I’ll be honest, I had trouble reading this document. I felt as if the document was written for those who were already researching the problem as a discipline in an of itself. Obviously I found this disturbing as an individual interested in *-disciplinary research as the article speaks to my interests and yet left me without a path to understanding the terms or the problem being addressed.

From the abstract I strongly agree that theoretically grounded research is needed. However, the article seems to assume there is a fundamental problem without spending any effort to convince a reader who has not studied the problem that there is in fact a problem. The use of incompletely defined disciplinary language is the critical component to this difficulty. Example, Transdisciplinary Competencies seems to mean something but on rereading it seems to simply means foundational research methods learning skills. Yet I cannot believe the article is arguing for what should be already in place and I have seen no evidence of it not being present. Therefore I’m not sure how to evaluate the article as a whole. My only comment is that my understanding of the general difference between a Doctorate in a field and a PhD is that the Doctorate shows deeper mastery in a particular field than a master’s degree while a PhD is degree of mastery of graduate level research. Therefore aren’t graduate programs conferring PhDs already supposed to be preparing students to do *-disciplinary research?

I also strongly question the repeated call for the use of ”new media” in the document. What exactly is new media in this context? What problem does it solve? I am assuming new media is based on the use of videos, slides, visual simulations, and the like in a learning environment. My rebuttal to this call is that to date strongly technical and non-technical disciplines each learn their discipline without the need for new media. To date I find the use of visual simulations and the like to be distracting. In one recent case we, as a class, were asked to use a simulator that was designed to be visual but had a text based command line version, I found the command line version superior to the graphical version for my learning and only moderately superior to simply reading the papers it was based on.