

ICBS Funding Request – Dav Clark

Participants

Dav Clark

Supervised by:

- Rich Ivry (Psychology, HWNI, ICBS)
- Michael Ranney (GSE, Psychology, ICBS)

Advised on this project by:

- John Canny (Computer Science)

Collaborating with:

- Daniel Reinholz (PhD student SESAME)
- Sarah Cohen (Undergraduate in Environmental Science)
- Numerous other undergrads and master's students working on the "RTMD" project

Description

Michael, Daniel, Sarah and Myself have had a paper accepted for Cog Sci this year. We think it's simultaneously highly socially valuable, while also providing some insight into the cognitive basis of individual attitudes and attitude change.

Specifically, there is strong doubt in both the cognitive/psychological community and the public policy/economics/etc. community about the utility of true science education in addressing problems such as climate change. Indeed, when I presented initial results from our line of research at CSAIL, one attendee exclaimed, "You can't teach people!" More seriously, we've had negative reviews that flatly deny our results claiming that "it's been demonstrated" that what we're doing doesn't work.

We have, however, shown that science education *does* seem to matter. Across a number of populations now, we have shown that there is a correlation between knowledge and attitudes about global warming. And we have an even more convincing result that we've now replicated across students from both Cal and UT, Brownsville: we've demonstrated that an educational intervention describing the mechanism of the greenhouse effect results in marked (significant) changes in global warming acceptance and expressed behavioral intentions.

There are some nuances, of course. For example, individuals' changes in their *perception* of their knowledge seems more tightly coupled to their attitudes than their objectively scored knowledge.

Moreover, while it's likely better bang for the buck for Michael to be there, given his more extensive experience with communicating with others at CogSci, he is certainly not as versed in the details of what we've done in our research. Thus, my presence would certainly provide a marked improvement in our ability to effectively convey our findings. As I discuss below, communicating about our findings is likely the most useful step towards securing more funding.

Budget

A plane ticket to Tokyo (partial reimbursement would be OK): ~\$1300

(As I've mentioned in an e-mail to you, you can get inexpensive commuter flights once you're in Tokyo.)

Explanation

Our research is fairly inexpensive, and as such, it is unsurprising that Michael doesn't (and therefore I don't) have a lot of money for travel. Without some financial support, it's unlikely I'd be able to travel to Sapporo to discuss this work with others in the field.

Future funding

Michael and I are both in the process of applying for grants to support this work. Sadly, while it seems of high social value, it doesn't properly fall under any of the existing categories – except, perhaps, “interdisciplinary” research (which is where ICBS comes in). That said, there are others doing similar work on cognition and climate change, such as Paul Thagard, Gail Sinatra and the CRED center at Columbia University. The major funding seems to be going to more “neuro / economic” approaches, but one hopes that with sufficient exposure, the utility of a science education approach will be more apparent and thus fundable (and funded!). It seems clear that an effective presence at a major conference will do much to further this goal. With all that said, we have already submitted a major grant proposal to the NSF and we intend to submit a similar grant to the Hewlett foundation. Both of these are in collaboration with folks from the California Institute for Biodiversity.