Interactive comment on “Engaging the students of today and preparing the catchment hydrologists of tomorrow: student-centered approaches in hydrology education” by I. Ngambeki et al.

R. Bucat
bob.bucat@iinet.net.au

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Figure 2 cartoon: I question the validity of portrayal of constructivism and social constructivism. The first cartoon, portraying information transmission or didacticism, is reasonable in that it shows verbal information from the instructor being transferred directly into the student's head – analogous to pouring water from a small container into a large vessel. However, the constructivist model is that the student constructs knowledge internally from incoming sensory inputs. So, the representation of something (verbal information) transferring directly from the instructor's mouth into the student's brain seems invalid. Firstly, would it not be preferable if the student's skull were not open to information to be deposited? Shouldn't, perhaps, whatever is emanating from the instructor's mouth be shown as a sensory input into the student's ear (or, students' ears, in the case of social constructivism)? And perhaps the arrow from the student to the object (tree?) should be reversed to show light as a sensory input to the student's eyes. Putting aside for now that there could also be sensory inputs of feel, smell and taste, portrayal (by light bulb and bubble) of the construction of concepts and relationships internally, with skull closed, seems a better representation?