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Designing the Interface Between Research, Learning and Teaching

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Abstract

This paper's central argument is that teaching and research need to be re-shaped so that they connect in a productive way. This will require actions at a whole range of levels, from the individual teacher to the national system and include the international communities of design scholars. To do this, we need to start at the level of the individual teacher and course team.

This paper cites some examples of strategies that focus on what students do as learners and how teachers teach and design courses to enhance research-led teaching.

The paper commences with an examination of the departmental context of (art and) design education. This is followed by an exploration of what is understood by research-led teaching and a further discussion of the dimensions of research-led teaching. It questions whether these dimensions are evident, and if so to what degree in design departments, programmes and courses. The discussion examines the features of research-led departments and asks if a department is not research-led in its approach to teaching, why it should consider changing strategies.

Introduction

'Universities need to set as a mission goal the improvement of the nexus between research and teaching.... The aim is to increase the circumstances in which teaching and research have occasion to meet, and to provide rewards not only for better teaching or for better research but also for demonstrations of the integration between teaching and research.' (Hattie and Marsh 1996 p. 533)

All too often, staff who are actively engaged in research perceive that there is only an indirect relationship between what they do as researchers and how it may impact on the design of their courses. Are there structural barriers to achieving links between research and teaching? How does this impact on the student learning experience?

There is research evidence that a narrow view of 'research' negatively impacts on staffs' concerns for teaching and can result within institutions and departments in a structural separation of course design and delivery from staff research (Jenkins et al, 2003), as, for example, the UK Research Assessment Exercise (RAE), where research is narrowly conceived as high level international 'discovery' research and is abstracted from any

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Design Research Quarterly Publication Information

Design Research Quarterly is is a peer reviewed journal, published in January, April, July and October by the Design Research Society.

Design Research Quarterly is archived on-line
<www.designresearchsociety.org>.

We solicit your contributions: papers and articles on design research. For information regarding submissions, contact
Peter Storkerson, peter@drsq.org

From the Editor

Peter Storkerson

Undisciplined!

The theme of the next biennial conference is fortuitous; the call for papers, right, that was first published in DRQ in the spring, before the naming of the conference (see page 4). This apparent coincidence presents a real opportunity for DRQ as a forum for empirical, practice-based, and anecdotal conversation about disciplinarity and the production of knowledge through design research.

Here, practice-based does not mean relating to practice or practices of design. It concerns research as practice or practices in different areas of inquiry, both traditional and emerging.

➜ What are the kinds of questions that researchers are asking?

➜ **What positions do those research problems prompt researchers to take: scientific, humanist, pragmatist, etc?**

➜ **How do those positions affect theories of knowledge: what can or cannot be known with what certainty and on what basis?**

➜ **How do these questions and positions vary from subfield to sub-field?**

➜ **How do design researchers deal with crossing the paradigmatic boundaries between science and humanities, and between knowledge and performance goals?**

➜ **Would it make sense to consider design not only on the basis of professional sub-field, but also in terms of the sorts of questions asked and fundamental attitudes to which we tend to commit ourselves as we work to answer them?**

No doubt, many of the larger questions will be discussed at the conference: whether design could be a discipline and if so, what it would be like and how it would deal with its internal heterogeneity. This is an opportunity to consider issues on a more concrete and specific level.

This is a chance to relate your experiences and observations—a very useful grounding for next fall's conference.

Please contact me with your queries, ideas, or interest.

This call for papers does not exclude contributions on other topics in design research. Please email with any ideas, queries, or for guidelines.

Peter Storkerson peter@drsq.org

Call for Papers:

Case Studies in Research: Knowledge and Inquiry

Call for Papers:

Designers use the term 'design' to cover a wide range of activities and types of problems, and we have many differing, often incommensurable and opposing models of design and its theoretical and methodological bases. As a result, we also have have a history of lively debates over specific theories. These debates have not been able to resolve differences.

Many regions of design are not well defined, and in such situations, researchers can find that apparently straightforward problems can lead to fundamental questions about the nature of design, what kinds of philosophical and theoretical positions that can frame the research and ground the methods, and their implications with regard to knowledge: what kinds of knowledge are possible within the frames needed to do the research.

In short, we want to hold a discussion on how research steers theory. Our idea is to look at research and theories in design not primarily as related to subfields per se, but to see theories as products of research problems themselves: the topics studied studied and the questions being researched.

Rather than look at abstract problems of research and theory, we want to present actual problems as case studies.

In this way, we can clarify design by mapping its terrain of activities and problem types with their fundamental theoretical and methodological requirements.

Over the next two years, DRQ will collect and publish articles on these topics and replies to those articles, using its regular publication schedule to build a discussion. Inquiries or Submissions:

Deadline: **March 1, 2008: April issue, June 1, 2008: July issue (prior to 2008 conference)**

Contact: **Peter Storkerson: peter@drsq.org**

Invitation
from Chris Rust

The fourth conference in our current series is an important opportunity to take stock. We will be using it to reflect on and develop the way we run these events as well as aiming to provide an important oversight of the

The City of Sheffield has a long association with design and the study of design. Sheffield Hallam University is one of the oldest design academies in the world, starting out as Sheffield School of Design in 1843 and today it is home to an interdisciplinary teaching and research centre that brings together the different arts and sciences that make up the landscape of 21st century design. The city was once a watchword for heavy industrial production, with a dark utilitarian image to match, but today, partly through the influence of its designers and artists, it is a centre for new cultural industries. Imaginative work

on urban design over the past 10 years has created a new and delightful city centre, surrounding our university with enjoyable spaces as well as public artworks, galleries and cafes. It is also a very friendly city.

So I look forward to welcoming you to our city in the middle of next year's English summer. We will have serious work to do but we also aim to create an enjoyable occasion for you to make new friendships and renew old ones – the real glue of any community.

Chris Rust

DesignResearch *Society*
4th Biennial Conference

Undisciplined!
Rigour in emerging design disciplines and professions

state of the art in research across the designing disciplines. We promise to pay equal attention to the quality of content and the quality of your experience at the conference.

The conference theme, attending to the new kinds of designing that are emerging to challenge our framework of specialisms and reshape our field, will provide some focus for keynote speakers and debates and you may find that relevant to your own work. However this is the main conference for the whole of our society and we are open to all research that informs or arises from designing.

You can find out more about the conference theme and other aspects of the event at the conference website at **www.drs2008.designinquiry.wikispaces.net** where you can also join the conference mail list to receive updates on the call for papers and the conference arrangements. The call for papers will be announced on 1st September 2007.

16-19 July, 2008

Sheffield Hallam University, UK

Provisional schedule (consult site)

2007	01 Sep	**Call for Papers**
	15 Nov	**Deadline for abstracts**
	Dec	Abstracts accepted
2008	01 Mar	Deadline for full papers
	01 May	Authors notified
	01 Jun	Deadline for corrected papers

http://drs2008.designinquiry.wikispaces.net

concern for student learning. The benefits to students of learning through research and enquiry have never been in question. The central message for course teams is to focus on the student experience of appreciating, using and doing research.

