Tips for Starting An Educational Research Project

1. **Develop a well written purpose statement.**
   a. Your Medical Education Fellows project must focus on an intervention that will enhance the teaching of and/or learning by students, residents, or fellows. Interventions that enhance a faculty member’s ability to teach may also be appropriate.
   b. The statement describing the purpose of your project should define:
      i. Participants
         1. Will your project focus on students, residents, fellows, and/or practitioners? You can even define them more specifically as first, second, third year, etc.
      ii. Intervention
         1. Define your educational strategy
      iii. Comparison or alternate intervention
         1. If relevant, state what you are comparing the intervention to.
      iv. Outcome
         1. What do you predict the intervention will accomplish? (e.g., enhanced knowledge, skills, attitudes, improved satisfaction)
   c. Example of a purpose statement:
      i. The goal of this project is to determine whether an orientation tutorial that includes asynchronous videos improves medical resident’s clinical performance during their first rotation as compared to the current orientation that is provided by the attending during the first few hours of the first rotation.
         1. (Clinical performance will be measured by: 1) faculty ratings of resident performance at the end of the rotation, 2) resident ratings about their readiness for their first rotation and stress levels during the rotation, and 3) resident performance on a patient care simulation.) (Remember you must measure outcomes that are measurable)
2. **Conduct a literature review and use the literature to build an argument that the intervention is important** (solves a problem that others face when teaching), **novel** (has not been previously reported with the learners used in your project), and **will be relevant** (will have an enduring impact in teaching/learning).

a. **Note:** The information you gather from the literature will help you in writing the Introduction section of your eventual manuscript for publication. You should prepare this Introduction section during this initial phase of your project. Your Introduction section should include the following (and therefore, during your initial literature review you should build information that will help you write this):

i. **Begin the Introduction section with a “narrative hook.”** For example, cite statistical data, provocative questions, and trends that infer the need for research. If the intervention has never been done, you can pose a provocative question/hypothesis.

ii. **A statement defining the research problem.** Usually this is 1-2 sentences.

iii. **Justification of the problem.** You can cite literature reports from others, experiences cited by others, and/or your personal experiences.

iv. **Deficiencies/gaps in what we know/understand about the research problem/issue.** Again, you can use literature to reference deficiencies/gaps.

v. **The audience.** What type of learners will benefit from the intervention? If this will positively impact faculty, describe what type of faculty.

b. **Tip:** Read some articles describing an educational research project/intervention and note how they write the introductory section. This will help you “get a feel” for writing an Introduction section.

c. **How to search the literature.**

i. **Remember the “Literature Pyramid”:** If you are new to the topic, basic information may be in Encyclopedias and Handbooks. Information not yet in publication can be found in the web and via grey literature.
ii. To search Databases - Go to the HSC library website that lists databases:

http://www.library.health.ufl.edu/resources/index.html

![Image of HSCL Databases]

iii. There are many databases available that are relevant to medical education. Here are suggestions for which databases to select:

1. First, search Pubmed.
   a. The library website contains a tutorial if you need assistance in using Pubmed. Your HSC librarian can also assist you.
   b. **Caution:** In almost all instances, you also want to search the databases listed below. This is because Pubmed only includes medical journals and there are many important education-related articles published by other disciplines.

2. Second, search Ebsco Host web.
   a. Ebsco host web actually contains multiple databases and you need to select those relevant to education. Appendix I contains a screenshot showing the databases that are most relevant to medication education.
      i. See Appendix I for Ebsco Host web page screenshot.
3. Third, search Eric (via the Cambridge Scientific Abstract database) if your project involves a broad education topic (example: self-assessment, video vs traditional instruction).

iv. How to prepare for your first search:
   1. **Define your search query by identifying important keywords.** You should have keywords for each of the following: a) Participants, b) Intervention, c) Comparison or alternate intervention, and d) the Outcome you expect.
   2. **Identify and expand concepts.** Identify other synonyms or words similar to the keywords your initially identified. For example: rotations may also be called clerkships. You may need to do the search several times using these other keywords.
   3. **Establish the scope of your query.** Consider inclusion and exclusion criteria. For example: medical students or only 3rd year medical students. (I only do this if the number of “hits” in my first search is extremely large).

v. Do multiple searches. If often takes several iterations of searches before you identify the best terms to use in your search.
   1. If your first search does not uncover relevant articles, redo your search using other keywords (your expanded concept list).

