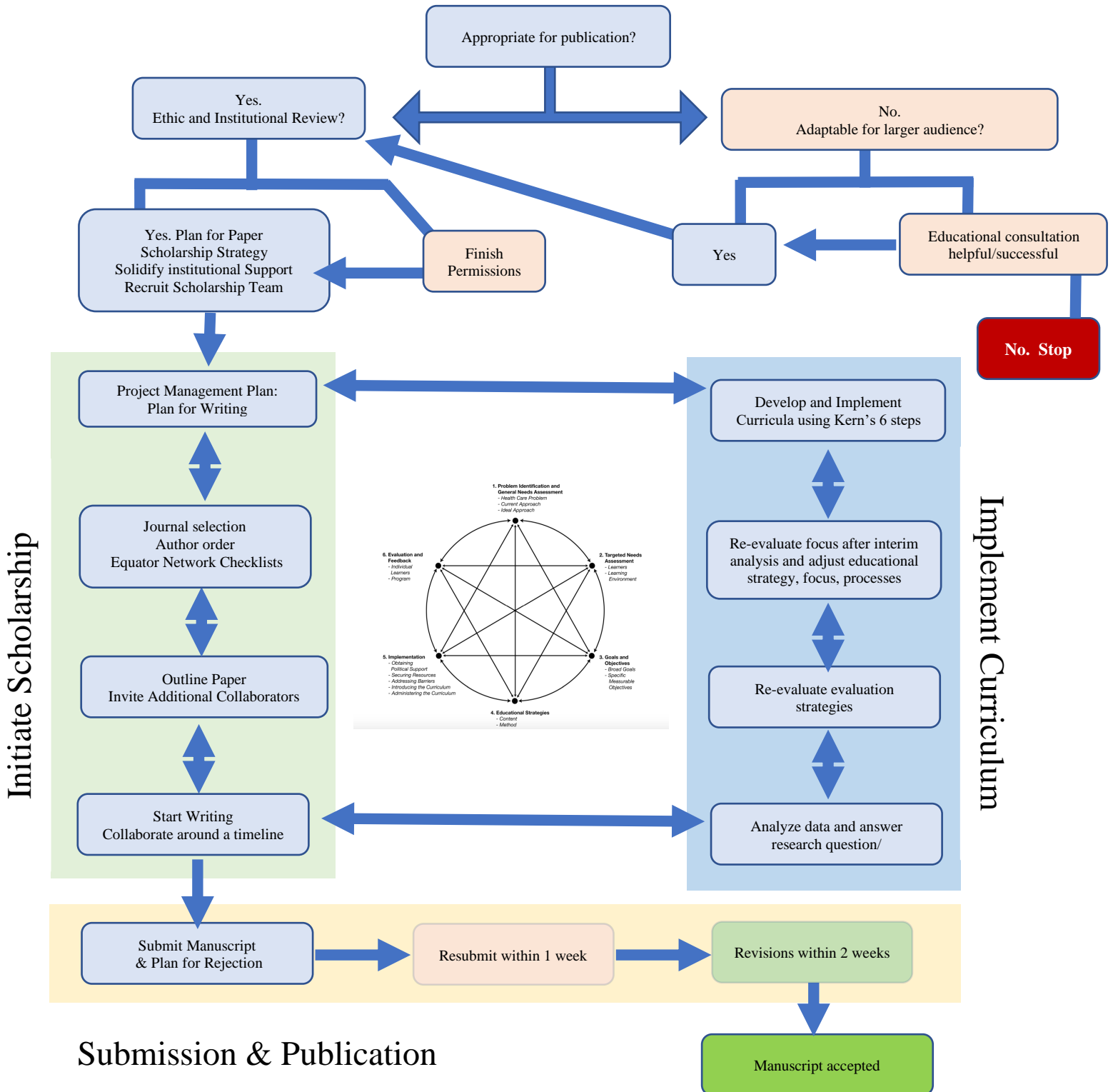


An Approach to Publishing Your Educational Innovation: Worksheet

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Pathway to manuscript submission



Is your educational innovation appropriate for publication?

1. Describe your planned or current curriculum in 1-2 sentences.

2. What problem is your curricular innovation solving?

3. What makes your curriculum unique and valuable beyond your own institution?
 - Content
 - Approach
 - Methodology
 - Evaluation
 - Current events
 - Other

4. What story do you want to tell around your innovation?

5. Determine your “why”? Why is this work meaningful to you?

6. Does your curriculum meet all the FINER criteria? What is missing? (elaborate)
 - Feasible
 - Interesting
 - Novel
 - Ethical
 - Relevant

7. Have you identified a tight research question (PICOT/quantitative) or guiding question (qualitative) around your innovation?
 - Quantitative: PICOT*
 - Population
 - Intervention (Observation)
 - Control (Comparison)
 - Timing

 - Qualitative: Guiding Question*

If no... can you adapt for broader interest?

