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Interactive Comment

Interactive comment on "Reframing hydrology education to solve coupled human and environmental problems" by E. G. King et al.

G. Ali (Referee)

Genevieve.Ali@ad.umanitoba.ca

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This is a nicely written manuscript promoting alternatives to canonical hydrology teaching practices. It includes several examples, builds its argument around an appealing terminology of hydrological research frameworks (i.e., narrow lens, wide lens, widedynamic framework) and should be of interest to the HESS readership. I find that the argument made by the authors could be sharpened by addressing the following points:

* This paper is not the first one to call upon a better integration of human and biophysical system components in hydrological research and training. In fact, there is quite a dynamic stream of socio-hydrological research developing and the authors should expand their literature review to include recent socio-hydrology papers, e.g.:

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T. Wagener, M. Sivapalan, et al. (2010). The future of hydrology: An evolving science for a changing world, Water Resources Research, 46, W05301, doi:10.1029/2009WR008906.

M. H. Jacobs and A. E. Buijs (2011). Understanding stakeholders' attitudes toward water management interventions: Role of place meanings, Water Resources Research, 47, W01503, doi:10.1029/2009WR008366.

M. Sivapalan, H. H. G. Savenije, and G. Blöschl (2012). Socio-hydrology: A new science of people and water, Hydrological Processes, 26(8), 1270–1276.

B. Sivakumar (accepted). Socio-hydrology: not a new science, but a recycled and re-worded Hydrosociology, Hydrological Processes, doi:10.1002/hyp.9511.

* About the Kenyan example: while I agree that a field trip in Southern Africa is very exciting, I think that domestically organized field courses are as valuable and this should be emphasized in the manuscript.

* What do the authors think about the potential involvement of private industries or consulting companies in undergraduate hydrology training? One other way to empower undergraduate students without going abroad might be to have them work on real, short-term problems submitted to them by non-academic partners, with or without a field component.

* With respect to the undergraduate curriculum: some geography departments do include two compulsory hydrology courses: one second year course that corresponds to the canonical hydrology training described by the authors, and one third or fourth year course focusing on integrated watershed science where case studies are discussed in depth. In those geography departments, both teaching philosophies are present. It would be interesting to have the authors comment on this dual strategy in the manuscript.

* The authors should also discuss whether hydrology textbooks should be re-edited

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with the socio-hydrologic integration explicitly stated. In other words, do the authors think that the socio-hydrologic "revolution" should happen right from the textbooks or is it rather the role of the instructors to make the transition?

- * Page 7741, line 8: it is written "Amery, 2003" but the reference list says "2002".
- * Page 7742, line 1: About the phrase "challenges beyond our borders": as HESS is an international journal, I would suggest being explicit about which borders those are...
- * Page 7744, line 14: There is a full stop missing.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 9, 7739, 2012.

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