3. **Search the Grey Literature for information relevant to your project/intervention:**
   a. Web
   b. ERIC (via Cambridge Scientific Abstracts) – Includes grey literature
   c. The Grey Literature Report (Published bimonthly by the New York Academy of Medicine)
   d. Includes AAMC documents
   f. Dissertation Abstracts (available via UF library databases)
   g. Library of Congress
   h. catalog.loc.gov
   i. National Library of Medicine
   j. www.locatorplus.gov

4. **Search for Early Stage Materials – the following are examples of websites relevant to many medical education projects:**
   a. AAME website
   b. ACGME website
   c. Resources on other COM websites (find using google and keywords)
5. Once you have thoroughly reviewed the research, reflect on whether your project will be FINER:
   a. Feasible (The project can be reasonably accomplished within the timeframe allotted for the fellows program; projects most always take more time than anticipated; large projects can be broken into phases and it may be possible to gain a publication about each phase.)
   b. Important (Other faculty would agree that your intervention will improve instruction, learner performance, make instruction/learning more efficient, etc.)
   c. Novel (No one else within your discipline has previously described/evaluated your intervention. If it has been previously published, you propose to implement it in a new group of learners, use an improved intervention, etc.
   d. Ethical (Learners, faculty, and patients will not be subjected to risk or harm. You have gained appropriate approval of IRB. Note: If is easier to gain IRB approval at UF via the IRB-2 office as long as you are not collecting data from patients/the project focus is teaching/learning.)
   e. Relevant (The intervention will make an enduring impact in teaching/learning)

6. Finalize the Introductory Section of your eventual manuscript – see above for suggested outline.

7. Summary
   a. The steps outlined in this document will enable you to prepare the following:
      i. The Introduction Section of your eventual manuscript
      ii. A detailed research proposal. A research proposal usually outlines the following:
         1. Specific Aims of the Project /Your Purpose Statement*
         2. Background* (Literature that defines the problem, provides justification of the importance/relevance, and identifies the deficiencies/gaps)
         3. Preliminary work (if applicable)
         4. Experimental design/methods. This section should include measurable outcomes and a data analysis plan. Also include your plans for submitting to IRB.
         5. Timeline for proposed activities.
         6. Literature References*
         7. Budget and Budget Justification (not required for the Fellows project but is required for a COMCEC Educational Research Grant).

*The information you gain from defining your purpose statement and doing your literature search will help you in completing these steps of a proposal.
Choose Databases

To search within a single database, click the database name listed below. To select more than one database to search, check the boxes next to the databases and click Continue.

- **Abstracts in Social Gerontology**
  - *Abstracts in Social Gerontology* includes bibliographic records covering essential areas related to social gerontology, including the psychology of aging, elder abuse, society and the elderly, and other key areas of relevance to the discipline. The index contains 70,000 records, which are carefully selected from the most important sources.

- **Academic Search Premier**
  - This multi-disciplinary database provides full text for more than 4,500 journals, including full text for more than 3,700 peer-reviewed titles. PDF backfiles to 1975 or further are available for well over one hundred journals, and searchable cited references are provided for more than 1,000 titles.

- **AgeLine**
  - *AgeLine*, produced by AARP, focuses exclusively on the population aged 50+ and issues of aging. *AgeLine* is the premier source for the literature of social gerontology and includes aging-related content from the health sciences, psychology, sociology, social work, economics, and public policy. This database indexes over 600 journals, books, book chapters, reports, dissertations, consumer guides, and educational videos. Publication coverage is from 1978 to the present, with selected coverage from 1966-1977.

