Exploring the fun in science: a prerequisite for succesfull RCR-courses

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Pitfalls

Theoretical endeavour that in most cases will not result in the internalisation of the principles of RCR
Pitfalls

limiting the teaching to a small staff, thus not involving a large group of researchers as role models
Challenge

• Design RCR courses in which students feel challenged to discover the underlying principles and moral issues in responsible research themselves whilst at the same time sharing this discovery with their role models
Teaching scientific integrity
Principle based or virtue-based?

• “Principle-based approaches stress the importance of following moral rules, while the virtue-based approaches emphasize moral character development.”

• “The principle-based approach may be most useful in formal instruction in research ethics.”

• “The virtue-based approach may be more useful in informal instruction in research ethics, i.e., mentoring.”

Whom am I doing this for?

http://integrityfactor.nl/glossary (science 4.01-4.30)
Mandatory RCR – course

On average 100 PhD-students/semester

• small group learning (10 max)
• mixed groups (different disciplines)
• a repository with structured background information, giving the PhD students responsibility for their own learning process
• experienced researchers as coaches
Challenges and worries

• A pool of 20 coaches was needed to ensure continuity

• The motivation of the PhD students as it is a mandatory course
Results

• After three rounds evaluations show that the course is seen as a necessary, interesting, self-evident and even fun part of doing research.

• The pool of coaches consist of 45 researchers – role models.
How can we explain this succes?

• Buzz

• Discovery

• Role models
Before the courses started we created a buzz in setting up a ‘fun’ project that involved a lot of dedicated researchers offering their expertise: an interactive film Integrity Factor (see [www.integrityfactor.nl](http://www.integrityfactor.nl)). The research community was already involved in making RCR–reflection available for young researchers in a non-traditional way.
Discovery

• The driving force of the course is taking the process of discovery by the PhD student as central.

• Some PhD-students now write articles about their specific RCR-topic
Role models

We fostered a culture in which researchers were eager to be coach: they were invited to be role models.

The pool of coaches consist of 45 researchers – role models

http://integrityfactor.nl/glossary scientific biases
“There is never a dull moment in science”

Thank you for listening