Departmental Context

Over many years, part-time teachers who taught students, particularly in the art and design worlds, maintained careers outside academe. Such design teachers included many leading practitioners who transformed the debates and led practice in their field. In this respect, there is a strong traditional of intellectual exchange between teaching and 'research'.

The part-time nature of teaching contracts is still a characteristic of many design departments, and many teachers maintain part-time careers outside of academe in the art and design worlds. These practices persist despite changes in Higher Education funding methodologies, which have led to a reduction in the percentage of part-time teachers and hence a reduction in the volume of interaction between the department and the outside worlds (I refer in particular to the UK context although there are similar changes in other national systems).

However, the situation is now different in a critical way. Internal (i.e. in academe) and external (e.g., RAE) factors have worked together to put in question the primacy of the historical intellectual exchange between teaching and "research". In simple terms, research has been introduced into the art and design academy as a new (or greatly enlarged) activity. In parallel with the growth of research, debate has progressed around the nature of art and design research, articulating a mode of research often described as practice-led or practice-based, which acknowledges the role of art and design objects in the intellectual discourse. However, even here there is the recognition that this mode of research is not merely what artists and designers typically do in the art and design worlds.

The increased level and concentration on research has brought into focus both the activities that take place in academe (i.e. teaching and research) and the privileged status given to the relation between teaching and the professions (i.e., art and design), characteristic of the pre-1990 art and design academy. This has led to anxieties about the status of teaching with respect to research and of professional practice to research. These divisions have been reinforced by institutional structures that separate the planning, man-

agement and financing of research from that of teaching. This has been exacerbated by the need to develop a research culture, which can often be perceived as separate and in competition with a well-established teaching culture.

Teaching, in so far as it is it is underpinned by practice, draws much of what was previously a non-academe activity (i.e. designing) into the academic context, at least for those who are willing and able to frame their practice as practice-based or practice-led research. Those who teach part-time and see practice as something that takes place outside the department are likely to see research as having nothing to do with teaching, since it is not what they bring to teaching through their external activities and has nothing to do with practice, which happens outside the department. There is a case for arguing that in order to provide an environment in which the relation between teaching and research can be explored properly, we need to find a way to reduce the distinction between what teachers do inside and outside the university, so that research is seen as supporting that which has typically been realized outside, that is, challenging art and design.

In particular, we should be looking at how the time required by staff members to create practice-led research in art and design can be supported within the contracted workload (i.e. whatever may be the normal contractual research/ professional practice/ scholarship time). This understanding, for example, informs my own college's research and overall academic strategy: the latter embracing a holistic enterprise, which for various often practical and organizational reasons are labeled as teaching, research, professional practice, etc.

Conceptions of Research

To understand the research, learning and teaching interface we must first ask what conceptions we have of research, and of learning and teaching. So, what do we understand by research? What is our experience of research and how does it influence what we think students should be doing when we say they 'engage with research'?

In research conducted by Brew (2001), she interviewed university teachers to discover the different ways they conceived of research in their role as teachers. There were those who reported ideas that involved their students in social settings mirroring research activities, such as teamwork, conferences, presentations, exhibitions and networking, labelling this an external focus. There were also those who

adopted approaches with their students to develop under-standing and involve their students in learning methodologies, labelling this an internal focus. Teachers also reported different intentions: either to explore and seek transformatory experiences or to produce outputs, products, or gain rewards – often extrinsically motivated. How then can our conceptions of research shape or influence our students' approach to learning, especially if they are limited to product and not process focussed outcomes.

Most teachers in that study (Brew, 2001) saw research as

will take on leading roles in their future working environments: directing change, asking important questions, solving problems and developing new knowledge.

EBL covers a spectrum of approaches (see figure 1). Many researchers see the benefits of enquiry-based learning, indeed using a method of rigorous enquiry has been described as 'a good way of thinking' (Knight & Yorke, 2004) leading not only to relevance in the learning context but also to skills and practices which engender 'employability'.
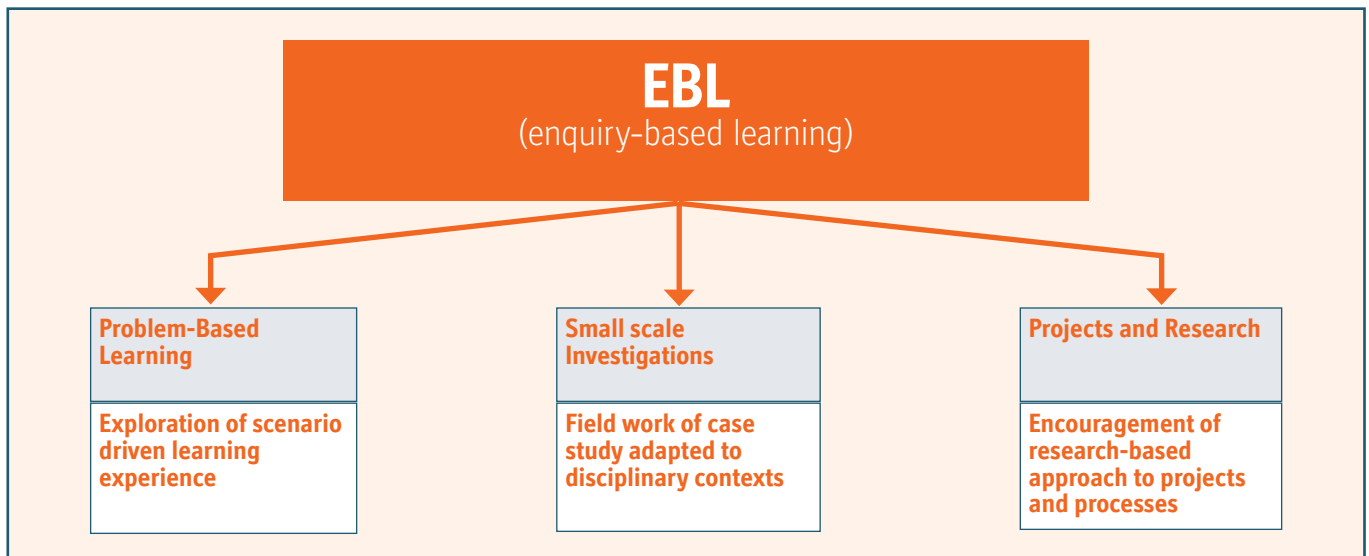
Figure 1: EBL Approaches to Learning (Source: Centre for Excellence in Enquiry-Based Learning)

a method primarily for gathering information leading to a developed enquiry. Enquiry-based approaches have become more popular in university settings as a way of encouraging both learner autonomy and higher level learning outcomes. Enquiry-based learning (EBL) describes an environment in which learning is driven by a process of enquiry owned by the student. Starting with a 'scenario' and with the guidance of a facilitator, students identify their own issues and questions. They then examine the resources they need to research their topics, thereby acquiring the requisite knowledge.

Knowledge so gained is more readily retained because it has been acquired by experience and in relation to a real problem. It is essential that our students are educated for knowledge creation, lifelong learning and leadership. They

Other research findings suggest that teachers at the undergraduate level in design need to use research and enquiry-based approaches – like the ones used in research – to enable high level learning outcomes (Shreeve, Bailey & Drew, 2004).

