpose of the institutions, and current goals, including strategies for the wanted balance between:

- activities which can be acknowledged directly as research and obtain external support (from the Danish research councils, EU's research programmes etc.)
- activities which can be developed into new fields of research, through a particular effort on development of methods, theories and networks, and which can thus at a longer term become recognized as research and achieve support from the research councils.
- activities which are central for the institution and may be integrated in research processes, but which cannot be recognized, isolated seen, as research and therefore not achieve external research funding.

The research strategies and plans of the institutions must furthermore address the extent to which the concrete research projects facilitate establishment of formal collaborations with other research institutions, in order to obtaining scientific (faglig) strength and effectiveness. This may improve the competitiveness of the institutions for obtaining increased research resources nationally as well as internationally.

In continuation of its recommendations on research, the Strategy invites the institutions to initiate similar strategic work with focus on artistic development.

2.6 Design research in an international perspective

Design research is a relatively young research discipline, and the international concepts and methods for this field of research are still in a state of development. Among others, the international discussion concerns the concepts *research into design*, *research for design* and *research by design* (also termed *research through design*), including discussion about the borderline between *research* and *artistic development*.

The current international trend is that design research is moving towards greater complexity in terms of both issues and approaches. In addition the concept of *research by design* is becoming ever more central, because this research field produces unique knowledge not found in other domains. In other words, the design research discipline moves towards approaches where design practice and artistic development is subject for reflection and knowledge production. The concept of *research by design* comprises several approaches, spanning from reflection and knowledge production based on outside observations of others' design practice, looking at practice retrospectively or contemporarily as in case studies, to participatory research and insider perspective where the designer-researchers use their own practice as a means for investigation and a subject for reflection and knowledge production.

The concepts of Originality and Validity used in the research strategy of the Ministry of Culture works well in relation to the international perception of design research, but the focus on research methodology in the definition of Transparency is perhaps more problematic. While this is of main importance in many areas of empirical and experimental research, it is a rather different matter in, for example, practice based design research, being more explorative in nature. In our assessments in chapter 3 of the design research work of the school we have therefore interpreted the concept Transparency in more general terms of clarity and precision in results.

2.7 Facts about Designskolen Kolding

Brief introduction

Designskolen Kolding is a private fund based educational institution embedded with the Ministry of Culture. The school is offering a series of study programmes in design for Danish students and international guest and exchange students.

Since 2002 the school has built up a design research activity. The aim is to be accredited in 2010 as an institution offering research-based Bachelor, Master and PhD education.

Although the regulatory framework allows Designskolen Kolding to conduct research based education, the school does not have legal status as a higher research based educational institution. Therefore, the researchers of the school are formally employed by Arkitektskolen Aarhus, and the formal graduation of PhDs has been conducted by institutions with status as university or higher research and art based educational institution.

Purpose/objectives of Designskolen Kolding

Pursuant to the legislation concerning artistic higher education institutions under the Ministry of Culture, cf. Act no. 889 of 21 September 2000, the **objective** of Designskolen Kolding is to provide education within arts and crafts, design and related fields, and to contribute to the dissemination of knowledge about methods and results within the profession.

Furthermore it is the **objective** of Designskolen Kolding to strengthen both general and specialist design research in Denmark, in compliance with the political multiannual agreement on the Ministry of Culture's educational programmes, and the requirement of the school's performance contract 2003-06 with the Ministry that the design programme be raised towards university level in accordance with the Bologna Declaration's 3+2 educational structure.

Designskolen Kolding's **vision** is "Design education and Danish Design as world class. Designskolen Kolding will inspire, challenge and develop Danish design and the role, relevance and scope of the designer in a global reality. The school will function as a progressive and creative knowledge and innovation capacity with local roots and international scope."

Organisation overall

Designskolen Kolding's education, research and development are organised in Faculty for Education and Research under which are placed three departments, Department

for Communication Design, Department for Product Design and Department for Cross Disciplinary Research and Education.

The school's design disciplines are divided between the two domain specific departments, so those that principally work with tangible materials are part of the Department for Product Design, and those with a more intangible departure point refer to the Department for Communication Design. In other words, Interactive Design, Graphic Design and Illustration Design are part of the Department for Communication Design, and Fashion Design, Textile Design and Industrial design are part of the Department for Product Design. Cross disciplinary activities, such as generic design theory, design methodologies, user studies, design history, design management, are embedded with the Department for Cross Disciplinary Research and Education.

In 2004-2006 the school had four departments (and no faculty), namely Department for Form and Theory, Department for Fashion and Textiles, Department for Visual Communication and Department for Industrial Design and Industrial Materials. In 2006-2008 the four departments was supplemented with a fifth, the Department for Research, until the school in 2008 changed its organisation to a Faculty for Research and Education under which are placed the three departments mentioned in the previous paragraph.

Designskolen Kolding's *board of governors* has the overall responsibility for the school. The members of the board of governors are elected by, and amongst, the members of the school's *board of representatives*, who are nominated by the business and design community. They all have experiences from professional design; business or institutions in the experience economy. The board of representatives constitutes a forum for contact and debate in support of the school's development.

The school is headed by the Rector, who is employed by and refers to the school's board of governors. The day to day management is carried out by the school's *management board*, which comprises Rector, the head of education, the head of research and the head of administration. The daily planning and development of the school's education, professional specialisations, research and teaching are carried out by the school's departments in conjunction with the faculty management.

Designskolen Kolding has established an International Advisory Board in order to strengthen the research strategic work at the school and the development of a research setting at international level. It is the intention that the board members will assess the school's research status, strategy and plans every second year.

In 2009, the total number of employees was approximately 70, whereas about 280 further persons have been associated to the school on hourly pay or remuneration, e.g. as lecturers. The total number of person years has annually been 60-63 in the evaluation period.

Organisation of the research

Since 2008, the design research at Designskolen Kolding is organisationally placed in Faculty for Education and Research and Department for Communication Design, and Department for Product Design. In the period 2007-2008 the research was organisationally placed in the Department of Research, whereas for the period 2004-2006 it was placed in the four then departments.