1. Can you...

- Link to a broader, more useful theme?
- Change the curriculum or evaluation methodology?
- Conduct a cross-institutional project/evaluation?
- Conduct a multi-institutional project/evaluation?
- Other options?

2. Would educational consultation help?

- If so, whom can you contact?
- Drs. Malathi Srinivasan and Erika Schillinger are happy to help, dependent on time!
- Use divisional resources: ex, PCPH Evaluation Science Unit

If yes... Plan for Paper

1. Do you have appropriate approvals to proceed?

- Internal School or Departmental/Divisional committees
 - SOM: mededresearch@stanford.edu
 - SOM: [Stanford Medical Education Research Policy](#)
- Dept/Division: Check with your GME or clerkship director
- IRB Human Subjects
 - i. [Core CITI certifications](#):
 - ✓ [CITI website](#) (take a few hours)
 - ✓ Select Group 7: Biomedical research
 - ii. Routine evaluation: Not research: Submission as HSR exempt/QI exemption
 - iii. Additional evaluation: Research: special protections apply
Depending on degree of invasiveness

2. Do you have you Institutional Support?

- Bring in the relevant clerkship/GME/CME director or dean or dept/division chiefs
- Set up meeting to discuss your purpose
 - Avoid conflicts with competing curricula or evaluation
 - Ensure feasibility
 - Get new ideas, be creative
 - Coordinate across working groups
 - Invite collaboration
 - Establish your intellectual interest
 - Establish your dept/division as innovator in the field
 - Establish your institution as innovator in the field
 - Establish funding for evaluation/writing/generalizability

3. Scholarship Strategy

- How can you improve the utility and generalizability of your educational innovation? What would make it better or more useful?

- How many papers do you really have in your study?
 - Perspective(s)
 - Data piece(s)

4. Have you assembled your creative Scholarship Team?

- Content experts (peers, patients, students, staff, etc)
- Curricular partners
- Methodologic experts
- Analytic experts
 - ✓ Office of Medical Education
 - ✓ Undergraduate and early graduate students
 - ✓ Standing programs
- Writing and strategic experts

If yes, Initiate Scholarship

1. Project Management: Plan for Writing

- Get [ORCID ID](#)
- Download reference manager [Zotero](#) and create account
- Contact medical librarian ([Chris Staves](#)) for help
- Re-articulate your narrative
- Pick general submission date
 - Work backwards, and block off time on your calendar
 - Schedule weekly or biweekly meetings with co-authors
- Assign tasks to major co-authors (tables, literature searches, etc)

2. Select Top 4 Journals

- Considerations during selection
 - Not too dissimilar in word length, audience and formatting
 - Descending order of impact factor
 - Don't waste your time – pick journals likely to find your work relevant
 - FUNDING: Open access vs standard publication procedures (\$2-3K/paper)
- How to select
 - Ask Mentors/Collaborators
 - Similar papers
 - Where are they published?
 - Reference lists from similar papers
 - Journal Selector/Finder
 - [Elsevier](#)
 - [Springer](#)
 - [IEEE Publication Recommender](#)
 - [EDANZ](#) (Japan)
 - [Cofactor](#) (UK)
 - [Web of Science](#)
 - [Scopus](#)
 - [JANE](#) (Journal Author Name Estimator)
 - Lists of Medical Education focused or friendly journals

3. Determine author order and deliverables

- Evaluation and curriculum team may be different
- Intellectual contribution: [CREDIT](#)
- Determine how to renegotiate if people fail to deliver
- 3 positions to consider
 - First:
 - Schedules meetings
 - Pushes manuscript over finish line
 - First crack at revisions/correspondence
 - Takes intellectual responsibility for paper integrity
 - Project manages entire process
 - Schedules meetings
 - Pushes manuscript over finish line
 - First crack at revisions/correspondence
 - Takes intellectual responsibility for paper integrity

- Senior/last: Major architect and input for the paper
 - May be the funder (or not)
 - May be project sponsor (or not)
 - May be educational expert (or not)
 - Mentors/collaborates with 1st author
 - Takes intellectual responsibility for paper integrity
- Second: Second greatest contributor to manuscript
- Other author positions: Key contributors, less involved.

