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## *Interactive comment on* "Competence formation and post-graduate education in the public water sector in Indonesia" by J. M. Kaspersma et al.

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This is an interesting contribution about competence needs in three phases of Indonesia public water sector development and the acquired competences in post-graduate education.

I have some comments and suggestions.

- Title 'Competence needs ... ' ?

- Section 2.2. The difference between the management and governance aggregated competence should be clarified, as the specific contents of the terms depends on the definitions taken. Often the difference is not so obvious. Management apparently is

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a combination of organisational management and water management. Can that be combined?

- Section 2.2. Two levels, individual and organisation, are both used. It is important to make clear what level is addressed. E.g. line 24. 'Organisations need to have an adequate management competence'. I agree, but not all individuals need the same level of this competence; this depends on position and function. Page 634, line 1. 'Requires professionals' here you talk about individual level.

- Section 2.2. Meta competence. I see that this is a competence all will need in various degrees. But do all need innovation? What will be the share of this component in a programme, compared to the other three. Probably less, and a lot implicitly embedded in curriculum? Should it not be 'Learning and innovation' as 'continuous learning' is usually referred to as a learning process after (post-)graduate education ? while you focus mainly on MSc education. See also next comment.

- Section 2.2 Line 25 and further the tacit component is key in water management and the fact that learning by doing is crucial. This could be stronger reflected in discussion, were you talk about MSc education only.

- Figure 1. Some questions. Is 'innovation' enough addressed? As there is much focus on learning and learning styles. Why no personal/ethical component in Technical? It contradicts with what you say on page 634 line 28? And line 13-14 Page 644. Management focuses on organisational management, more than water management? 'Ability to cross disc. boundaries' is crucial for water management as well.

- Chapter 3. The strategy for having both interviews and a survey can be better explained. Now only explained by lines 5 and 6 (page 638) which are not sufficiently clear to me.

- Chapter 3. Page 639, line 2. 'For sure' I would rephrase as you do not know, and if you know use a reference. This point of 'Cultural sensitivity' should be further explained,

as it will influence your results.

- Chapter 5. Title 'Results and discussion'?

- Chapter 5. I feel the text could be more explicit about the structure along comp. required and comp. acquired. The figures are explicit, which is good.

- What strikes in the results overall is the low scoring of technical component. Is this 'interest in' or 'need to have'. Maybe indeed there is more interest in management subjects, but that is different from what you need for your organisation. These two terms (interest and need) are both used in the text, while the captions of results figure mention required (and not interest) which is consistent to me.

- As mentioned by one of the reviewers some background on Indonesian LPE would be helpful. Also indeed what IPE is considered.

- As mentioned by other reviewer indeed some implications based on your results for beyond Indonesia would be helpful.

- The abstract could be enhanced by intro sentence, stronger structure along needs (in three phases) (now it mentions interest and needs; see comment above) and acquired competences. The last two sentences I feel should go to the beginning. I doubt about the conclusion that in IPE the weak horizontal bar is compensated by cont. learning and innovation.

- Figures need a footnote about what the rating means?

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