MARCELO MACHADO
Kwantlen Polytechnic University (KPU), Canada

MASSIVE OPEN ONLINE RESEARCH: A COLLABORATIVE APPROACH TO TACKLE WICKED RESEARCH ISSUES.

Abstract:
Humans are hardwired as problem-solvers. Education and research enable us to solve complex problems. Even decades ago, we could safely send a crew to the moon and back. A moon-bound project is a very challenging and complex problem, but it is a tame one. The problem is clearly defined and the challenge becomes how to find the best solution. As the world and our understanding of issues becomes more interconnected, there is a different type of problem in the horizon - “wicked” problems. A wicked problem is normally complex and challenging, but differs from the “tame” problem because there is no agreement in terms of problem definition. A wicked problem does not allow for the “choice” of best solution. Solutions tend to only mitigate the problem and sometimes generate unpredictable consequences. For instance, mitigating climate change is an issue that requires a level of ingenuity that cannot be achieved by a limited group of people, regardless how brilliant they are. It cannot be addressed by our dominant scientific, reductionist, discipline-based, and proprietary approach either. This paper proposes Massive Online Open Research (MOOR) as an alternate approach to deal with wicked research issues. In terms of organization, this paper includes a thorough literature review on online collaboration, focusing on the dynamics of knowledge creation and innovation. Sample open online research initiatives are described and analyzed in the light of the literature review. Based on the literature review and real cases, a MOOR framework is proposed and discussed. Limitations and opportunities for future research are also included.

Keywords:
Collaboration, Online Research, Wicked Issues

JEL Classification: D80, O39, O31