The research at DK focuses on textile design including fashion design, industrial design, and interaction design. Research is also carried out within jewellery design and game design. Across

the different specialist domains, DK carries out research in various types of user-inclusion in design, the processes and methods of the design profession, behaviour regulating design, emotions in design, and strategic design and design management.

Designskolen Kolding is a partner of the Danish Centre for Design Research (DCDR).

The table below shows the research staff year by year of the evaluation period. In the end of 2009 the school's research staff comprised 1 Professor, 4 Associate Professors, 1 Postdoc, 9 PhD scholars and 7 research assistants. In the evaluation period the school has graduated 2 PhDs.

Table 1. Research staff at Designskolen Kolding 2004-2010

År	Forsknings-assistent	Ph.d-stud.	Ph.d.gæste Ophold på DK	Erhvervs-Phd.	Adjunkt	Lektor	Post.doc	Professor	Gæste-prof.	I alt VIP	Forsknings-Administration
2003		2								2	1
2004	2	2	1							5	1
2005	3	6				2				11	1
2006	5	6				3	1			15	1
2007	6	7		1		3	2		1	20	2 ²
2008	6	7		2		3	1			19	2
2009	7	9		2		4	1	1	2	26	2
2010	4	12 ³	1	4 ⁴	2 ⁵	6 ⁵	1 ⁷	1		31	2

² From 2007, one of the two employees in Research Administration is the Head of Research, who is also Associate Professor (lector) and thus also appears in that category.

³ Three PhD. -scholarships are funded and will start in 2010 (Corporate design & Cultural Diversity (1), project LARtM (1), Visualisation of statistics (1))

⁴ One additional industrial PhD starts in 2010. (DONG)

⁵ Planned announcements of two Assistant Professor positions (behavioural regulation in design and Communication design)

⁶ One Associate Professor in ID/Strategic Design starts 1.5.2010 and one Associate Professor in communication design is under assessment.

⁷ One Postdoc (forskningsadjunktur) linked to Corporate Design & Cultural Diversity

The research activity

According to its self-evaluation report, the school:

“..focuses on practice based and development-driven research. The objective is a constantly improving education in which the three sources of knowledge – research, design specialist knowledge, and practical knowledge – walk hand in hand creating learning cycles between experimental knowledge sources, analytical knowledge sources, and inclusion of practical experience.”

The school's research strategy 2009-2014 indicates the following four main purposes:

- *The research must help increase the understanding of the role design plays in the dynamic of the innovative society and contribute to the development of concepts and methods for design-driven innovation processes in the business and cultural communities and in the public sector.*
- *The research must be part of a knowledge developing interplay with the experimental design projects of the school in order to understand, challenge, and develop the tacit*

knowledge embedded in design, so that the steps, concepts, methods, and tools of the design process are explicated and can be the foundation for interdisciplinary knowledge renewal and create the foundation for DK's education.

- *The research must help translate the experimental knowledge developed through the design projects and in the interplay with the business and cultural communities into generic design theories and models which can form the basis of the interdisciplinary research collaboration in design.*
- *The research must help understand the cultural heritage of Danish design and its significance to the development of the design profession in a context characterised by cultural as well as socio-economic globalisation trends.*

The research unfolds through a number of projects and other research activities. Research is published via scientific publications and conferences, and DK disseminates knowledge on the research at a popular level via magazines, websites, etc. The following table shows the publication activity of the school for the period 2005 – 2009, including preliminary numbers for 2010.

Table 2. Publication activity of Designskolen Kolding 2005-2009.

	2005	2006	2007	2008	2009
1.1 Research publications	0	3	6	12	18
1.1.A Articles in peer reviewed scientific journals	0	0	3	9	12
1.1.B Articles in scientific journals, not peer reviewed	0	2	2	2	0
1.1.C Scientific books, monographs	0	1	0	0	0
1.1.D Contributions to scientific books, monographs	0	0	1	1	6
1.2 Reviews, scientific reviews, editorials, commentaries/debates	0	0	0	0	0
1.3 Conference contributions	0	0	0	6	1
1.3.A Conference contributions: articles, papers - not peer reviewed	0	0	0	1	0
1.3.B Conference contributions: posters, abstracts	0	0	0	5	1
1.4 Scientific reports, contributions to scientific reports	2	2	2	1	1
1.5 Working papers/pre-prints	0	0	0	0	0
1.6 Additional research contributions	1	0	0	0	2
1.6.A Patents	0	0	0	0	1
1.6.B Inventions	0	0	0	0	0
1.6.C Other, audio media and image media, software, music, etc.	1	0	0	0	1
2.1 Dissemination publications	2	4	4	10	25
2.1.A Articles in journal/newspaper	1	4	1	2	2
2.1.B Features in journal/newspaper	0	0	0	0	0
2.1.C Reviews in journal/newspaper	0	0	2	1	0
2.1.D Research disseminating books/anthologies/reports	0	0	1	1	5
2.1.E Contribution to research disseminating books/anthologies/reports	1	0	0	6	3
2.1.F Encyclopaedia articles, commentaries	0	0	0	0	15
2.2 Additional dissemination contributions	22	14	39	63	80
2.2.A Oral research dissemination	3	2	7	8	13
2.2.B Participation in specialist committees, councils and boards	4	5	5	5	10
2.2.C Participation in dissemination through television, radio and similar	0	0	4	9	3
2.2.D Other dissemination contributions; software, exhibitions, data bases, music, etc.	15	7	23	41	54
3. Teaching publications	2	0	2	1	1
3.1 Textbooks	1	0	0	0	1
3.2 Compendiums/Lecture notes	0	0	0	0	0
3.3 Contributions to text books/anthologies	1	0	2	1	0

	2005	2006	2007	2008	2009
3.4 Audio media and image media	0	0	0	0	0
3.5 Additional teaching contributions	0	0	0	0	0

Source: www.re-ad.dk

Note: 1.1.A includes peer reviewed articles in scientific journals as well as peer reviewed conference articles.