4. Download Equator Network checklists (www.equator-network.org)

from Aditya Narayan, Stanford MS1

- [Squire-EDU](#)
- [RISE2-Genomics \(genomics education\)](#)
- [CRe-DEPTH \(general evaluation of training interventions in healthcare\)](#)
- [GREET \(educational interventions for improving evidence based practice\)](#)
- [Reporting on healthcare simulation research](#)
- [Checklist for reporting on OSCEs](#)
- [Guidelines for reporting on team based education](#)

5. Start writing: Don't overthink it – it is just 1500-3000 words!

- Determine article type
 - Innovation/Brief Report (800-2000 words)
 - Original research (3000-3500 [quant]; 3500-4000 [qual] words)
 - Perspective (800-2000 words)
- Create “Idea Bin” for leftover or new brainstormed ideas: “No idea left behind”
- Outline your paper (format for research paper), Tips
 - i. Review checklists
- Use a standard format for article type (research paper)
- Write cover letter (see [JGIM IFA cover letter templates](#))
- Start literature search
 - Login through** [Stanford Lane Medical Library](#)
 - [Google Scholar](#)
 - [PubMed](#)
 - [ERIC](#)
 - [CINHAL](#) (nursing and allied health)
 - Use Zotero
- Tips
 - ✓ Write draft while implementing: “reflection in action/on action”
 - ✓ write a paragraph at a time
 - ✓ Don't overwrite
 - ✓ If you get stuck, do something fun and come back

Your Paper Outline Worksheet

Section	Purpose	Para- graphs	Your initial ideas
Background <i>“What is the problem and why should I care?”</i>	“What is the problem?” “Mind the gap”	1	
	Contextualize the gap in “What is known?” “Why it is important?”	1	
	Study design/hypothesis “What I did to fill the gap?”	1	
Methods <i>“What I did”</i>	Study design + details	1	
	Curriculum details + IRB “not human subjects research” or “exempt/expedited”	2	
	Evaluation tool details	1-2	
	Analytic details	1	
Results <i>“What I found”</i>	Participant description	1	
	Major outcome 1	1	
	Major outcome 2	1	
	Major outcome 3	1	
	Major outcome 4	1	
Discussion <i>“What it means”</i>	Summary of key findings	1	
	Contextualize Key Findings	2	
Limitations <i>“Threats to validity”</i>	3-5 issues with: <ul style="list-style-type: none"> • Study design, overall • Specific to this study • Affecting generalizability “could be a problem, but...”	1	
Conclusions <i>“Rousing finish”</i>	Next steps Future directions (don’t overreach data)	1	

