



INTEGRITY

**Empowerment as core focal
point in RCR education**

Lunch session at Amsterdam UMC



This project received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824586.



Universiteit Utrecht

Context of empowerment in Education

- SWAFS 2018 call on educational tool in RI > 2019-2021 project with 11 partners
- Aim: to develop innovative tools for high school students, undergraduate students and early career researchers > Why these target groups?
- Taking RCR as starting point (learning how to do things right, not so much focusing on ideal behaviour), and taking non-ideal world (with plenty of grey areas) as a given.

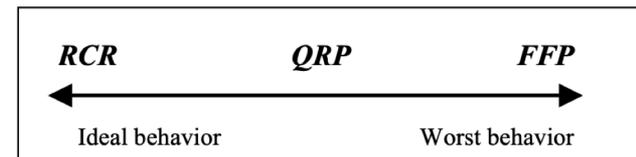


Fig. 1. Current framework for Defining Research Behaviors

Empowerment as leading concept?!

- Strong concept, leading back to Freire's Pedagogy of the oppressed (conscientizacao), found in work of Foucault. I mainly use the first author (as he influenced educational sciences a lot)
 - Vocation of humanity is to humanize (systems of oppression jeopardize this)
 - Dialogue is a means to liberate humans (stimulates epistemological curiosity about what dialogue requires)
 - 'One cannot think for others and others cannot think for me'
- Lawson: 3 elements of empowerment
 - Personal effectiveness (being able to do things oneself)
 - Critical autonomy (i.e. ability to think for oneself)
 - Community (ability to work with a group to achieve social change)

Core elements of empowerment II

In literature

- Taking control, taking power
- Positive and proactive concept (focusing on change, improvement)
- Levels of empowerment: individual, organizational level and community level (all need to be involved to make real changes)

In RCR context

- Stimulate reflection in research practices on what one can 'control' and what seems 'out of control'
- Focusing on 'good behaviour' and 'doing things right' in a pro-active way (like active bystanding)
- Levels are relevant in research practices as well (systematic change as well as individual changes)

From core elements to competence profile on RCR empowerment

- Process: using a Delphi method: presenting core elements from literature to consortium members > going back and forth and defining 'competences'
- List with competences defined that can be used at all target group levels (high school, undergraduate and graduate)
- Core competences and additional competences (not a gradual model like 'insufficient/sufficient/excellent')
- We will continue to scrutinize the list with core competences, using feedback from teachers and evaluations from our educational tools

Rules of thumb for the competence profile

- Competences need to be interpreted from the abstract to the specific (topic, study level, discipline)
- When aiming for a specific competence based on this profile, first ask yourself 'how will this empower the students/participants of my course towards RCR'?
- It is impossible to achieve all competences within the context of one course. Therefore, it is wise to focus on a few competences instead of slightly touching upon them all;
- If possible, setting up a curriculum (learning trajectory) will help to build capacities throughout the years and will lead to more competences being achieved;
- Each competence could be achieved on each level of studies, yet it will get a different shape and might apply to different topics.
- So, it is well possible that one specific competence is core to multiple trainings in various study phases, while other competences could be more study phase specific (e.g. learning how not to plagiarize will not differ much across trainings)

A good researcher ...

Has basic knowledge on what (a) research (project) entails (research cycle, designing a study, using appropriate methodology, collecting & analysing data, reporting findings) and what challenges this brings with it;

Can explain rules and regulations regarding academic & research integrity (like codes of conduct, rules on plagiarism, etc.) and apply them to generic cases

Is able to apply rules and regulations of responsible conduct of research and research/academic values to one's own project/field, and to conduct one's research (project) according to RCR standards and values;

Can recognize and point out what integrity issues are relevant in one's own context and how they relate to debates on Responsible Conduct of Research (RCR);

Is able to identify and reflect on relevant RCR aspects in a given situation;

Is able to determine relevant strategies in a situation in which RCR is at stake;

Can determine an appropriate course of action in a situation in which integrity is at stake (also in consultation with others);

Is an active bystander (i.e. takes active responsibility) when encountering situations that could jeopardize RCR;

Expresses adherence to norms of responsible conduct of research;

Demonstrates in one's reflections and decisions that one feels up to addressing issues of RCR and integrity with others;

Recognizes, and is able to withstand stimuli to condone misconduct;

Understands the institutional context of integrity issues, and how one's individual role is sometimes limited yet relevant;

Acts respectfully towards others (humans, animals, nature) when conducting research (projects)

Acts with honesty, responsibility, and transparency as core values of research;

Demonstrates sufficient analytic, problem-solving, and communicative skills in discussions and deliberations on RCR issues.

Example how a competence could be interpreted/specified

- *Is able to identify and reflect on relevant RCR aspects in a given situation;*
- If a student, when doing group work, encounters a situation of free-riding, (s)he should be able to recognize not only that the workload is not fairly spread, but that this is also problematic, because someone is profiting from the work that others do. Moreover, reflecting on it, instead of condoning the situation, and actively discussing it with group members (what counts as free riding to them), could be the objective of an RCR assignment.

WP 4: PhD tools

1. SPOC on Mentoring and Supervision
2. SPOC on Data in research
3. SPOC on publication and (peer) review

Core to each SPOC:

- a. trying to empower PhD candidates,
- b. focused at their own projects,
- c. interactive (eg group work),
- d. reflective (helping them to analyse cases) with RCR reflection model,
- e. interdisciplinary

Leading thoughts in each spoc

SPOC	Core idea	Empowerment via
Mentoring and supervision	Learning to discuss issues of RCR with supervisor > have a talk with supervisor on this during course	Stimulating to dare to talk about RCR issues with supervisor, reflecting on own and shared responsibilities and expectations
Data in research	Reflecting on research cycle and RCR issues involved. Analyse own project from RCR perspective and peer review one other project	Increasing awareness on RCR issues in one's project and help think of strategies to prevent/deal with these.
Publication and (peer) reviewing	RCR issues regarding publication (strategies) and peer review > learn to do a good peer review	Stimulate good practice by learning to do a good peer review, and learning to discuss these with peers.