The educational activity

Designskolen Kolding offers design education within the fields of textile, fashion, industrial design, graphic design, illustration, and interactive design. The aim of teaching at Designskolen Kolding is to enable the students to develop a personal sensibility and the necessary craft skills with regard to the design and composition of form, and to combine these with a theoretical understanding and practical experience of the design process, design methods and design history. The students are to learn to engage the design process as a whole, including: project description; problem formulation; idea and concept development; research; analysis and synthesis; sketching; design development; layout, models and prototypes; and verbal and visual presentations and arguments.

The education at Designskolen Kolding is a five-year higher education programme, divided into a 3-year basic programme and a 2-year advanced programme. In the evaluation period the student population has amounted to approximately 400 students. In 2009, an additional 39 students were accepted to the Master's Degree educational programme in design management, which Designskolen Kolding offers in collaboration with the University of Southern Denmark (SDU).

In the evaluation period the school has annually between 207 and 266 students studying at the basic programmes and between 102 and 147 students at the advanced programmes. During the evaluation period, 221 of the students have been exchange and visiting students from abroad.

Formal collaboration on education and research

Designskolen Kolding has formal collaboration on education and research with SDU, Textilhögskolan in Borås, Tongji University in Shanghai and Case Western Reserve University in USA.

Financing

The financing and costs of Designskolen Kolding are indicated in the tables below.

In table 3, accounts/budget, the costs of DK are specified in research, education, management and administration, and buildings and supporting functions, for each year of the evaluation period. This table also indicates diverse percentage shares as regards research costs and financing of research. DK's total cost budget for 2010 is 56,4 million DKK, of which the budget for research and development is 14,6 million DKK.

In the evaluation period the research and development costs have constituted 9 % of the total costs, equivalent to 13,8 % of the total costs excl. administration, buildings and library, i.e. 13,8 % of the sum of costs for research and education. Please note that it has not been possible, in terms of accounts, to separate research from research and development (R&D) before 2009. In 2009 the research costs constituted 9,1 % of the total costs, and 14,9 % of the total costs excl. administration, buildings and library, i.e. 14,9 % of the sum of costs for research and education.

Table 3. Accounts/Budget of Designskolen Kolding 2004-2009

Total costs in 1000 DKK, running prices

Main activity	2004	2005	2006	2007	2008	2009	2004-09
Education	22.469	22.838	23.315	24.780	23.540	25.691	142.633
Research and development (R&D) ¹⁾	1.260	2.151	2.646	3.757	5.216	7.751	22.781
Management and administration	4.069	5.268	5.092	5.782	5.219	5.738	31.168
Buildings and support functions	9.287	9.508	9.458	9.820	8.897	10.216	57.186
Total	37.085	39.765	40.511	44.139	42.872	49.396	253.768
R&D costs as share of total (%)	3,4	5,4	6,5	8,5	12,2	17,1	9,0
R&D costs as share of educ.+R&D (%)	5,3	8,6	10,2	13,2	18,1	23,2	13,8
Pure research costs	-	-	-	-	-	4.485	-
Res. costs as share of total (%)	-	-	-	-	-	9,1	-
Res. costs as share of educ.+R (%)	-	-	-	-	-	14,9	-

1) Comprises R&D activities registered in the accounting system of Designskolen Kolding

Table 4 shows the basic and external financing for the research and development activities. In total, the *external* financing for R&D has constituted 39,5 % of the *total* financing for R%D. Table 4 also shows the total basic funding for DK.

Table 4. Financing for DK, 1000 DKK

Main activity	2004	2005	2006	2007	2008	2009	2004-09
Total basic funding	36.200	37.000	37.300	38.800	39.300	41.300	229.900
Basic funding for research	680	1.885	2.314	2.848	3.540	4.185	15.452
External funding for R&D ¹⁾	580	488	1.091	2.188	3.254	2.486	10.087
Total financing of R&D	1.260	2.373	3.405	5.036	6.794	6.671	25.539
Ext. R&D fin. as share of total R&D fin. (%)	46,0	20,6	32,0	43,5	47,9	37,2	39,5

1) External financing also include funding administrated outside the accounting department of Designskolen Kolding. See details in table 5.

Table 5 shows the sources of financing of the research of Designskolen Kolding. Please note that the funding from external sources comprises both funding for research and funding for research related development activities. Pure research funding is marked with an asterisk (*) in the table.

Table 5: Sources of funding – research and development: 2004-2010

Gross costs in 1.000 DKK, running prices

	Accounts	Accounts	Accounts	Accounts	Accounts	Budget	2004-	Budget
	2004	2005	2006	2007	2008	2009	2009	2010
Basic funding for research	680	1.885	2.314	2.848	3.540	4.185	15.452	3.641

External Funding for R&D:								
National public in sum (of which):	580	488	1.091	1.538	1.854	1.086	6.637	3.503
FI, Ministry of Science *	578	131			145		854	1.418
Ministry of Education	2		45	2	85		134	
Danish Arts Agency		136	213	302	184		835	
Ministry of Culture (Research Fund) *				93	367		460	
The Danish Enterprise and Construction Authority (Ministry for Economics & Business Affairs)					186	300	486	1.749
Danish Centre for Design Research (DCDR) ^{1*}		221	833	1.141	887	786	3.868	336
National private in sum				180			180	
Industrial PhDs ²⁾ *				470	1.400	1.400	3.270	1.870
Total external funding	580	488	1.091	2.188	3.254	2.486	10.087³	5.373

*) Pure Research funding.

1) Funding by DCDR is not administered by Designskolen Kolding. Figures are based on reports from DCDR and funding letters.

2) Estimated figures. Industrial PhDs are administered by the host companies (Gabriel, Middelfart Sparekasse, CUBION and DONG) and reported directly to FI. The three-year budget for a PhD is approximately DKK 1.4 million. (Salary, doctoral school, supervision, travel and operation).

3) Out of the total external funding in 2004-2009 3.613 kr. has been administrated by the accounting office of Designskolen Kolding.

3. The Panel's assessments and recommendations

Overall

In spite of the short history of research at this rather small design school, the Panel finds Designskolen Kolding's governance of the research, the research community and the research output of having both quality and coherence. In the prioritised focus areas the level of research is found to be good and its relevance very good both for internal purposes, in developing the institution, and externally in its outreach towards external stakeholders. With good reason the level can be seen to meet international standards of design research conducted at institutions of design education worldwide.

