Interdisciplinarity: Q & A

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What?

What is interdisciplinarity?

• Problems are non-disciplinary
• People are trained to be disciplinary
• Teams can be multidisciplinary
• Methods can enable interdisciplinary practices
• The result of interdisciplinarity is usually transdisciplinary
Why?

Why are interdisciplinary centres arising?
• Because the development of science and technology have to face increasingly complex challenges

Why are Universities so reluctant in assimilating/legitimizing interdisciplinarity?
• Because they evolved according to disciplinary fragmentation

Why non-academic research institutes are more flexible towards interdisciplinarity?
• Because they are usually problem-oriented and once a task is completed, the team is redeployed to other tasks.
Who are the interdisciplinary researchers?

• They are usually members of a team working on a complex problem. The composition of the team varies from one problem to the other. There is no incompatibility between being a member of an interdisciplinary team and keeping the disciplinary affiliation.
Where?

Where does interdisciplinary research flourish?

• There is a growing demand for these practices (both in training and in research). Niches emerge usually from bottom-up, where the institutional environment is favourable (or at least not unfavourable).
When is interdisciplinary research needed?

- Whenever there is a complex question, which can’t be solved within the limits of a discipline or just by adding multidisciplinary elements.
How to connect disciplines and reach interdisciplinary goals?

- The need to develop methods & tools, such as I2S.

How does it look like?

- Multidisciplinary team = mosaic of disciplines (static)
- Interdisciplinary teams = kaleidoscope; the shape changes, according to the focus (dynamic). The hierarchy of the members of the team changes, as the focus changes.
FROM DISCIPLINES TO INTERDISCIPLINARITY
THE ROLE OF I2S
In some cases, multidisciplinary teams can solve the problem

Ex.: making a car (conception, development, design, production, quality control etc.)
But sometimes interdisciplinarity is needed

Ex.: dealing with climatic changes (understanding natural cycles, measuring and modelling impacts, evaluating vulnerabilities and adaptation strategies, proposing mitigation policies etc.)
References:

[http://dx.doi.org/10.1080/13504622.2013.780587](http://dx.doi.org/10.1080/13504622.2013.780587)

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