

Problem-Based Research

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- 1) Start with a Research-Worthy Problem
 - a) Problem =
 - i) Something going wrong
 - (1) Active, not passive
 - (2) i.e. a missed opportunity is not a problem
 - ii) Impacts people
 - (1) “pain and suffering”
 - (2) Identifiable, meaningful population
 - (a) Not just a single person or specific company or organization
 - (b) Generalizable
 - b) No “adequate” solution currently available

- 2) Research = Original contribution to the body of knowledge
 - a) Original =
 - i) Individual work
 - ii) Something new, however small, added to our understanding
 - (1) Explore the unknown
 - (2) If the answer is already known, not research
 - b) Body of knowledge =
 - i) Applicable to the domain of your discipline (i.e. computing technology in education, information systems, etc)
 - ii) Anchored in previous research and/or theory

- 3) Research-Worthy =
 - a) Theoretical basis for the problem’s
 - i) Cause(s)
 - ii) Impact – who it effects
 - iii) Intensity – why it causes so much “pain and suffering”
 - b) Implies an appropriate solution
 - i) Within the domain of your discipline
 - ii) For which you have adequate resources
 - iii) For dissertation-level scholarship

- 4) The Problem Drives the Study
 - a) Not all problem domains can support all types of study
 - b) Domain breadth
 - i) Very narrow domains have tightly prescribed study parameters
 - ii) I.e. mathematics
 - c) Domain maturity
 - i) Existing body of research prescribes study parameters
 - ii) I.e. can’t do an experiment if treatments have not yet been developed

- 5) Regardless of the Type of Study, You Need Research Question(s)
 - a) How your solution can address the problem
 - i) Answers to the questions make contribution to resolving the problem
 - b) Nature of questions tied to type of study
 - i) I.e. experimental study research questions quite different from developmental
 - c) Outline for the study
 - i) Methodology organized around how to answer the questions
 - ii) Results organized around the answers derived