The school's perception and use of the concept of research meet the concept of research as defined in the research strategy of the Ministry of Culture, while at the same time the school has an explicitly declared focus on practice based design research, i.e. research by/through design, with priority on the designer as researcher. The focus on practice is in our view a good strategy as it in the long run guarantees solid links both between research and design education and between research and professional design practice. In this connection we wish to emphasise the school's strategy for design specialist teachers pursuing a doctoral degree, a very good strategy which rather unique in the overall design research community.

We thus find the achievements of the school, in terms of its research results and its establishment of a design research activity and environment, very good, with excellence in certain areas – particularly in view of the short history of the research at the school and the small volume of the activity.

Design research is a relatively new discipline in the institutions under the Ministry of Culture, initiated in 2003, and the design research activity of Designskolen Kolding can mature further in the coming years. Among others, there seems to be a small tendency to lean towards external research and methods from other research areas at present. This is neither surprising nor criticisable in view of the history of the design research of the school. For further increasing the school's research profile in the future, though, it is important to get more pro-actively involved in research by design by contributing to its definition and practice in a more explicit way. In addition, more focused research and more in-house supervision, i.e. more time and stable funding, to develop in depth research in a couple of areas could mark out DK as a prominent research institution on the international design research scene.

3.1 The conditions and framework for the research.

The regulatory framework has entailed a barrier

The fact that DK has not had legal status as a higher research based educational institution in the evaluation period has implied a barrier for the school's development of its environment and competences for design research.

DK has thus not been allowed to employ researchers itself. Instead the employment of the researchers is formally conducted by Arkitektskolen Aarhus. Effects of this are extra time and resources (for both DK and Arkitektskolen Aarhus) for dealing with employment issues. Therefore, and in view of the research qualifications of Designskolen Kolding, we welcome the aim of the school obtaining accreditation as a higher research based educational institution in 2010.

Financing – stable basic funding, but no separate basic funding for research

The Panel finds it positive that the basic funding budget from the Ministry of Culture has been stable in the evaluation period, and that DK has had free possibility for distributing the basic budget on research, education and other costs.

During this period DK has allocated an increasing share of its turnover to research and development. The research and development costs have constituted 9 % of the total costs in the evaluation period. This is equivalent to 13,8 % of the total costs excl. administration, buildings and library, i.e. 13,8 % of the sum of costs for research and education. It has not been possible to separate the costs for research from the costs for development before 2009. In 2009 the research costs constituted 9,1 % of the school's total costs (corresponding to approximately 15 % of the costs for education and research).

In comparison, the basic research funding to the Danish universities constitutes between 29 and 47 % of the total turnover in 2009⁹. The accounts of the universities show that the research costs constitute between 22 and 52 % of total costs in 2008¹⁰.

The Panel finds that the stability in the basic funding to Designskolen Kolding has established some basis for DK's long term planning and development of its design research activity. In addition, the rather low budget share for research at Designskolen Kolding has been acceptable for a design school still in its early stages of creating a research environment.

However, we have also observed that the level of basic funding has not been raised to any significant extent in connection with the initiation and development of the research activity. The school's basic financing of the research activity has thus been, and is, taken from the amount of basic funding for the education activity, and there is of course a limit for how much of the present budget can be taken from the education part without the education activity suffering significantly. Thus, with the present basic funding system there seems to be only little opportunity to adequately raise the extent of design research to a level similar to the university sector, without cutting significantly in the education activity of the school.

We thus find the present funding level/system/, where the research is financed on the cost of reduction of the education activity, in opposition to the present political focus on design (and thus designers) as an important area for future innovation. The present basic funding is insufficient for maturing the research base to "full university standard and level" concurrently with ensuring the present education of the present number of students.

In light of the present political focus on design as an important innovation promoter, we therefore recommend the basic funding for the school to be better balanced with the political targets for the design research and education.

Good possibilities for external funding, but basic funding is necessary for ensuring stability of focus areas and continuity in research competences

Additional to Designskolen Kolding's internal allocation of basic funding income to research the school has sought external funding for research. In the evaluation period the total external funding for the school's R&D has constituted 39,5 % of the *total* financing for R&D. The total external funding purely to research in the evaluation period is lower, but unknown, because the funding for research has not, in terms of accounts, been separated from the funding for development before 2009.

⁹ The University Evaluation 2009, Evaluation report, annex 7, table 6, p. 100,

<http://www.ubst.dk/publikationer/the-university-evaluation-2009-evaluation-report/Evaluation%20report%202009.pdf>

¹⁰ http://dkuni.dk/politik_debat/statistik/testside/universiteternes_statistiske_beredskab/, table B. Omkostninger, 2008

One of the significant external funding sources has been the Ministry of Culture's foundation administered by DCDR. It appears to have been relatively easy to achieve funding from this foundation, including funding for activities for development of the research environment. In view of the still low share of basic funding for research, compared with the Danish universities, the Panel finds the Ministry's "DCDR-foundation" important for the future maintenance and further development of the design research of DK.

It is also worth mentioning that DK has succeeded with a considerable and increasing financing of research via industrial PhD scholarships.

Designskolen Kolding's share of external funding for research is growing, but the school emphasizes in its self-evaluation that even if this is positive it is important to have a stable, and large enough, core of tenure staff. The Panel agrees. A certain stable core volume of the research activity is crucial in order to secure continuity in work and attracting further external funding through new applications, as well as for stability in PhD supervision and for developing the link between research and research based education. Furthermore, basic funding is typically necessary for conducting more experimental basic research, research that is essential for the development of research skills and also for the development of design practice itself.

Thus we highly appreciate DK's achievement of external financing, but we also wish to emphasise the importance of a continuous significant basic funding for the research. Basic funding which is without pre-demands or restrictions is critical for ensuring stability in terms of research focus areas and for continuous development of the research competences.

3.2 Planning and organisation of the research

Research strategy – The development of the research of DK in the evaluation period has been very well carried through

The Panel finds that DK, in its development and organisation of the research activity, has taken a very sound, straight forward and realistic approach which has proven successful. The school aims at basic research as well as applied research based on the OECD definition of basic and applied research in a slightly, deliberately moulded version where the school has an explicitly declared focus on practice based design research, i.e. research in/through design, with priority on the designer as researcher, and where design is used as a tool to explore and experiment with different future scenarios.

