

Title: Impacts of the Digital Ocean on Education

Abstract:

Data are records of experience and data analysis is learning from records of experience (Tukey & Wilk, 1966). The digital revolution has brought about dramatic changes in what can count as a "record of experience", often with concomitant advances in data analytic techniques across many fields. Unfortunately, the lack of training in the underlying logics of inference, a-historical and isolationist views of methodology, physics envy, statistical religion, and the failure to understand data analysis from a human-centered approach have contributed to a failure for many of these advances to reach social science practitioners and educators. Meta-methodological questions addressed will include "are you optimizing your research for a world that doesn't exist anymore?", "what % of variance in analytic impact is explained by 5% improvement in standard errors?", and "if a p-value gets computed in a forest and no one sees it, does it exist?"