So, what do we understand by research? What is our experience of research and how does that influence what we think students should be doing when we say they 'engage with research'?

In the future, if practice-based research is practiced by most members of our teaching staff, then since it is directed toward a practice that is transforming, for example, of the art and design world debates, etc., we should expect it to increasingly underpin both the delivery and content of undergraduate and postgraduate degrees. Since undergraduate and postgraduate students are being developed

as practitioners and practice underpins practice-based research, we can say that insofar as teachers frame their courses in content and delivery as building towards practice-based research, their students will be "engaged" with research from the outset.

The principal distinction between practice-based research and practice is that in practice-based research, there is a more public engagement of the practitioner with the theories, ideas, etc., underpinning the work. This public engagement is manifested in art and design world debates encompassing both linguistic and visual modes of exchange. In the progression from Bachelors to Masters through to PhD, we should expect students to be 'engaged' in this way at increasing depth, rigour and intellectual sophistication and to increasing productive consequence. This "engagement" can be seen as replicating, reflecting and even contributing to the exchange or discourse that largely takes place in the wider academic and non-academic art and design worlds.

Conceptions of Teaching

What then do we think learning is? What is our experience of learning, as teachers and as learners? How does our conception of teaching influence what we think research-led curriculum might involve?

Research into teachers' approaches to teaching identifies distinct variations (Prosser & Trigwell, 1999) characterised: (a) as an Information Transmission/Teacher Focussed (ITTF) approach, which involves teachers telling students 'how to', telling 'stories' about their own research; and (b) as a Conceptual Change/Student Focus (CCSF), where teachers engage students in the practice of research; authentic settings and teamwork.

What do we understand by teaching in this practice-based context? It is the development of students as practitioners, albeit engaging with the practice as 'legitimate, peripheral participation'? (Lave & Wenger, 1991).

Learning to practice in art and design requires engagement with authentic activities in context. The activities which constitute learning in practice can be varied according to course context, learning outcomes and opportunities for collaboration. (Drew, 2004a; 2004b; Drew & Williams, 2003)

Practice based learning is a way of conceptualising and organising student learning, where the teacher encourages students to manage projects involving complex problem solving skills, which are set in the context of professional practice. The emphasis of the learning is on peer learning

and process. The teacher can work with students to develop their conceptions with the intention to increase self-awareness, individual and team autonomy and for professional preparation. In this conception, teachers believe that real world scenarios or projects, as simulations of professional practice, enable high level learning outcomes including problem solving skills.

As further development of this conception, the teacher emphasises original research and conceptual thinking skills. The teacher can work with students with the intention to improve self-directed research, practice and conceptual skills. The teacher feels that students should be able to relate key concepts to the practice, or to develop practice through critical examination of concepts or theories.

Enabling students to change conceptions of the subject, of the world, and of their work is seen as an integral part of this conception of teaching. Teachers can also express aspects of changing as a person in this conception as relating to practice, to concepts of creativity and beyond practice into the student lifeworld.

What are the Dimensions of Research-led Teaching?

The dimensions described by the University of Sydney's USYD Project gives a compelling framework of seven dimensions, which I will explore and discuss:

As framed by the USYD project, briefly, a research-led institution is one in which:

➜ planning, management and monitoring of teaching and research are fully integrated in the business planning process;

➜ a very high proportion of staff members are research active (in excess of one day a week);

➜ a very high proportion of staff members' workload profiles comprises teaching and research (or put another way, there are few research only or teaching only staff);

➜ the academic culture (including both teaching and research) is communication and trust rich, open, transparent, non-divisive, non-hierarchical, developmental, works toward shared goals and is supportive and rewarding of commitment and merit.

1. Research-active staff

➜ Highest level of research-led teaching: faculty, school or department has a balance of high quality researchers in

the subject discipline and high quality researchers concerned with subject specific and generic pedagogical research and scholarship

➥ Each academic is actively researching and publishing: that is, working towards world-class status in at least one of these areas. Some will be active in both. For example, research strengths have been defined in pedagogical research as well as in disciplinary research (University of Brighton; Faculty of Arts and Architecture)

2. Evidence-based teaching

➥ Curriculum decisions are based on informed knowledge of the literature on teaching and learning in higher education, with reliable evidence of students' response, learning experiences and outcomes

➥ In preparing teaching and learning strategies, academics take account of scholarship in relation to teaching and learning in higher education

➥ Academics who are experts in pedagogical research act as mentors and advisors (Breslow et al, 2004)

3. Research-based curriculum

➥ The curriculum mirrors research processes and activities

➥ Students engage in research skills development programs

➥ Collaborative team-working, presentations, posters, papers, exhibitions

➥ Assessment mirrors research practices of peer review, revision on the basis of feedback and re-presentation of revised artefact. For example: a Multimedia course is organised to mirror the process of conference paper/poster submission, research, writing and peer review, and then presentation at a One Day Conference to which outsiders including potential employers are invited (Southampton University)

4. A culture of enquiry

➥ Debates and discussions within the school/faculty take place routinely e.g.

➥ What can our disciplinary knowledge and theories contribute to our understanding of teaching and learning issues?

➥ What is the nature of knowledge in our subject/s?

➥ What can the methodological approaches we adopt in researching our subject tell us about teaching and learning?

Building a culture of enquiry involves exchange between the department and the wider community. At one level, this can be achieved through the representation of the department via web sites, visibility in public events (both internal and external), publications/exhibitions and collaborative links with research peers, which are seen as the primary mechanisms for meeting this objective.

The culture needs to be appropriately supportive of teachers. Here, my own institution plans to introduce five-year staff research plans, informal research mentoring, and reviews of research in appraisal. The expectation is that these initiatives will extend to most staff. Support for PhD registration, sabbatical leave, research project management and training are planned: all designed with a view to raising the number of teachers actively engaged in research and raising the quality of their engagement.

The culture needs to be organised such that there are foci of enquiry. Departments can build such foci from existing or new research interests. The culture needs to be developmental and transformational. PhD students are seen as central to this, so departments need to provide local research training; to support research student-led events and activities; and to enhance the links between research and undergraduate and postgraduate students. The latter is seen both as a way of raising research student profile and experience, and as a source of inspiration to students to aspire to progress to Ph.D.

5. A community of scholars

➥ Students are inducted into the culture and community of researchers (undergraduate and postgraduate).

➥ Students develop knowledge of what it is to engage in the subject in a research-based way, understand the key issues and debates in the subject area and know what researchers in the subject do in general and what researchers in the school/ faculty do specifically.

➥ They engage in activities that mirror the research process. For example: students engaged in a research project to investigate students' experiences of 'research' in the university, interviewed a number of their peers and photographed images of 'research' (University of East Anglia).