This is in our view a good strategy as it, in the long run, guarantees solid links both between research and design education and between research and professional design practice. To earn the respect of professional designers, as well as presumptive students, it is vital that research at a design school in a very clear and explicit manner contributes to the development of design practice. It is therefore very positive that this is clearly stated in the school's overall research strategy. It might seem obvious that research at a school for education of professional designers should contribute to the development of professional practice, but in the process of the "academisation" of design schools this is something that could not be said too often.

In addition Designskolen Kolding has a clear prioritisation of specific design research areas and on developing the research competencies of the staff, while ensuring the solid basis in design practice. The long term research strategy is in scope with the recommendations of the Ministry of Culture's research strategy.

Research strategy – the school's definition of the concept of research

In strategy plans and the self-evaluation the school makes a distinction between development of design practice/artistic development ("designfaglig/kunstnerisk udviklingsvirksomhed") and research – where the notion of research follows the definitions of research and experimental

development given in the OECD Frascati Manual. This is in compliance with the concept of research as defined in the Research Strategy of the Ministry of Culture.

In building up research at design and art schools it is a distinction that is often made to draw a dividing line between the developmental work that has always been going on at these schools and the new task – research – that now is being introduced. However, it can be questioned if the distinction between design/artistic development and research does not cause more problems than it helps in mapping out design research as an academic discipline in its own right.

The distinction is problematic for the development of research at design schools in several ways. It introduces concerns about what is what that can easily lead to, that we in our research practice,

- focus too much on “wrong” things, i.e. who is doing the research, how is it done, why is it done etc, somehow forgetting that the result provides the motivations,
- more or less lose contact with the traditions that, through experimental work and scholarly studies, have developed design practice,
- in order to be on the safe side motivate work by referring to other academically established areas of research and thereby effectively hinders the development of the field’s “own” theoretical and methodological foundations. Taken to the extreme this paints a picture of an interdisciplinary area of study without identity.

It is in this context very positive to note that DK in their Research Strategy Plan 2009 – 2014 states that the school will not try to imitate the scientific logic for development of research that characterizes the universities (“Men det betyder ikke, at DK vil imitere de videnskabelige logikker for forskningsopbygningen, som præger universiteterne.”).

Research strategy – successful, systematic and transparent development of the research competencies

In 2003-04 design research was a very new discipline in Denmark and several other countries, and it was difficult to recruit researchers with experience in design research. The school has deliberately aimed at ensuring research training of designers and design teachers, in order to ensuring from the beginning that the school’s research has a solid foundation in design practice. At present the school has still rather few senior researchers and is still in the process of educating designers to researchers with the aim of employing them as senior researchers on the school.

DK’s systematic and transparent development of its research has been successful and has resulted in increasingly consolidated activity and competencies which are still in positive progress. The initial disadvantage of lack of expertise within design *research*, due to the short time of existence of the design science discipline in Denmark, is thus dissolving concurrently with progress of time and emerging of new generations of design researchers at the school.

The present research staff, including the PhD scholars, appear to have a solid and highly appropriate background in design practice, and the Panel appreciates that DK has succeeded with establishing a full professorship despite the overall barriers for achieving a research environment similar to university environments. Overall the school’s number of “senior” researchers (1 professor, 4 associate professors and 1 postdoc in end of 2009) is low for developing a research environment which is to cover a number of prioritised design research themes. We therefore welcome the ambitious number of PhD scholars and research assistants (9, respectively 7 in end of 2009), which is relatively many compared with the number of senior researchers, as well as the school’s plans for employing further senior researchers.

The school has in a relative short amount of time built up a research environment with 12 PhD students in 2010 – four PhD students defending their PhD dissertations in 2010. During the site visit the impression was that many PhD students have external supervisors. Although, in general, it is a good strategy to engage external supervisors in the PhD education it is at the same time imperative to aim for a situation where the “main” supervisors are in-house. This is both a matter of taking responsibility for the PhD education as part of the school’s educational

programmes and a matter of strengthen research at the school through PhD education – it can also be a very good driving force in sharpening focus of research at the school.

The supervision of the PhD scholars takes place, to a large extent, via external researchers/tutors who are working within other research areas than design research. This significant external supervision activity may partly be due to the rather small number of senior researchers, many of whom have not graduated as PhDs until the latest years. It may thus be an advantage that DK uses experienced supervisors from outside, for ensuring the *research* competencies of the PhD scholars since they do not themselves have many staff with long experience in research. However, a fully mature research environment should reflect a more significant internal extent of supervision. A combination of internal and external supervision will in the long run guarantee a satisfactory combination of expertise.

Research strategy – good relation of the research to education

The Panel finds that DK has succeeded with linking the research to the education, not least because of its effort for educating design teachers to researchers. Following the school's formal guidelines, the associate and assistant professors have in general 40% of their work time reserved for research, besides 50% for teaching and 10% for administration. This allocation of working time for research is very positive and shows that the school has a clear determination to develop research on broad front and link that to research based education. Also younger researchers, including PhD scholars, have teaching obligations.

Research strategy – potential for further improvements

As implied above, the research activity of the school is not yet fully mature. Among others there seems to be a small tendency to lean towards external research and methods of other research areas. This is neither surprising nor criticisable in view of the short history of, regulatory barriers for, and relatively small volume of, the research at Designskolen Kolding. However, for further strengthening the school's research profile in the future, it is important for the school to get more pro-actively involved in research by design by contributing to its definition and practice in a more explicit way. The researchers could benefit from having a deeper knowledge of different taxonomies of design research and to communicate their own practice based approach to a larger extent to the scientific community of design research.

In addition, more focused research and more in-house supervision, i.e. more time and stable funding, to develop in depth research in a couple of areas could mark out DK as a prominent research institution on the international design research scene.

Research strategy – both basic and external funding are important

As indicated in section 3.1, we commend Designskolen Kolding's successful strategy, during the evaluation period, for obtaining external funding for research. The school has achieved relatively high, and growing, ratio of external funding for research in the evaluation period, including a rather significant funding for industrial PhD scholarships.

