

Interactive comment on “Hydroinformatics education – The Water Informatics in Science and Engineering (WISE) Centre for Doctoral Training” by Thorsten Wagener et al.

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General comments: I have very much enjoyed reading this paper. I believe doctoral programmes of this nature will be increasing in number in the near future, and papers such as these are of great relevance to the scientific community to learn from the outcomes and experiences of such programmes. The paper is very well written and it explains thoroughly the need and benefits of the presented programme. It is very important to share the success story of this programme; however, I also think it is as much important for the community to learn about the difficulties and challenges, which I believe could be a little bit more specified in the paper. In general, this paper

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provides a great set of ideas for the community to benefit from and hopefully it will inspire academic institutions to create evenly innovative and interdisciplinary doctoral programmes.

Specific comments: Paragraph 3.1 ‘student participation and feedback’: Here it is explained that surveys and individual feedback are important in the programme for improvement. It is nice to read that 70% of the students feel happy, however it might be interesting to know why 30% feels less than happy. Is this related to the programme? For example, is it particularly challenging (e.g. in comparison with a traditional PhD, this programme might be more intense/stressful due to a lot of training, meetings, conferences, ..), did the students have different expectations, etc. I also read that cohorts become “happier” and it is considered that the improvements of the programme have something to do with this. Could you give some examples of lessons learnt and such improvements throughout the programme (are they administrative, logistic, technical, social, ..)? What did students particularly indicate in the surveys/feedback that should be improved? I think in the final paragraph 5 ‘Conclusions and lessons learnt’, there could be some more attention to the challenges that were faced during the programme and how they were solved, or how they remain a challenge in this type of programmes. I refer to you the paper “Serlet et al (2020) SMART Research: Toward Interdisciplinary River Science in Europe. Front. Environ. Sci., <https://doi.org/10.3389/fenvs.2020.00063>” which describes an interdisciplinary doctoral programme (SMART EMJD) that was very successful but also faced many challenges due to a very ambitious set of goals.

The wide interaction of the doctoral students with researchers, industry, practitioners, .. is really a successful key point in this programme and could be more highlighted in the abstract. I really appreciate the out-of-the box type of thinking that was implemented, e.g. the story of the workshop where artists and students collaborated and was then used to integrate the general public.

In line 80 it is written that most students entered the programme after finishing a Mas-

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ter's degree, while some with a Bachelor's degree. Given the age of some students, I would think there are also students who have a working experience? It could be interesting to add this.

Considering the wide range of backgrounds of the students, does this reflect in an equally wide range of thesis topics? In an interdisciplinary programme it can be challenging to have students collaborating e.g. in publications due to a wide range of topics – in contrast to students working in a traditional PhD setting within a team of people working on a single subject.

Did you find specific challenges for integrating the industry on an academic level? I think it is quite 'new' for academic programmes to reach out to the industry on the level of doctoral programmes, particularly for certain disciplines. Are there any recommendations you can give if institutions would like to achieve the same in other countries? Did you make contact yourself, did you advertise the programme, .. ?

I am a bit confused about the number of students, line 75 states 84 students were recruited, line 73 states "all 63 current students", and in the abstract it is said over 70 PhD students will graduate. Perhaps you can also indicate how many students dropped out from 84 recruited?

I did not understand from the paper if the programme is finished, has a limited duration or it will continue indefinitely?

Did the programme have funding to include a living allowance for the students?

Increasingly, the term "doctoral candidate" is being used instead of "doctoral student". This is a little bit related to the culture and local regulations (status). Since the European Commission uses the term doctoral candidate, I would recommend this term.

Technical corrections: Line 95 there is a dash, while in line 96 there is a bracket.

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