Leadership and recruitment of staff in line with the department's research interests share in research decision-making, and the integration of research into the overall operation of the department is seen as central to achieving a community of scholars. A high level and quality of communication about research and its implications for subject development and educational process are key to a culture of scholarship. These can be achieved in multiple ways, such as regular research presentations, participation of researchers in decision-making processes whether strategic or operational, participation of researchers in all courses and at all levels, and effective internal communication of and promotion of research activity through web-based resources and discussions groups and newsletters, etc.

6. Research-aligned teaching

→ The department or faculty is organised around the research strengths and interests of the staff (including pedagogical research), and the curriculum is aligned with those research strengths. The more research-led the college/faculty is, the more pervasive is the influence of these research areas on the curriculum

→ Research aligned teaching enables the development of research clusters (Goldsmiths College) and research centres (e.g. Typography at Reading University).

7. Teaching-led research

→ Teaching stimulates disciplinary research: through questioning by students, and through the results of the research projects that students engage in

→ Teaching stimulates pedagogical research: academics question the effectiveness of teaching strategies and approaches and the learning experiences of their students

→ Teaching influences research behaviour: academics discuss the implications of their pedagogical findings for research and knowledge generation in the subject. For example: The use of reflective practice in engineering design learning. (2003 Design Studies Award)

Conclusion: how does this affect our strategies at course and department levels?

Course design strategies

'Teaching and research are correlated when they are co-related... exploit further the link between teaching and research in the design of courses.' (Brew & Boud, 1995)

Doing the appropriate kind of research, in this instance, practice-based, as discussed previously, potentially brings more teachers into research such that the division between practice and research is removed. Institutional strategies which recognise the importance of good practice in course design also reward that activity (e.g. through Teaching Quality Enhancement Funds or Centres for Excellence in Teaching and Learning, both HEFCE). This can increase the motivation to reward good practice in practice-based teaching and learning, including that which is research-led. Examples of activities which impact on course design include pedagogic research projects, teaching fellowship activities and learning and teaching secondments.

At the University of the Arts, examples of course design strategies and activities, which correlate with features of practice-based learning, include:
▸ Practitioner teachers
▸ Live projects
▸ Simulated work experience
▸ Collaborative projects
▸ Event based learning
▸ Placement learning
▸ Independent projects
▸ Consultancy
  CLIP-CETL (Creative Learning in Practice: Centre for Excellence in Teaching and Learning)

Institutional strategies

Institutions can choose to develop institutional awareness and mission in linking research and teaching i.e. to make it the mission and deliver it. (This is a key item in my own university's medium term strategy and has been discussed at the highest levels of academic governance as well as at college, department and course level.) The institution can then organise events, studies, exhibitions and publications as well as develop curricula to support the nexus. The first stage of putting this into practice has been to develop and audit teaching policies and to incorporate them into strategic and operational planning. Institutions can also develop research to support the nexus (see USYD project and Oxford Learning Institute). Staff and institutional structures to support the nexus also need to be examined as discussed previously. To further develop a disciplinary understanding of teaching and research relations, both criteria must be used as a central consideration in hiring new staff. Departmental heads and their teams need to discuss how staff roles are defined and develop strategies for

appraisal and staff development which support the nexus. Synergies between research centres and course planning teams must be sought in order that academic planning reflects the research strengths of the department.

Finally, ask yourselves this question about your own department. Does it embed a research culture? If so, who provides the leadership vision in this area and what is your role in that vision?

'Simply put, research activity and productivity, and the quality of teaching and learning, are influenced for better or worse by the way a department is managed or led'. (Ramsden, 1998, p. 11)

Linda Drew

New Resources:

Design Blog:
<http://www.researchdesignconnections.com/blog/>
Research Design Connections (RDC) has launched a blog to connect design practitioners with recently released scientific research. The blog also links members of the design community focused on environment-behavior research and practice.

New Tool for Journal Research:
< http://jinfo.lub.lu.se>
Lund University Libraries has, with financial support from the National Library of Sweden, put together a new tool to support researchers in their choice of journal for publication. The service, called "Journal Info", gives fast and simple access to journal information through a web interface . The journal information is divided up in general, accessibility, cost and quality and each area is supported by a number of relevant points.

Linda Drew

Linda Drew, Ph.D., is the Dean of Academic Development at Chelsea College of Art and Design, University of the Arts London. Dr. Drew was previously Co-Director of the Art, Design and Communication subject centre based at the University of Brighton. She is editor of the peer-reviewed journal Art, Design and Communication in Higher Education published by Intellect. Her research interests focus on conceptions of, and approaches to, learning and teaching situated within the context of practice-based disciplines. In this regard she is one of a growing clutch of active design researchers working with both phenomenographic and social constructivist approaches to research.

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Calls for Papers:

AI EDAM Journal: Artificial Intelligence for Engineering Design, Analysis and Manufacturing
http://web.cs.wpi.edu/~aiedam

Special Issue, Fall 2008, Vol.22 No.4
Submission Date: 21 September 2007
Developing and Using Engineering Ontologies
Guest Eds. Chris McMahon & Jos van Leeuwen
Send Intent to Submit   AS SOON AS POSSIBLE:
enscam @ bath.ac.uk or josvl @ uma.pt

Special Issue, Spring 2009, Vol. 23, No. 2
Submission Date: 15 April 2008
Tangible Interaction for Design
Eds. Ellen Yi-Luen Do & Mark Gross
Send Intent to Submit   AS SOON AS POSSIBLE:
ellendo @ cc.gatech.edu or mdgross @ cmu.edu

Shaping the Future?

The 9th International Conference on Engineering and Product Design Education

13–14 September, 2007
School of Design at Northumbria University, Newcastle upon Tyne, UK

The conference will bring together representatives from education and industry who have an interest in shaping the future of design education. It will provide a forum for educators and researchers from product development, engineering and industrial design, together with industry and government representatives to discuss current educational issues and the nature of design education in the future. This year's conference theme, 'Shaping the Future?', will provide the opportunity for participants to exchange ideas and build collaborative relationships.

Topics:

- Design and local community
- Design and government
- Teaching tools and techniques
- Developing links with industry
- Design curriculum development
- Philosophies of design education
- Professional development in design

- Cross-disciplinary projects
- Work-based learning
- Future industry needs
- Learning environments
- Industry based student projects
- Assessment
- Professional doctorates
- 'New' Knowledges for design
- Design manifestos

Presentations:

- Paper and poster presentations
- Roundtable discussions

- Exhibition
- Workshops

Election of Fellows of the Design Research Society

Nigel Cross

In May 2007, the following new elections were ratified by DRS Council:
- **Professor Tom Cassidy**: University of Leeds, UK.
- **Professor Kun-Pyo Lee**: Korean Advanced Institute of Science and Technology, Daejon, South Korea.
- **Professor Sanjoy Mazumdar**: University of California, Irvine, Ca., USA.
- **Dr. Christopher Nemeth**: University of Chicago, Illinois, USA.
- **Professor Robin Roy**: The Open University, Milton Keynes, UK.
- **Professor Pradeep Yammiyavar**: Indian Institute of Technology, Guwahati, Assam, India.