The school's achievements in terms of external funding reflect to some extent the progress of DK's research competencies and relevance of the research. Among others the school has recently achieved funding from the Danish Strategic Research Council for a project in collaboration with Aarhus University, and from the Independent Research Council to a project in collaboration with Copenhagen University.

The school's strategy includes clear awareness of the importance of having a stable and large enough core of tenure staff, an attentiveness which we also find important, as described in section 3.1. In general there are limits for the expediency of achieving high external funding because it typically includes self-financing and significant resources for applying and reporting. Furthermore a high ratio of external funding may impede stability and long term planning for a research environment.

Management - Good management structure and procedures

The Panel praises the very professional management competencies of the school's senior managers. The research management as well the staff management are highly committed and enable the research staff to achieve their goals as much as possible. The professional management skills are reflected in the excellent, transparent research strategies, which are well accomplished so far. Furthermore the school has reacted quickly to the changes happened recently in the field of design research, and the school's selfevaluation report expresses awareness of the current challenges for the research activity.

We also commend the established sound internal coordination and communication between management, researchers and teachers, including the *Central Council for Research* which coordinates the activity and development of the research of the school. DK has also established internal fora within the various design focus areas where both researchers, teachers and developers meet for discussion and exchange of knowledge.

The good internal communication does not only ensure good transfer of research knowledge to the education, but is also in scope with the tradition of work places in Denmark and with best practise for management of knowledge-intensive organisations such as research institutions.

As concerns quality assurance of the research, it is worth mentioning DK's implementation of a 'proposal seminar' with the participation of an external evaluator which is held after the first year of PhD studies to promote care and 'early warning' after one year of PhD studies.

Finally we wish to mention the material which the school has delivered to the Panel in connection with the evaluation. This very clear and well structured material is an additional sign of a competent management of the research.

3.3 Extent, quality and relevance of the research

Quality of DK's research overall

Although Designskolen Kolding has not had design research for very long, we are impressed with their results, enthusiasm and the seriousness of the school's approach. The research output has both quality and coherence, and the school has already made good contributions to the design research community, contributions that, no doubt, will be even stronger in the future. In the prioritised focus areas the level of research is found to be good. With good reason the level can be seen to meet international standards of design research conducted at institutions of design education worldwide.

As described in section 3.2, the school's perception and use of the concept of research meet the concept of research as defined in the research strategy of the Ministry of Culture, while at the same time applying a scientific logic which is expedient for design research, including an explicitly declared focus on practice based design research, i.e. research in/through design, with priority on the designer as researcher. The focus on practice is in our view a good approach as it in the long run guarantees solid links both between research and design education and between research and professional design practice.

The moving of design research towards a more explorative, even experimental mode does not mean loss of transparency or solidity of argumentation, but it certainly enables researchers who are educated in design to more fully exploit their knowledge capacity. In addition, the gained results find more audience within design practice and education than more theoretically based research results do.

At present the school's research methods and theories are to a large degree generic or adapted from other fields and to a less degree developed as design proprietary approaches, and

the current discussions in the design field internationally on research by design are not yet very actively fronted.

The researchers' "idea" about research through design could be better grounded by increasing knowledge about different taxonomies of design research and how practice based research relates to other types of research. The research of DK would thus benefit from connecting better to the international discussions and from building up more knowledge and experience from research by design and reaching a level where the school can contribute to the field.

Research priorities

The main research foci of Designskolen Kolding are textile design, industrial design, interactive design and communication, but emphasis is also put on user driven innovations, studies on consumer behaviour, design techniques and technical features of materials. There also exists a strand of research approaches, coming from the humanities, which enriches the palet of topics and ways of enquiry. In comparison with the number of research staff the school thus exhibits a rather broad range of research directions and themes. The school seems to be well aware of the need for further focusing and development of common themes. One such thread that seems to bind several projects together is the introduction of user driven innovation and development into "new" areas of product development.

Extent of the research

Although the research activities of DK are rather focused on doctoral education, the school has managed to achieve a reasonably good publication record during the evaluation period, particularly in view of the short history of the research activity at the school. According to the statistics at the website re-ad.dk¹¹, the school has had 39 research publications in total in the evaluation period.

Of the 39 publications, 24 have been in peer reviewed journals, a number which is not that high in relation to the flood of publications on today's international scene of design research today. In the school's self-evaluation it is also said that the research as yet is not ready to be evaluated with reference to bibliometrical indicators.

However, in this connection we wish to point out that there could be reasons for caution in formulating bibliometrical targets, as there internationally are some indications that bibliometrics can be challenged in the future in favour of a closer look at the content of research and the impact of the research results as such¹².

High relevance of the research for education and users

The relevance of the research is very good both for internal purposes, in developing the institution, and externally in its outreach towards external stakeholders.

We have got the impression that research is not an isolated phenomenon in Designskolen Kolding. On the contrary it is very much ingrained in the normative actions of the institution. Thus, the research is conducted by staff members who transfer their attitude, way of thinking and research findings into their teaching.

DK has established excellent collaboration with user organisations, including industrial co-financing and hosting of industrial PhD projects. Collaboration partners include several private enterprises as well as several public institutions, including very good connections with organisations in the Kolding region.

DK's methodological approach of user-driven and participatory design research gives excellent opportunities to implement research results directly in society with a strong foundation in

¹¹ re-ad.dk is a joint research database/webportal for Designskolen Kolding, Kunstakademiets Arkitektskole, Arkitektskolen Aarhus, Danmarks Designskole and Center for Designforskning (Danish Centre for Design Research (DCDR))

¹² Cf. Deutsche Forschungsgemeinschaft Press Release No. 7 | 23. February 2010. "Quality not Quantity" – DFG Adopts Rules to Counter the Flood of Publications in Research

www.dfg.de/en/service/press/press_releases/2010/pressemitteilung_nr_07/index.html

people's everyday life, without the hang backs typical for conventional basic research. EU has recently published a study about "Design as a driver of user-centered innovation" which concludes that design has the potential of becoming an integral part of European innovation policy and a building block of a policy model that encourages innovation.

