

Integrated Studies 2

Week 3

What is a Discipline?

- **Discipline, in this sense,** refers to a branch of knowledge or learning
- Academic disciplines are therefore branches of knowledge that are formally recognised by funding bodies and institutions.
- Disciplines normally have their own clearly defined areas of concern, with formalised objects, laws and areas of concern, and with particular terminology / jargon relating to this.

What Disciplines?

- Natural sciences: Such as Astronomy, Behavioral science, Biology, Chemistry, Physics, Earth sciences
- Mathematics and computer science: Mathematics, Computer science
- Social sciences: Such as Anthropology, Archaeology, Communications, Economics, Ethnic Studies, Ethnology, History, Geography, Linguistics, Political science, Psychology, Semiotics, Sociology
- Humanities and arts: Such as Area studies (sometimes called cultural studies), Art, Classics, Creative writing, Dance, English literature, Film studies and film criticism, Folklore, History, Linguistics, Literature and cultural studies, Music, Museology, Mythology, Philology, Philosophy, Religious studies, Theatre, Women's studies and gender studies
- Professions / Applied sciences: Such as Design, Business, Education, Engineering, Ergonomics, Agriculture, Forestry, Family and consumer science, Journalism and mass communications, Law, Library and information science, Health sciences, Military science, Public affairs and community service

Multidisciplinarity?

- **Interdisciplinarity should be distinguished from Multidisciplinarity...**
- **Royal Society Report (1996)**
- **“Multidisciplinary research involves people from different fields co-operating: working together towards a common goal but staying within the boundaries of their own fields.”**
- **“...the outcome of good interdisciplinarity work is greater than the sum of its parts. ...Unlike disciplinary research, which formulates the problems it tackles to match its methodologies, it is more issue-driven and therefore more holistic”**

What is Interdisciplinarity?

- (From Wikipedia)
- **Interdisciplinarity** is a type of academic collaboration in which specialists drawn from two or more disciplines work together in pursuit of common goals.
- It is either very new or very old
- Such work is often stimulated by external need to tackle problem areas from a broader perspective, such as climate change research
- Examples of former interdisciplinary research areas that have become disciplines include neuroscience, biochemistry, and biomedical engineering.

Interdisciplinarity and Communication

- Kim (1990) points out that “Disciplines, like all human tools, are by nature rigid” and therefore designed to perform specific tasks
- Often communication issues arise
- The habits and jargon specific to the discipline are often invisible to people within that discipline in the same way as cultural habits are often opaque to people within that culture
- Questioning or challenging the presumptions of a discipline without understanding their jargon and concern area can often appear either threatening or ill-conceived

Interdisciplinarity

Discussion

- Interdisciplinarity paper summary reports and discussion
- Kyriakos - Kim, S. (1990). Interdisciplinary Cooperation. In B. Laurel (ed.), *The art of human-computer interface design*, p31-45.
- Alicja - Scaife, M., Curtis, E. & Hill, C. (1994). Inter-disciplinary collaboration: a case study of software development for fashion designers. *Interacting with Computers*, 6(4), 395-410.
- Antonia - de Young, L. (1996) Organisational support for software design. In T. Winograd (ed.). *Bringing Design to Software*, p253-273.
- Hannah - Burns, C. & Vincente, K.J. (1995). A framework for describing and understanding interactions in design. *DIS'95, ACM*, p97-103.

Interdisciplinarity

 BREAK

Interdisciplinarity

- In pairs discuss the following to feed back to the class based on the readings:
- What is/was your discipline? What defined it and what terms were commonly used? (in your opinion)
- Is Interdisciplinarity always a good thing? What advantages or disadvantages are there?
- How does this relate to you? (Have you experienced communication issues across disciplines or worked with people from other disciplines?)

Interdisciplinarity

- In your groups list the main roles that were listed in the video last week and what their discipline would have been
- Pretend there is a problem with a game that you have been developing in such a company. What would your main concerns be?
- Complete the sheet with this in mind

Interdisciplinarity

- In your groups discuss communication issues that may arise between the different groups
- Devise a brief role play showing a potential problem that could occur between two of these groups

Interdisciplinarity Essay

- Assignment: A 1000 word written report due week 7 (30% assessed marks)
- “What is Interdisciplinarity?”
- **Due:** Thursday 4pm on 23rd February 2006