Last year the Council of the Design Research Society instituted a new grade of membership – Fellow of the DRS. Conferment of the title of Fellow of the Design Research Society acknowledges an established record of achievement in design research, and attainment of peer recognition as a researcher of professional standing and competence. Fellows of the Society may use the personal suffix of FDRS.

Fellows must be full members of the Design Research Society, and must have:
- a research qualification or equivalent (normally a Doctorate or a Masters degree by research)
- at least seven years experience of working at postgraduate level in research related to design, or research-based design practice
- a significant record of achievement in design research, as evidenced by, for example, publications of international standard, and/or conducting successful research projects, and/or successful education of postgraduate research students.

The Council has appointed an interim group of members, chaired by the President–Elect, Professor Nigel Cross, to invite and consider applications for election to Fellow. When a sufficiently large group of Fellows has been appointed in this way, there will be a College of Fellows to consider applications for election from all members of the Society.

In a first round of invited applications, so far fourteen Fellows have been appointed. Several others are currently in the process of application.

Nigel Cross

New fellows join these fellows:
- **Professor Michael Biggs**
- **Professor Lin-Lin Chen**
- **Professor Rachel Cooper**
- **Doctor Linda Drew**
- **Professor David Durling**
- **Professor Alpay Er**
- **Professor Ken Friedman**
- **Doctor Per Gall**
- **Professor Jack Ingram**
- **Doctor Terence Love**
- **Doctor Deana McDonagh**
- **Professor Victor Margolin**
- **Professor Judith Mottram**
- **Doctor Rivka Oxman**
- **Doctor Lubomir Popov**
- **Professor Vesna Popovic**
- **Professor Chris Rust**
- **Professor Keiichi Sato**
- **Professor Stephen Scrivener**
- **Professor Erik Stolterman**
- **Professor Martin Woolley**

Current Research in Design
Tables of Contents from Leading Design Journals: Spring-Summer, 2007

Alice in technoland
Lucy Bullivant
➜ 'Interactive design environments can...take the visitor to somewhere else....An installation designed by Daan Roosegaarde for the Netherlands Media Art Institute in Amsterdam...epitomises this approach.'

Beyond the Kiosk and the Billboard
Lucy Bullivant
➜ 'Commercial billboards and electronic signage limits...interactive art sites. Eskyiu transformed an HSBC bank...with an interactive facade and Antenna Design have created their Civic Exchange project....'

Distinguishing concepts: Lexicons of interactive art and architecture
Usman Haque
➜ 'Haque sorts the wheat from the chaff and brings clarity to bear on the vocabulary and thinking behind interactivity.'

Playing with art
Lucy Bullivant
➜ 'The digital has emancipated institutions from their previous physical constrictions... [A] new level of interaction is being encouraged by specially commissioned installations that encourage the user to physically engage with art.'

Otherwise engaged: New projects in interactive design
Mark Garcia
➜ 'What are the possibilities of interactive technologies delivering a new level of social engagement in architecture?...Mark Garcia reviews the advances that have been made per se, and with four projects in particular, in socially interactive spatial design.'

The architectural relevance of Gordon Pask
Usman Haque
➜ 'The work of Antonio Citterio...has gained an enviable international reputation for his elegant and impeccably well-made buildings.'

Wearable technologies, Portable architectures and the vicissitudes of the space between
Despina Papadopoulos
➜ 'The particular social and cultural impact of wearable devices...[and] a new generation of interactive designers'

Shadow play: The participative art of Scott Snibbe
Lucy Bullivant
➜ 'Realising the potential of the ancient Chinese tradition of shadow play through an interactive digital media'

Illuminating embodiment: Rafael Lozano-Hemmer's relational architectures
Maria Fernández
➜ 'Art and architecture have a strong tradition of humanism....Rafael Lozano-Hemmer...transgresses and challenges these preconceptions.'

I am a camera: Electroland
Hugh Hart
➜ 'West Coast practice Electroland has repurposed surveillance technology in an interactive installation in...the observation platform on top of Rockefeller Center.'

AD+ Interior Eye
Modular mountain retreat
Jayne Merkel
▶ 'Two types of existing prefabricated components and two prototypes that the architects have developed out of their own research'

AD+ Building Profile
Concert hall, Bruges
Jeremy Melvin
➜ 'Provides one of the most exemplary medieval Flemish cities with a window to modernity.'

AD+ Practice Profile
3+1 architects
Andres Kurg
➜ 'The work of 3+1 architects...in Vilnius, Lithuania'

AD+ Spiller's Bits
It's all inside my head
Neil Spiller
➜ '[Marcos] Novak's own scanned brain becomes a literal, reflexive generating force in the formation of a spatial environment.'

AD+ Yeang's Eco-Files
The US solar decathlon 2007
Ken Yeang
➜ 'The US Solar Decathlon...offers teams of young designers the opportunity to flex their ecological muscles.'

Lighting the cavern: Alvar Aalto: Through the eyes of Shigeru Ban
Michael Spens
➜ 'Thoughts on the recent Aalto exhibition at the Barbican'

McLean's Nuggets
Will McLean
❧ no abstract

The crystal at the Royal Ontario Museum
Sean Stanwick
➜ 'A catalyst for the city's cultural and architectural renaissance'

Using language as related stimuli for concept generation
Vey Chiu and L.H. Shu

Linguistic support for concept selection decisions
J. Delin, S. Sharoff, S. Lillford and C. Barnes

Ontology-based design information extraction and retrieval
Zhanjun Li and Karthik Ramani

Answering engineers' questions using semantic annotations
Sanghee Kim, ROB H. Bracewell and Ken M. Wallace

Product family design knowledge represen-tation, aggregation, reuse, and analysis
Jyotirmaya Nanda, Henril J. Thevenot, Timothy W. Simpson, Robert B. Stone, Matt Bohm and Steven B. Shooter

Theorizing design
Rachel Cooper

Theorizing things: Status, problems and benefits of the critical interpretation of objects
Prasad Broadkar

Product talk
Josiena Gotzsch

Seamless knitwear – the design skills gap
Kate Sayer, Jacquie Wilson and Simon Challis

Design-based knowledge transfer partnerships
Bob Jerrard

Enhancing the design capabilities of small and medium-sized enterprises through knowledge transfer
Ian Montgomery and Brian McClelland

Clusters: A possible alternative to ktps for improving design knowledge?
Kathryn Burns

Transfer or emergence: Strategies for building design knowledge through knowledge transfer partnerships
Tom Inns, Seaton Baxter and Emma Murphy

Professionalizing a cottage industry: Ktps and design group development
Seymour Roworth-Stokes

Democratizing innovation
Eric von Hippel

Charles Leadbeater
Mike Press

Brand strategy and retail environments
Barry Seifer
➜ '[Seifer] advises managers to design environments that engage the emotions and to be sure that there is consistency in the brand, corporate vision, and market position.'

Cool by design
Celina Lardapide
➜ 'Urban Outfitters depends on its stores and the "buzz" among consumers and in the media to generate business.'

Design managers as company strategists
EunSook Kwon
➜ 'How a fine tuned office layout can improve communications and business processes'

Disruptive demographics, design, and the future of everyday environments
Joseph F. Coughlin
➜ "The aging of 80 million baby boomers is shifting the design agendas for many businesses.'