The user-driven and participatory approach is found in all of DK's main research areas, and there are examples of applications in textiles, future electric cars, interaction design and hospitals. It is also worth mentioning that a Danish company has taken out a patent based on DK's research project on textiles and patterns for adjustment of daylight.

The applications and the extensive collaboration with private and public users imply high relevance for the society and economy of the school's research.

In general in Denmark, industrial financing of research is very low compared to its neighbouring countries, including Finland, Sweden, Norway, Germany and UK¹³, and DK's accomplishments in terms of relevance for industry of the research are therefore excellent, particularly in view of the relatively few years of research at the school and the relatively few basic finances for the research.

The research of the Department of Product Design

The Department of Product Design focuses on Fashion Design, Textile Design and Industrial Design. The research in the department is to a very large extent focused on textile design. In the research the department operates with three levels of knowledge: product, method and context.

The textile design research

Textiles are a focal area of education and research in DK's Department of Product Design. Research in textile design carried out at the school has a strong foundation in practice, both with respect to design aesthetics and with respect to textile techniques. It ranges from research on digital printing, computational experiments with weaving patterns and experimental explorations of textile design for decorative shadings to investigations and development of methodology for the textile design process in cooperation with textile companies, technical universities and users in the public sector. Most of this research has a rather direct relevance for education in textile design as well as for professional design practice.

As experimental design research it is overall strong in the sense that it combines clear directions of research, as well as originality of ideas, with depth both in design aesthetics and in design techniques. The research group is also strong, building on excellence in textile design skills and innovations in experimental methodology within textile design research. Textiles, and textile design, is an area of research where DK have excellent conditions for further developments.

There could in future development be need for a somewhat more narrow focus in research themes as well as a larger body of researchers involved in the textile design area. The goal, as it is stated in the self-evaluation, is to have two to three senior researchers in each of the school's institutes. Textiles being part of the Department of Product Design implies that the textile design research group should build on possibly an even smaller number of senior researchers. To strengthen and further develop textiles as a focal area of research there is in the long run need for more senior researchers that can write applications for external funding and supervise a growing number of PhD students. This particular example illustrates well the overall need for a stronger focus in research at the school – or a rather large expansion in tenure research staff.

¹³ The University Evaluation 2009, evaluation report, section 5.4.1.

The research, and researchers, in the area have good visibility through participation in national and international conferences, exhibitions, workshops and networks.

The research of the Department of Communication Design

The Department of Communication Design presents a good level of strategic thinking. The department is based on three main domains Graphic Design, Illustration and Interaction Design. Although these domains are at the bases of the department it has an intention of developing new professional domains by e.g. looking at digital technology as a force for new development. In addition the department strategically moves towards greater integration between the three domains. The strategy further has pinpointed four fields where research is going to be strengthened:

- 1) Communication and media theory
- 2) Experience and interaction in mediated spaces
- 3) Design narratology
- 4) Strategic and Service design

All in all we find this to be a strategy that is thoroughly thought through and defined, and allows for enough leeway for the individual researchers to find their place and interpretation of the strategy. It is crucial though that the department refines the strategy towards defining and pinpointing research and reflection regarding aesthetics, craftsmanship and “design thinking”. A discourse on these issues as central in the making disciplines is central for the development of a more precise and powerful definition and implementation of research by design.

There is a high level of expertise in the staff. The scientific level of the research and PhD projects is good. The Department of Communication Design has roots to the late 90's and especially one person was central in the development of the department. This research is on central issues of interaction and communication design like ubiquitous computing, pervasive computing. This research is now resulting in a PhD.

Since then the department has developed a lot within several areas that are less obvious but which give opportunities for innovation and for bringing interaction and communication design into new fields. Hence the relevance of this research is high. There are examples of research into themes like business processes and research on social inclusion.

Current research projects include dementia, game design for children in hospitals, service design, information design and s project with audio files for Danish radio, LARtM

The plans for future research projects include experience and exhibition design, information design, Aesthetics and emotional interaction, design and welfare technology, Strategic design and service design.

The research staff at the department are very few and the department needs to be strengthened. Especially facing the task to develop more design proprietary research methods and discourse it is crucial to bring together a bigger group and to interact with the other staff at the school. Regarding this lack of resources the level of results and activities are very high and beyond normal expectation. The research is of high relevance to the profession and to the society.

The research of the Department for Cross Disciplinary Research and Education

The cross-disciplinary and cross-departmental research is embedded with the Faculty for Education and Research in the Department for Cross Disciplinary Research and Education at Designskolen Kolding. The department is especially focused on user driven innovation and anthropological studies (E.g. Open source workshop: Trans-disciplinary 6-day workshop, user descriptions and user journeys. How-might-we sessions, e.g how can we make electricity more available. Practice and experiment based.) Furthermore, theory, methodology and tools, and design management, are emerging research themes in the department.

The department has a developed understanding of user involvement (e.g.: User involvement is not for uncovering user needs but common meaning making. Needs are created in collaborative processes addressing end users but also users of the innovation processes). The projects engage in e.g. knowledge theory, tacit knowledge and artistic knowledge.

User-driven design has a long tradition in Denmark, particularly in ICT and workspace development. At Designskolen Kolding steps are taken into new and promising methodological developments in the area. The contributions are not (yet) in theoretical developments but in practical applications. An example is the “etrans” project about future electric vehicles, which is a large scale anthropological study combined with a huge workshop with stakeholders. This research project shows some very interesting results. It can be seen as a test-bed for different user-driven methods as well as bringing forward new knowledge about consumer preferences in the area. The “etrans” project is also a good example of that user driven design has a high relevance for creating innovative solutions with a strong foundation in people’s everyday life.

3.4 The research environment and scientific collaboration with national and international research groups

The research environment of DK has a good working atmosphere

The Panel got a clear impression of DK’s researchers being highly motivated and with very good achievements in view of the few years and resources available for developing the research activity. The researchers constitute a good mix of designers and non-designers, but the gender balance could be better.

In the staff and management there seems to be a high trust capital and a good working atmosphere, and apparently a very low level of conflict, respect for each others’ areas and a good exchange of knowledge. We find that, among others, the established fora, the central council for research and the monthly and bimonthly “meeting places” within and across the different design disciplines of the school, comprising both researchers and design specialist employees, contribute to the good working atmosphere.

