

Educating those involved in changing human futures

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Designing & Human Futures

- The purpose of undertaking acts of designing is to produce designs for artifacts that are intended to change human futures.
- Acts of designing occur in a wide variety of disciplines - mainly by untrained individuals.
- Designing is a key element of most forms of professional activity.

Human futures integrates design education

Core issues in designing are:

- *Social* - designing is a human activity & creates complex change for humans.
- *Ethical* - designing involves human values in choosing good/bad, include/exclude, do/don't do etc.
- *Environmental* - designing is intended to change human environments.

Fields of Design Education

There are three main groupings:

- Technical fields of designing - e.g. engineering, software, and systems (45%).
- Fields of designing based on Art & Craft traditions - e.g. graphic designing (5%).
- Other fields of designing - e.g. organisation designing, instructional designing, policy designing (50%).

Fragmentation of design education

- Fragmented and uncoordinated across fields and professions in its approaches, content, methods and practices.
- Divided by single discipline issues about:
 - Disciplinary cultures
 - Theories and perspectives
 - Organisational issues
 - Praxis

Integrating Design Education

Integrating ‘Art and Craft’ and ‘Theory’ cultures of design education shows up weaknesses in coordinating:

- ontology
- epistemology
- concepts
- theories
- terminology

These are core issues in building design education!

Some problem areas

- Educational content limited to single discipline.
- Ontological, epistemological and theoretical foundations different for different disciplines.
- Little agreement about key concepts.
- Single discipline focus problematic for multi-disciplinary designing for human futures.
- Poor basis for communication between designers from different disciplines.
- Single discipline designers limited inability to draw on knowledge from other disciplines.

Multi-disciplinary designers

- Similar level of understanding as a university-qualified practitioner in technical, social, business and other disciplines.
- Involves more than supplementary courses in e.g. ‘social issues’, ‘business ethics’, ‘contextual issues’, or ‘cultural analysis’.
- Requires *full-strength* final year units from other disciplines, and a significant reduction (say >50%) in current course content.

Types of designers involved in the building human futures

- Designers of visual outcomes and surfaces
- Technical designers in e.g. engineering, information systems, architecture
- ‘Other’ professional designers in e.g. management, government, agriculture.
- All human beings undertaking the often hidden acts of designing that help define & shape possible human futures

Defining the activity of designing

- Test: “Can X occur without Y?”
- This test separates ‘the activity of designing’ from many associated activities such as; drawing, calculating, analysis - even thinking.
- The test implies that ‘the activity of designing’ cannot be easily separated from ‘the activity of feeling’.
- The above distinctions are important to defining appropriate education for designers.

Summary: Key understandings in educating designers

- Designed artefacts shape human futures in short & long term.
- Improving human futures is a key aspect of designing and design education.
- Designers have responsibilities because of their influence on the development of individuals and societies.
- Substantial contributions available in Futures Studies research literature.

Summary: adverse factors

- Current discipline-based aims and pedagogies of design education & practices.
- Assumption that designing is only done by single discipline design professionals.
- Conceptualising designing in terms of associated skills - rather than as a distinct activity itself.

Designing and the design education to improve human futures

- Multi- disciplinary designers able to analyse and utilise findings of many disciplines that they tertiary level of skill.
- Wide-ranging analyses of factors impacting on designing & broader effects of designed artefacts.
- Grounded in Futures Studies methods, theories and projections.
- Include the acts of designing of all persons - professional or not - involved in creating the future

Separating designing from associated activities - basic issues

Clarifies many issues about:

- Who is doing the designing.
- What skills designers need.
- Which education processes, content, and pedagogies are appropriate.

Separating designing from associated activities - research

It opens up research avenues including:

- making explicit different aspects of human functioning related to designing.
- Exploring how humans bring together ‘designing’ with associated activities e.g. drawing.
- Exploring how actthes of designing are shaped by each designer’s past experiences and physiology.

Separating designing from associated activities - education

- Offers the extension of design education into most disciplines.
- Clarifies & resolves many cross-disciplinary conceptual conflicts in design education.
- Provides the basis of a broad education aimed at improving individuals' cognito-affective designing processes.
- Provides the basis for identifying the educational content and training is necessary to educate designers who are fluent in a wide variety of disciplinary areas.