Do design lines add value?
Jan Schoormans
➜ 'it might seem that a family of different products related by a well-chosen vocabulary of design attributes would be a compelling way to grow sales and loyalty. Research...suggests, however, that this strategy...has an impact limited to very specific circumstances and groups of consumers.

Experiential marketing as a wundt(erful) experience
Stephen Mapes
➜ 'The "Experience Drama Curve" can help transform space into a sequence of environments that capture a customer's attention and imagination.'

Leveraging unique environments through-out large retail networks
Eduardo Alvarez
➜ 'Service businesses face the extra hurdle of having "products" that cannot be touched or tried on.'

Place branding: New tools for economic development
George Allen
➜ 'The principle that cities and regions can be branded...offers new opportunities for attracting economic development and tourism.'

Solving the right problem: A strategic approach to designing today's workplace
Arnold Craig
➔ 'What matters are workplaces that support a company's processes, structure, strategies, people, and reward system.'

When there 's no salesperson: The value of a consumption vocabulary
Stephen J. Hoch
➔ 'effective point-of-sale information design can be used to increase consumer wisdom and leverage sales.'

Design, the future and the human spirit
Victor Margolin

"Feeding the lion:" One internal design group's odyssey
Adam Kallish

The design enterprise: Rethinking the HCI education paradigm
Anthony Faiola

The best laid plans of mice and men: The computer mouse in the history of computing
Paul Atkinson

Rigor and practice-based research
Michael A. R. Biggs, Daniela Büchler

Integration of design projects within a Ph.D.
Owain Pedgley, Paul Wormald

International Conference on the Cultural Industry and the Education of Art and Design: The future of design education in different cultural contexts
Fenggen Qian

Book reviews
► The archeworks papers,1:2
Stanley Tigerman, editor

► Modernity, woman and men: An introduction to design and culture, 1900 to present
Penny Sparke

► Louis I. Kahn: Building art, building science
Thomas Leslie

On Albert Borgmann's real American ethics
Cameron Tonkinwise
➔ 'Philosophers who use the word design, with reference to the human practice of making things (happen) … are few. The most notable contemporary exception is Albert Borgmann. It is frustrating that … engagement with his work by design practitioners and researchers, is almost non-existent.'

Redirective practice
Tony Fry
➔ 'adaptation in face of what has to change to counter the unsustainable; the elimination of what threatens sustainment by designing 'things' away; and prefiguration, which is designing in order to redirectively deal with what is coming'

living room totem of the unsustainable
Eli Blevis
➔ One way to conduct research … is to collect personal inventories of interactive technologies in situ…. Starting with an "ultimate particular" can lead to insights … on a larger scale.'

Special issue on participatory design

Learning to talk to users in participatory design situations
Rachel Luck
► architectural design; design practice; design education; communication; user participation

Participatory design in community informatics
John M. Carroll and Mary Beth Rosson
► community informatics; design methods; information design; user participation

Integrating the Rational Unified Process and participatory design for development of socio-technical systems: a user participative approach
Sofie Pilemalm, Per-Ola Lindell, Niklas Hallberg and Henrik Eriksson
► Rational Unified Process; systems design; user participation; collaborative design

Information technology as a tool for public participation in urban planning: a review of experiments and potentials
Malgorzata Hanzl
► urban design; user participation; collaborative design; virtual reality; information technology

Recent trends in community design: The eminence of participation
Zeynep Toker
► collaborative design; design practice; decision making; user participation; new urbanism

Including excluded perspectives in participatory action research
Caitlin Cahill
► participatory action research; research methods; social design

The impact of working memory limitations on the design process during conceptualization
Zafer Bilda and John S. Gero
► conceptual design; working memory; design cognition; protocol analysis

Locating design phenomena: A methodological excursion
Ben Matthews
▸ case study; design activity; design practice; research methods; practices of analysis

Improving an existing product family based on commonality/diversity, modularity, and cost
Fabrice Alizon, Steven B. Shooter and Timothy W. Simpson
▸ design method(s); design tools; product design; design management

Towards an anticipatory view of design
Theodore Zamenopoulos and Katerina Alexiou
▸ design theory; design problems; epistemology; modelling; anticipation

Principles of design leadership for industrial design teams in Taiwan
Kim C.K. Lee and Thomas Cassidy
▸ design leadership; design management; industrial design; creativity; product design

Does typographic design of examination materials affect performance?
Maria dos Santos Lonsdale
▸ legibility; question and answer sheet layout; reading examinations; search reading; text layout

Website hierarchy and the interaction between content organization, webpage and navigation design: A systemic functional hypermedia discourse analysis perspective
Emilia Djonov
▸ children's websites; hypermedia discourse; information architecture; social semiotics; systemic functional theory; user orientation; website hierarchy; website usability

Weighing-up line weights: The value of differing line thicknesses in technical illustrations
Clive James Richards, Nicolas D'Amour Bussard and Robert Newman
▸ coloured backgrounds; line drawings; line weights; technical illustrations; visual clarity; visual diction

Creating effective illustrations for pictorial assembly instructions
Peter Schumacher
▸ diagnostic testing; illustrations; pictorial assembly instructions

Laying out software architecture diagrams
Jim Curran

Does typographic design of examination materials affect performance?
Maria dos Santos Lonsdale

Language quake: Symbolic activity in information design
Max Louwerse and Maria Giaele Infantino

Website hierarchy and the interaction between content organization, webpage and navigation design: A systemic functional hypermedia discourse analysis perspective
Emilia Djonov

Ten years after: An interview with Karen Schriver about the lasting impact of the dynamics of document design
Saul Carliner

Book Reviews
▸ Beautiful Evidence
  Edward R. Tufte
  Graphics Press.

▸ Writing and digital media; studies in writing
  Luuk van Waes, Mariëlle Leijten and Chris Neuwirth Eds. Elsevier.

▸ Evaluation of a computer-based instructional package about eating disorders. M.L.E. Kerwin
  Computers in Human Behavior, 22 (6).

▸ Question Understanding Aid (QUAID). A web facility that tests question comprehensibility
  A. Graesser, Z. Cai, Z., M. Louwerse, M. & F. Daniel
  Public Opinion Quarterly, 70 (1), 3-22

▸ Managing corporate visual identity: Exploring the differences between manufacturing and service, and profit-making and nonprofit organizations.
  L. M. Annette, A.L.M. Van den Bosch, M.D.T. De Jong, & W.J.L. Elving
  Journal of Business Communication, 43 (2), 138-157.

▸ Corporate branding, identity and customer response
  P.A. Dacin & T.J. Brown.
  Journal of the Academy of Marketing Science, 34 (2).