There also appears to be very good possibilities for internal financing of participation in conferences and other research related activities.

External scientific collaboration – National collaboration is well established, and international research collaboration is emerging

The Panel finds that DK has established excellent scientific collaboration with other research institutions in Denmark. The school has research collaboration with the other design research schools under the Ministry of Culture and with several Danish university groups constituting a broad variety of knowledge. Particularly the collaboration on a Master’s programme in Design Management with SDU has contributed to research collaboration in the newly established joint Centre for Design, Culture and Management.

Naturally, it takes time and resources to build up collaboration with other research environments, and it is not surprising that the present collaboration is mainly with Danish research institutions.

The international collaboration is still in a phase of emerging, but is in promising progress concurrently with the development of DK's research activity. We welcome the school's establishment of an International Advisory Board and its investments in international strategic alliances. Collaborations have thus been established with research and education organisations in Sweden, ShangHai and USA, collaborations which originally may have focused on education and design, but which appear to have begun to include scientific collaboration also. Furthermore DK's researchers participate in diverse international researcher networks.

DK should continue to increase its promising international collaboration. This can enrich the school's knowledge on theory and methods in the field of design research and support the school's own research capacity and skills.

3.5 Dissemination of knowledge from the research.

As described in previous sections, the scientific dissemination of the research is channelled through conference papers and articles in science journals. In addition, knowledge from the research is disseminated via the educations of DK and via the described extensive collaboration with public and private organisations.

This section thus concerns the broad, popular dissemination of knowledge from the research. The Panel has not had access to comprehensive statistics on the full picture of broad dissemination of the school's research, but the statistics and dissemination on the website re-ad.dk together with information from the school show several dissemination actions, where DK's researchers present knowledge on the research in news papers, other written publications, exhibitions and on the internet, supported by the communication department of the school.

All in all we have got the impression that DK conducts sound and appropriate dissemination of its research knowledge to a broad audience, in the light of the limited resources of the school. Furthermore we welcome the collaboration about dissemination between the four design research schools and the Danish Centre for Design Research (DCDR), which is implemented via re-ad.dk and DCDR's webmagazine MindDesign, particularly in view of the limited resources of DK.

The Panel recommends that DK at a longer term builds up dissemination more directly to the core groups of design practice, design-related production and the users.

3.6 Benefits for DK of DCDR and DCDR's services

It is the clear impression of the Panel that the research of DK has benefited from the services of the Danish Centre for Design Research, particularly since the re-organisation of the centre in 2007. According to DK, the centre plays an important role as a **"lighthouse"** for the Danish design research, gathering design research nationally as well as internationally, and reportedly DK finds that DCDR should continue playing this role.

More specifically, the following activities and services of DCDR have been supporting and promoting the design research activity of DK:

The **funding of research** from a foundation of the Ministry of Culture, administrated by DCDR, has been a valuable support to developing the research environment and skills of DK. Particularly the fact that the foundation provides funding for activities for preparing new, and developing existing, research activities has been beneficial for DK, which is still in a period of maturing its design research activities. The DCDR funding has among others contributed to DK's start-up of its textile, fashion, and interactive consortia and to pre-doc projects preparing for PhD projects. The funding, particularly of activities which develops the design research, appears to be important in the coming years also.

5 of DK's design specialist teachers have graduated from the **Master's Programme**, a vocational training programme of DCDR, in the period 2004-2009. One further teacher is to graduate in the coming period. The programme has thus contributed to the development of the scientific/academic skills of DK's teachers and researchers in the field of design research.

DCDR's services for **facilitating networking** between the design researchers of the four schools have been important for building a network between the design researchers of the four schools. Particularly the annual seminar held in August is an excellent facilitator of networking between the researchers and a source for exchange of experience and inspiration. DK has participated in the annual researcher event with nearly all Ph.D. students and senior researchers promoting specialist networks and new collaboration relations with the four design institutions.

By international standards, the individual schools have small research settings – even after mergers. Thus, the researcher network is an important base for joint initiatives. It has promoted good collaboration and exchange of experience between the four schools, which in principle are competitors, as regards design research.

DK's points of view as regards DCDR and its future role

Besides DK having articulated the abovementioned specific benefits, with which the Panel agrees, the school has conveyed that it sees DCDR's role as a Danish lighthouse through the centre's **dissemination** activities (DCDR's research focused website, including the monthly magazine Mind Design) and through the centre's hosting of events with reputed design researchers from the Nordic countries, Europe, and the USA. DK also finds DCDR's research **lobby** directed at the organisations of the business community valuable.

In addition, Designskolen Kolding has communicated a few disadvantages by DCDR to the Panel, namely the following:

- At times slow administrative procedures with a large time lag between application and funding. Tendency to redundant administrative processes.
- Nearly all teachers affiliated with the Master's Degree programme are from Copenhagen.
- DCDR's geographic location places time and economic strain on the provincial institutions when participating in events.

Concerning the future, DK finds that the four design research schools are moving towards self-sustaining research volume. However, the school assesses that DCDR could play a future role in the following areas:

- being an administrative gathering point for large research ventures in design – e.g. under the governance of EU's framework programmes.
- being design research's common lobby organisation in relation to the political system and in relation to business organisations. Rendering design research visible is important in the innovative society.
- continuing to offer a joint vocational training Master's Degree programme.

- continuing to organise national researcher events.
- creating a framework for purchasing licenses for e-journals and databases.
- taking on the role as Ph.D. course facilitator to all schools. DK approves of a joint doctoral school for the four design research schools but will support the establishment of a Ph.D. training programme unit with dedicated focus on problems, theories, and methods of design research. DK has expressed hope that this will be embedded with DCDR.

The Panel agrees with DK that DCDR can and should play a future role in a number of the abovementioned areas, including lobby activities, hosting a vocational training master's programme and organising national design researcher networking events. We wish to emphasise, though, that the future roles of DCDR indicated above expresses the point of view of DK, not of the Panel. We present our assessments and recommendations regarding the future role of DCDR in the overall evaluation report.