

Empowering RCR through education

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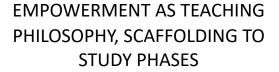
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Outline of the talk







EXAMPLE OF OUR TEACHINGS



RESULTS OF SPOC: HOW TO DO THINGS RIGHT?



Empowerment perspective: learning to hear, see, speak up

- Building capacities of researchers
- Help to learn to take control
- Is to learn to develop a critical autonomy (self-reflective attitude, able to deliberate independently, able to evaluate contexts of research and able to develop strategies to become a responsible researcher
- Stimulating to act upon decisions (pro-active)
- Stimulates an attitude of openness and courage (when needed)





Scaffolded

- One teaching philosophy
- One competence profile based on empowerment
- Scaffolding study stage + discipline + country specific elements
- Blended course materials which can be used in own curricula, in own ways,and own pace (respecting the teaching philosophy)

High school

undergraduate

(early) career

super visors



Tools: innovative and appealing











RCR course: how to do things right?

* 25 min



2.2 Styles of supervision and mentoring

Learning objectives



- •4-week course, average course workload 2.5 hours each week
- Certificate at the end of the course
- Interactive assignments (individual and group work)
- •Topics: doing research well; supervision and mentoring; publication, reviewing and evaluation;



RCR course: empowerment examples

- •LU 1.5: apply ALLEA code of conduct to own research project (what is well taken care off, what could be improved)
- •Lu 2.6: using a case deliberation method RCR reflection model, reasoning skills are stimulated.
- •LU 3.5: portfolio assignment where participants are asked to find information within their own institution, e.g., whom to turn to with questions on Ethics Review, the GDPR, data management, etc.



Measuring empowerment... inquiring what works > explorative study

Interviews + Survey (pre-post)

Case deliberation assignment

Course reflection & evaluation



Experienced empowerment

Interviews (n=6)

Course reflection & evaluation (n= 72)

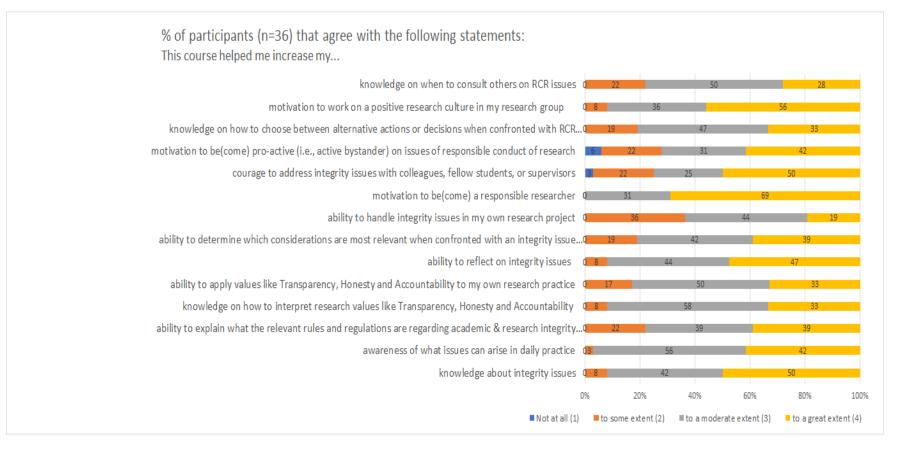
Competences shown

Case deliberation (n=48)

Survey (pre- and post) response too little



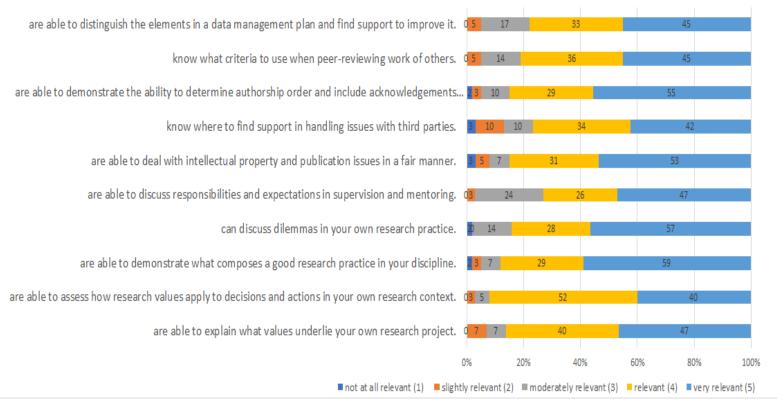
Reflections on competences: the course has helped increase my...





Relevance learning aims: after following the course you...

% of participants (n=36) indicating the (ir)relevance of the courses' learning aims. After following this course you ...





Empowerment: competent with regards to...

Awareness Knowledge Reflection **Motivation** Courage

Ability to deal with integrity issues



What positively contribes to empowerment

Motivation competence: ". . . if you don't know what to do yourself and you have all these senior researchers I don't think that would motivate me to stand up."

Motivation: "in that sense I could say that I feel more empowered, like I know that it's important and that I should try myself to be . . . as good as I can be in that sense and also if I encounter some kind of problems . . . to address them, not to ignore them."

Courage: More specifically, four of the interviewees mentioned that they are mainly courageous when it comes to addressing integrity issues with students, friends, or colleagues. Being courageous was felt to be more difficult with supervisors or those higher in the hierarchy, due to the higher risk of negative consequences if the relationship gets damaged.



Obstacles to empowerment

- Dependency on others "in my university I [do] not feel free to say something. We have a really hierarchical system and everyone higher [has] more power than the lower ones and I think if I say something about integrity, they will shush me down"
- Institutional and research culture
- Lack of power to make changes



Conclusions

Empowerment as pedagogical view on RCR trainings is novel and leads to a positive, pro-active stance on learning to become a responsible researcher (how to do things right) and stimulates a critical autonomy of researchers;

This view is used in the design of courses (4 SPOCs, 1 MOOC) for PhD students, but also for undergraduates and high school students;

Explorative study (qualitative) shows positive effects of empowerment in 1 SPOC (RCR: how to do things right)

More study needed to see if these effects also show in other courses, and quantitative data needed to scrutinize these data (mixed method)



Thanks for your attention

Project Partners

























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