Supporting pupils with dyspraxia in the visual arts: Does drawing from observation function as an official and discriminatory Discourse?
Claire Penketh
➡ 'Prioritising a formalist approach to the teaching of specific skills and mastery of techniques, and...the implications that this may have for [dyspraxic] pupils'

A conceptualisation of emotion within art and design education: A creative, learning and product-orientated triadic schema
David Spendlove
➡ 'Calls for the recognition and conceptualisation of a triadic schema for theorising the location of emotion within a creative educational experience'

Transitional spaces: Mapping physical change

Juliet Sprake and Helen Thomas

➤ 'The argument that a museum building as a subject is a constantly changing environment, through which young learners can develop their historical imagination and critical abilities'

Recording the creative process: An empirical basis for practice-integrated research in the arts

Bill Gillham and Helen McGilp

➤ '[The case for] narrative reporting (the creative process journal) as a methodology for practice-integrated research in the arts'

Conditions for learning: Partnerships for engaging secondary pupils with contemporary art

Lesley Burgess and Nicholas Addison

➤ '[Questioning] whether the perceived constraints of traditional art and design pedagogy can be overcome by changing the conditions in which learning takes place'

Provoking points of convergence: Museum and university collaborating and co-evolving

Nadine Kalin, Kit Grauer, Jill Baird and Cheryl Meszaros

➤ 'With the creation of this programme and through the forging of relationships with area museums, unique ways have evolved for graduate students from diverse areas of education and art teacher education candidates to interact with works of art, museum professionals, artists, and the museum space itself.'

An analysis of the presentation of art in the British primary school curriculum and its implications for teaching

Jenny Hallam, Helen Lee and Mani Das Gupta

➤ 'The way art is conceptualised in the British primary school curriculum and...an evolution of ideas that have shaped the way art is presented in the modern day primary curriculum'

An Analysis of the political complexion of the 1835/6 Select Committee on Arts and Manufactures

Mervyn Romans

➤ 'The politicians who sat on the 1835/6 Select Committee'

Exploring types and characteristics of product forms

Wen-chih Chang and Tyan Yu Wu

▶ emotion; pleasurable products; product forms; cluster analysis

A usability evaluation of web map zoom and pan functions

Manlai You, Chun-wen Chen, Hantsai Liu and Hsuan Lin

▶ web map; zoom; pan; interface design; usability; human-computer interaction

Effects of RSVP display design on visual performance in accomplishing dual tasks with small screens

Chien-Hsiung Chen and Yu-Hung Chien

▶ display; mobile communication; rapid serial visual presentation; small screen; visual performance

Guerrilla wars in everyday public spaces: Reflections and inspirations for designers

Pieter Desmet and Paul Hekkert

▶ experience; aesthetics; meaning; emotion; design psychology

Framework of product experience

Pieter Desmet and Paul Hekkert

It looks like a Toyota: Educational approaches to designing for visual brand recognition

Toni-Matti Karjalainen

▶ brand identity; design semantics; education; product design; visual recognition

A phenomenographic study of Greek primary school students' representations concerning technology in daily life

Christina Solomonidou

▶ daily life technologies; primary education; social factors in representing technology; students' representations; teaching technology; technological literacy

The effect of alternative approaches to design instruction (structural or functional) on students' mental models of technological design processes

David Mioduser and Osnat Dagan

▶ design process; design functions; mental models; technology education

Creativity in school design & technology in England: A discussion of influences

David Barlex

▶ creativity; curriculum; design & technology; designing; pedagogy

Designers as teachers and learners: Transferring workplace design practice into educational settings

B. Mawson

▶ design process; learning; teaching; workplace

Teachers learning about technology and technology education: Insights from a professional development experience

▶ teacher knowledge development; technology concepts; teacher professional development; technology education

Can twenty years of technology education assist 'grass roots' syllabus implementation?
Ian Spurway Ginns Contact Information, Stephen J. Norton1, Campbell J. McRobbie and Robert S. Davis
▶ technology education; technology education research; technology syllabus; teacher practice; teacher professional development

Programming for the Internet and experiential learning: A new approach incorporating a constructed world contact information
Adam P. R. Taylor
▶ engineer; construction; culture; experiential learning; identity; internet programming; sense making

Aspects of consideration in product development research
Evastina Björk a; Stig Ottosson
▶ action research; insider action research; product development; research methods; usability

An analytic network process-based approach to concept evaluation in a new product development environment
Z. Ayagbreve a and R. G. özdemir
▶ new product development; concept selection; Multiple-criteria decision-making; Analytic network process

Market segmentation for product family positioning based on fuzzy clustering
Yiyang Zhang, Jianxin (Roger) Jiao, Yongsheng Ma
▶ product family; mass marketing; market segmentation; fuzzy clustering

Modelling and analysis of system robustness
Armen Zakarian, James W. Knight and Lusine Baghdasaryan
▶ system modelling; system integration; robust design; parameter design

On representations and dynamic analysis of concurrent engineering design
Dohyeon Kim
▶ concurrent design; work transformation matrix; dynamics of design iteration; discrete state-space modelling

Phase reviews versus fast product development: a business case
Sameer Kumar and William Krob
▶ phase reviews; PACE®; stage-gate; phase-gate; new product development; product lifecycle management; simultaneous engineering; three-dimensional concurrent engineering; design for manufacturing and assembly; integrated product and process development

A design methodology to create constraint-based human movement patterns for ergonomic analysis
Ross H. Mitchell, Anthony J. Medland and Aki I. T. Salo
▶ computer-aided design; ergonomic design; human-machine interaction; movement descriptor; sit-to-stand

An introduction to capturing and understanding the cognitive behaviour of design engineers
Fiona Coley, Oliver Houseman and Rajkumar Roy
▶ design behaviour; design cognition; problem-solving; protocol analysis; research techniques

Experiment on a system-level design tool
Joshua Austin Ruder and Durward Kenneth Sobek II
▶ engineering design education; design experiment; system-level design; empirical research

Application of data-driven design optimization methodology to a multi-objective design optimization problem
H. Zhao, T. Icoz, Y. Jaluria snd D. Knight
▶ dynamic data-driven application system; data-driven design optimization methodology; multi-objective design optimization; regression model

Design of a non-circular planetary-gear-train system to generate an optimal trajectory in a rice transplanter
Kang-Yul Bae and Young-Soo Yang
▶ non-circular planetary-gear train; optimal trajectory; inverse kinematics; gear shape

Split-line design for given geometry and location schemes
Andreas Dagman, Rikard Söderberg and Lars Lindkvist
▶ product design; industrial design; design process; geometrical assurance

Developing urban design as public policy: Best practice principles for design review and development management
John Punter
▶ architecture; architectural structure & design; architecture: architectural structure & design; built environment; city & town planning; architectural; city & town planning; architectural aspects; planning; urban design; urban studies

Perceiving and valuing sense of community in a new urbanist development: A case study of Kentlands
Joongsub Kim
▶ architecture; architectural structure & design; architecture; architectural structure & design; built environment; city & town planning; architectural; city & town planning; architectural aspects; planning; urban design; urban studies

City centre revitalization in Portugal: A study of Lisbon and Porto

Carlos J. L. Balsas

▸ architecture: architectural structure & design; architecture: architectural structure & design; built environment; city & town planning - architectural; City & town planning - architectural aspects; planning; urban design; urban studies;

