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Hydrology and Earth System Sciences Discussions

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

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We are grateful for the constructive comments of both reviewers. Here we summarize their key queries and suggestions (Q), and provide responses (R), which indicate where the manuscript has been updated to incorporate their insights.

Reviewer 2: Q1. The value of domestic fieldwork R1. Indeed we agree with the reviewer, and the example was not intended to suggest that students had to travel to a distant location in order to benefit from hands-on field courses. In a new paragraph at the end of the Kenya example, we discuss how local field work can achieve the same educational objectives.

Q2. Potential for giving students experience with private industries and consulting companies. R2. This is an interesting question; indeed a number of experiences can influence the development of a hydrologist in training. For the context of this article, however, we opted to focus on learning opportunities that instructors themselves can provide.

Q3. The dual strategy of combining teaching philosophies of from canonical hydrology and integrated watershed science. R3. Integrated watershed science is a great example of an applied discipline that can readily build on a wide dynamic perspective. Programs that require such a class in concert with canonical hydrology provide students an excellent opportunity to broaden their perspective on hydrology. Including some of the theoretical pinnings of complex systems into the canonical course would lay an excellent foundation for the second course in watershed management.

Q4: Should hydrology textbooks be re-edited to include human dimensions? R4. Effecting change in education starts with building awareness of a need for change among educators and practitioners. That is the primary objective of this commentary. We have edited the manuscript to close with a statement that argues in general terms that tomorrow's hydrologists will benefit from wide-dynamic thinking via inclusion in instruction and texts. We anticipate this trend will indeed emerge to reflect the growth of hydrology in the directions of hydrology, sociohydrology, and sustainability science. This trend can already be seen, in incipient stages, in other science fields like geography and ecology. This special issue is a graet example of needed initiatives to improve the visibility of various innovations to help train tomorrow's hydrologists to cope with grave challenges in water management.

Q5. Mismatch in Amery 2003/2002 R5. Corrected to Amery 2002

Q6. "Challenges beyond our borders" R6. By changing "our" to "their," the statement now represents students anywhere.

Q7. Full stop after US R7. In our submitted manuscript, we abbreviated the United

States as U.S., and the full stop was there. HESS editors changed U.S. to US throughout, and I suppose they didn't see that one was at the end of a sentence.

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