

Quantitative study: determine comparisons to be made; adjust $p$ level for #comparisons		
Use MERSQI or BEME scales to rate quality of your project: can you enhance? (for quantitative studies)		
Construct flow chart of study steps and participants, as applicable		
Ongoing: Write everything down at least in outline format Keep references in End Note, Refworks or similar		

### Action Plan

Write down 3 steps you will commit to undertake within the next 5 days, in the area most relevant to your project.

**Ready** – planning your study

**Set** – conducting your study

**Go** – analyzing, writing, and submitting your study for publication

### Work-in-Progress Checklist for Education Papers

Step	Done	N/A
Brief literature search		
Identify potential question(s) FINER (Feasible, Interesting, Novel, Ethical, Relevant) & conceptual framework		
Identify mentor		
Identify colleagues		
Identify sites (>1 better). If 1 site, repeat intervention more than once		
Identify statistical help		
Meetings/emails to refine research question		
Determine research approach to best answer the questions: quantitative, qualitative, or mixed methods. <i>Note: the resources for this workshop mainly address quantitative approaches</i>		
Intervention studies: define intervention operationally (recipe that others can replicate) & identify comparison group (controls with active alternative intervention better)		
Observation or cohort studies: thorough sample recruitment; comparison of responders/participants to non-responders/non-participants, or to total population		
Determine meaningful outcomes; eg, for innovations: <i>feasibility</i> (faculty time, trainee time, training, staff, materials, IT) and <i>acceptability</i> (to trainees, to faculty, to team)		
Determine level of outcomes: Kirkpatrick's scale (1: reaction/satisfaction; 2: change in skills or knowledge; 3: change in behaviors or practices; 4: change in patients or system)		
Determine instruments to measure outcomes		
Describe validity evidence for instruments used; for 'home grown' outcome instruments describe development, testing, modifications		
Can outcomes be measured objectively (external better than self-assessment)		
Can outcomes be measured distant from intervention (ie, not just immediate)		
IRB request for exemption or approval (if humans involved)		
Quantitative study: determine likely effect size (from lit., pilots, minimum change considered of value) & use with type I error ( $p$ ), & type II error ( $\beta$ ) to calculate sample size		