Spatial Synergy and Supportiveness of Public Space

Dieter Frick

▸ architecture: architectural structure & design; architecture: architectural structure & design; built environment; city & town planning - architectural; city & town planning - architectural aspects; planning; urban design; urbanstudies;

The role of urban quality in the planning of international business locations: The case of Amsterdam Zuidas

Jan Jacob Trip

▸ architecture: architectural structure & design; architecture: architectural structure & design; built environment; city & town planning; urban design; urban studies;

A new urban planning approach for the regeneration of an historical area within Istanbul's central business district

Engin Eyübogbrevelu, Ayscedile Sema Kubat, Özhan Ertekin

▸ architecture: architectural structure & design; architecture: architectural structure & design; built environment; city & town planning; architectural; city & cown planning - architectural Aspects; planning; urban design; urban studies

Visible Language
40:3, Fall, 2006
ISSN: 0022-2224   WEB LINK

A comparison of Maya and Oracle bone scripts
William Chaing

Typography behind the Arabetic calligraphy veil
Saad D. Abulhab

▸ calligraphic forms of Arabic script and digital technology

Analyzing multimodal interaction within a classroom setting
Heloisa Moura

➡ 'the specific place of action and multimodal interaction within the learning process'

Children's responses to line spacing in early reading books or 'holes to tell which line you're on'
Linda Reynolds, Sue Walker and Alison Duncan

➡ 'whether children's reading would be affected by line spacing that is wider or narrower than the commonly used default values.'

▸ Key words (from listing)

⯈ Editor's summary (from abstract)

⯈ Quotation (from abstract) with or without editor's summary.

Emerging Trends in Design Research

11-15 November, 2007
Hong Kong Polytechnic University

http://www.sd.polyu.edu.hk/iasdr

Design Process issues:
▸ identifying the limits of user research
▸ making collaborative decisions
▸ managing information resources
▸ evaluating innovation potential
▸ exploring multimedia and multimodality

Design Research issues:
▸ developing collaborative research strategies
▸ exploring digital convergence
▸ managing multiple problem/solution perspectives
▸ translating research findings to design action
▸ communicating research findings effectively
▸ creating research community
▸ developing new research methods
▸ funding basic research in design

Design Education issues:
▸ blending art and science
▸ identifying fundamental knowledge for design
▸ creating distance learning approaches for design
▸ exploring industry-academia research partnerships
▸ developing quality assurance for design education

Social issues:
▸ controlling privacy
▸ controlling environmental degradation
▸ supporting human equality
▸ supporting development in undeveloped regions
▸ changing human behavior

Upcoming Events
Design Conferences Worldwide

Artemis Yagou

2007

14-18 Aug. **Copenhagen, Denmark**
Fashioning Technology: Design
from Imagination to Practice
The International Committee
for the History of Technology
Symposium 2007
http://www.icohtec2007.dk/

21-22 Aug. **Chicago, USA**
6th Design Research
Conference
IIT Institute of Design
www.
DesignResearchConference.com

22-25 Aug. **Helsinki, Finland**
UE+/User Experience Plus,
Designing Pleasurable
Products and Interfaces 2007
http://designresearch.
uiah.fi/dppi07/

28-31 Aug. Paris, France
16th International Conference
of Engineering Design
http://iced07.org

5-7 Sep. **Kingston, U.K.**
Design/Body/Sense:
Design History Society
Annual Conference
http://www.
designbodysense.co.uk/

12-14 Sep. **London, U.K.**
Designs on eLearning
http://www.
designsonelearning.net/index.
php?section=1&item=3

12-16 Sep. **University of Brighton, U.K.**
ATypI 2007 Conference
http://www.atypi.org

13-14 Sept. Newcastle upon Tyne, U.K.
EPDE07 - The 9th International
Conference on Engineering
& Product Design Education:
Shaping the Future?
http://www.cfdr.co.uk/epde07/

19-21 Sept. **Montreal, Canada**
EuropIA.11: 11th International
Conference on Design
Sciences & Technology
http://europia.org/EIA11

19-18 Oct. **Jena, Germany**
DIME - RAL2 WP 2.2
Conference 2007 on:
Demand, Product
Characteristics and Innovation
http://www.dime-eu.org/
innovation_conference_2007

29-30 Oct. **Farnham, U.K.**
Sustainable Innovation
07 - Global Building and
Construction: Systems,
Technologies, Products
and Services 12th
International Conference
http://www.cfsd.org.uk/

29-31 Oct. **Mexico City, Mexico**
Second MX Design
Conference 2007
http://www.dis.uia.mx/
conference/2007

12-15 Nov. **Hong Kong**
Emerging trends in de-
sign research
International Association
of Societies of Design
Research 2007
http://www.sd.polyu.
edu.hk/iasdr/

2008

25-27 Feb. **Cape Town, South Africa**
DIS2008
http://www.sigchi.org/dis2008/

Mar. **Kyoto, Japan**
Cumulus Kyoto 2008
http://www.kyoto-seika.
ac.jp/cumulus/eng/07_
callfor/papers.html

14-16 May **Toulouse, France**
ICHSL.6
http://www.ichsl6.org

19-22 May **Dubrovnik, Croatia**
DESIGN 2008
http://www.
designconference.org

16-19 Jul. **Sheffield. U.K.**
Undisciplined!
Design Research wSo-
ciety Conference
http://drs2008.designinquiry.
wikispaces.net/

3-6 Sep. **Falmouth, U.K.**
Networks of Design:
Design History Society
Annual Conference
http://www.
designhistorysociety.org

9-12 Oct. **Lisbon, Portugal**
Society for the History
of Technology 50th
Anniversary Conference
http://www.
historyoftechnology.
org/fiftieth.html

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➜ articles	▶ philosophy of design
➜ exhibitions	▶ design theory
➜ books	▶ art
	▶ engineering
	▶ anthropology
	▶ architecture
	▶ systems design
	▶ design management
	▶ CAD
	▶ ergonomics
	▶ psychology
	▶ computer science
	▶ information design
	▶ informatics
	▶ design for development
	▶ and many other subjects.

Design Research News Online:

http://www.jiscmail.ac.uk/lists/ design-research.html

Membership:

Design Research Society
Design Research Quarterly

The Design Research Society is the multi-disciplinary learned society for the design research community worldwide.

We have an international design research network in around 40 countries comprising members who maintain contact through our publications and activities.

Our members are from diverse backgrounds, not only from the traditional areas of design, ranging from expressive arts to engineering, but also from subjects like psychology and computer science.

We:

▶ Recognize design as a creative act common to many disciplines
▶ Understand research and its relationship with education and practice
▶ Advance the theory and practice of design
▶ Encourage the development of scholarship and knowledge in design
▶ Contribute to the development of doctoral education and research training
▶ Share knowledge across the boundaries of design disciplines
▶ Facilitate networks to exchange and communicate ideas, experience and research findings among members
▶ Disseminate research findings
▶ Promote awareness of design research
▶ Organise and sponsor conferences, and publish proceedings
▶ Encourage communications between members internationally
▶ Respond to consultative documents
▶ Collaborate with other bodies
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