A sneak preview of some course materials (you can have a look yourself via the links we sent you)

The screenshot shows the 'elevate' course interface. At the top, there is a navigation bar with the 'elevate' logo, language options (EN | NL), and notification icons. Below the navigation bar is the course title 'INTEGRITY' with a European Union flag icon. The main heading is 'Responsible Research through supervision, mentoring & working together 2021 II'. A navigation menu includes 'Course info', 'My Peers', 'Schedule', 'News', 'FAQ', and 'FAQ for moderators' (with a '21' notification bubble). A progress indicator states 'You are 6 steps away from starting the next learning unit...'. Below this, a list of course units is shown:

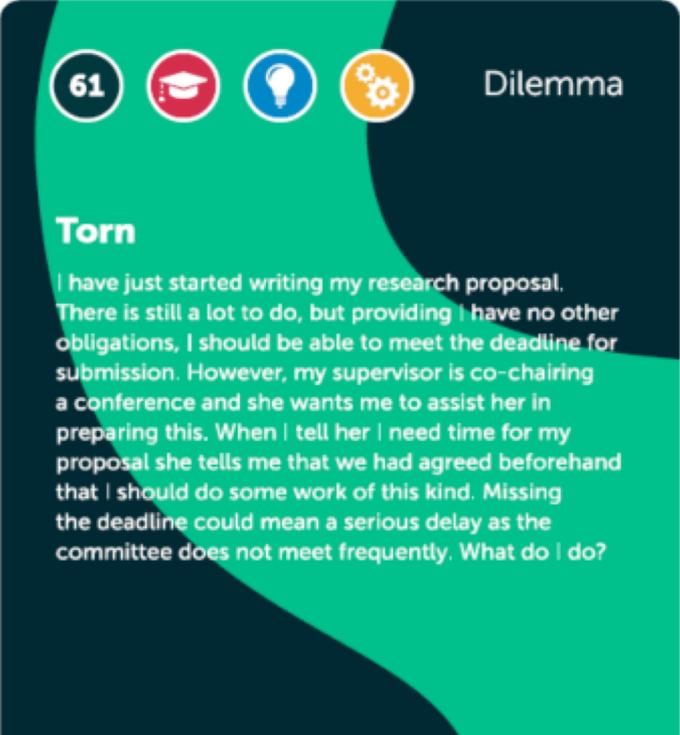
Activity Type	Unit Title	Duration	Progress
Read	0.1 Welcome	5 min	3
Todo	0.2 Consent to course rules	5 min	0
Watch	0.3 Have a look around	5 min	0

A 'Help' button is visible in the bottom left corner.

A central question in RCR is what constitutes “good research practice”. The European Federation of Academies of Sciences and Humanities has developed a Code of Conduct for this purpose.

Assignment

1. Read the code of conduct, with a focus on the principles at the beginning of the code. The code might be available in your institution's library. [European Code of Conduct for Research Integrity](#) -
2. Read the “Torn” case below.
3. Discuss via the discussion section the following question: which of the principles, as mentioned in the code, are relevant in this case?



61    **Dilemma**

Torn

I have just started writing my research proposal. There is still a lot to do, but providing I have no other obligations, I should be able to meet the deadline for submission. However, my supervisor is co-chairing a conference and she wants me to assist her in preparing this. When I tell her I need time for my proposal she tells me that we had agreed beforehand that I should do some work of this kind. Missing the deadline could mean a serious delay as the committee does not meet frequently. What do I do?

Learning objectives

This activity will increase your awareness of different styles of supervision and mentoring. In addition, it allows you to practice how to respond to a style of choice.

Assignments

- Supervisors and mentors may employ a range of different styles. The following cartoons will give you some examples. Look at the images and click on [-] to read the explanation.
- Which role do you recognize in the way you are currently supervised? Use the discussion section to share your views with each other.
- Which role would you prefer your supervisor to take (more often), and why? Again, use the discussion section to share your views.



Facts so far....

- Number subscribed to courses so far: 479
- Participants also from outside consortium (Malta, Armenia, Czech Republic)
- Non-starting numbers are also very high (up to 50%)
- **Subscription to free courses till June 2021 at our website.**
- **Blended /embedding in universities UZH, VU and UU will be part of 2021 project**



Impressions of student experiences so far

- Overall positive
- What students appreciate about the courses:
 - Use of cases
 - Working in groups
 - Interdisciplinary
 - Diversity of activities
- Some effects of the courses:
 - Increased knowledge
 - Increased awareness
 - Feeling more empowered
 - Increased commitment to RCR

“Working with cases or case-studies was a very constructive approach to make the topic more specific.”

“The course has made me aware of the importance of conducting responsible research and discussing these topics in academic settings.”

Educational research on SPOCs

- Research question:
Is empowerment towards responsible conduct of research stimulated in participants of the SPOC?
 - Development of competences, perception empowerment, perception learning aims
- Methods:
 - Pre- and post test: professional decision-making in research (PDR) > validated
 - Interviews
 - Course data:
 - Course reflection
 - In-course data (case reflection, learning aim analysis..)
- Nudging research (presentation Christine on 22 January)

Thanks for your attention

Project Partners



This project received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824586.