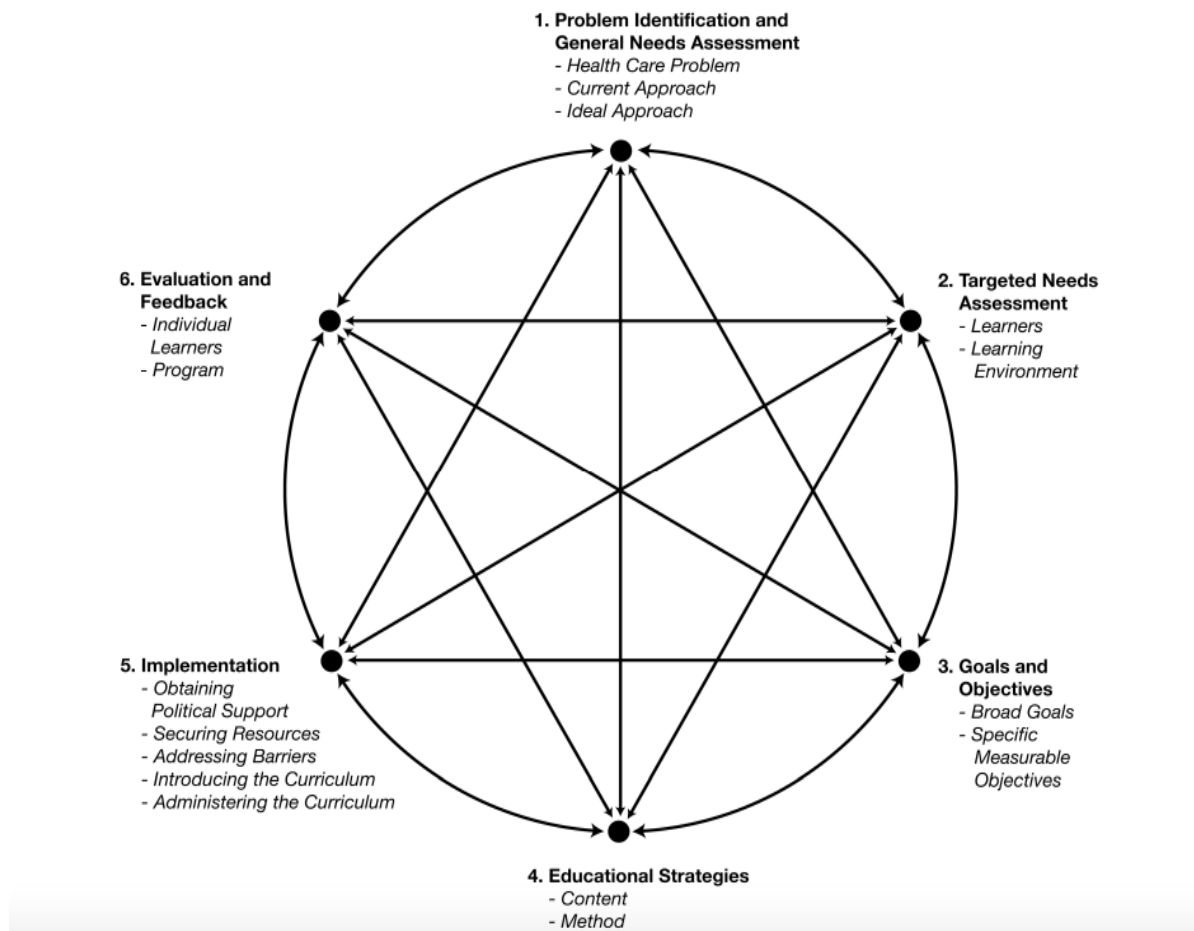
If yes, Implement Curriculum

1. Start [Kern's 6 Steps](#) to implement your curriculum

- Needs analysis (general/specific)
- Educational Strategies
- Goals/objectives
- Implement
- Evaluate and Iterate

2. Collaborate with evaluation and writing team

- Review theoretical framework
- Ensure curriculum, methods and evaluation strategy match desired outcomes
- Sharpen your engagement strategy with learners and key stakeholders
- Strengthen methodology
- Strengthen evaluation
- Develop and test evaluation tools
- Continue reading literature
- Continue Networking



Submission and Publication

1. Submit paper to journals in descending order of impact/relevance
 - Save time for final submission (about 3 hours)

2. Plan for rejection
 - Happens all the time, not a big deal.
 - Initial rejection: Poor fit for journal, not high enough quality: 1-2 weeks
 - Rejection after review: Not high enough quality: 2-4 months
 - Get reviews: Address all relevant comments. Some not relevant.
 - Don't get reviews: Resubmit elsewhere within 1 week

3. Plan for revisions (get results within 3-4 months)
 - Turn around manuscripts in 1 week to next journal
 - Plan for turn around in 1-2 weeks.
 - New analysis?
 - Use template revision letter formats
 - Timeline/format

4. Accepted!
 - Take evening off and celebrate!
 - Send note to your collaborators, educational leadership, divisional leadership
 - Consider which awards to apply for that would recognize your work
 - "Lather, rinse, repeat": Plan for next paper

Medical Education Journal List

[AAMC GEA](#) list (2019)
[University of Louisville](#) list
 (Osmosis, Wayne State, etc)

General Medical Journals that publish medical education manuscripts

Journal	Impact Factor	Issues per year
The New England Journal of Medicine	70	52
JAMA: The Journal of the American Medical Association	51	48
The Lancet	59	52
BMJ (open access)	39.8	Weekly & monthly
PLOS Medicine (open access)	11	Continuous
Annals of Internal Medicine	25	12
Annals of Family Medicine	5.4	6
Journal of General Internal Medicine	5.2	12
American Journal of Medical Quality	6	1.8

Medical Education Journals

Journal	Impact Factor	Issues per year
Academic Medicine	5.1	12
Medical Education	4.6	12
Advances in Health Sciences Education	2.8	5
Medical Teacher: An International Journal of Education in the Health Sciences (AIMEE)	2.3	12
Teaching and Learning in Medicine	2.2	5
Journal of Medical Ethics	2.2	12
Medical Science Educator: The Journal of the International Association of Medical Science Educators	1.7	5
Medical Education Online	1.03	Continuous
The Journal of Continuing Education in the Health Professions	1.2	4
Journal of Graduate Medical Education (ACGME)		6

Post Graduate Medicine (published by BMJ)	2.4	12
Best Evidence in Medical Education (BEME – for reviews to register your topic)		

Open Access Journals (pay a submission fee)

Journal	Impact Factor	Issues per year
BMC Medical Education	2.3	continuous
MedEdPORTAL: The Journal of Teaching and Learning Resources (AAMC) ****NOT CURRENTLY INDEXED ANYWHERE (may be fixed in 2021-2022)****	N/A	continuous
Journal of Medical Education and Curricular Development	N/A	Continuous
PLOS Medicine	11	Continuous
PLOS ONE	3.2	Continuous
BMJ Open	2.7	Continuous
Advances in Medical Education and Practice	1.2	