- **Alt HealthWatch**
  - This database focuses on the many perspectives of complementary, holistic and integrated approaches to health care and wellness. It offers libraries full text articles for more than 180 international, and often peer-reviewed journals and reports. In addition, there are hundreds of pamphlets, booklets, special reports, original research and book excerpts. *Alt HealthWatch* provides in-depth coverage across the full spectrum of subject areas covered by complementary and alternative medicine. This database features indexing and abstracts going back as far as 1984, and full text going back as far as 1990.

- **America: History & Life**
  - *America: History and Life* is the definitive index of literature covering the history and culture of the United States and Canada, from prehistory to the present. With indexing for 1,700 journals from 1964 to present, this database is without question the most important bibliographic reference tool for students and scholars of U.S. and Canadian history. The database also includes citations and links to book and media reviews. Strong English-language journal coverage is balanced by an international perspective on topics and...
events, including abstracts in English of articles published in more than 40 languages.

American Bibliography of Slavic and East European Studies

American Bibliography of Slavic & Eastern European Studies (ABSEES), produced by the University of Illinois at Urbana-Champaign, provides information on East-Central Europe and the former Soviet Union. Coverage for ABSEES ranges from 1939-present.

ATLA Religion Database

ATLA Religion Database provides information on topics such as biblical studies, world religions, church history, and religion in social issues. ATLA Religion Database contains more than 1.6 million bibliographic records covering the research literature of religion in over 60 languages. It includes more than 537,000 article citations from more than 1,633 journals (518 currently indexed), more than 225,000 essay citations from over 18,700 multi-author works, more than 494,000 book review citations. Coverage spans from 1949 to the present. This database is produced by the American Theological Library Association. Click here for a complete title list. Click here for more info.

Business Source Premier

Business Source Premier is the industry's most used business research database, providing full text for more than 2,300 journals, including full text for more than 1,100 peer-reviewed titles. This database provides full text back to 1886, and searchable cited references back to 1998. Business Source Premier is superior to the competition in full text coverage in all disciplines of business, including marketing, management, MIS, POM, accounting, finance and economics. This database is updated daily on EBSCOhost.

CINAHL

CINAHL is the authoritative resource for nursing and allied health professionals, students, educators and researchers. This database provides indexing for 2,928 journals from the fields of nursing and allied health. The database contains more than 1,000,000 records dating back to 1981.

Communication & Mass Media Complete

Communication & Mass Media Complete provides the most robust, quality research solution in areas related to communication and mass media. CMMC incorporates the content of CommSearch (formerly produced by the National Communication Association) and Mass Media Articles Index (formerly produced by Penn State) along with numerous other journals in communication, mass media, and other closely-related fields of study to create a research and reference resource of unprecedented scope and depth encompassing the breadth of the communication discipline. CMMC offers cover-to-cover (“core”) indexing and abstracts for more than 460 journals, and selected (“priority”) coverage of nearly 200 more, for a combined coverage of more than 660 titles. Furthermore, this database includes full text for 350 journals.

EconLit

EconLit, the American Economic Association’s electronic database, is the world’s foremost source of references to economic literature. The database contains more than 1,010,900 records from 1969-
present. *EconLit* covers virtually every area related to economics.

**Family Studies Abstracts**

*Family Studies Abstracts* includes bibliographic records covering essential areas related to family studies, including marriage, divorce, family therapy, and other areas of key relevance to the discipline. The index contains 45,000 records, which are carefully selected from the most important sources within the discipline.

**Fish and Fisheries Worldwide**

*Fish & Fisheries Worldwide*, produced by NISC South Africa, combines databases on all facets of ichthyology, fisheries, aquaculture and aquatic biology. This product includes research on aquaculture species ranging from culture and propagation to genetics, behavior, ecology and habitat. With over 800,000 citations and abstracts dating back to the 1970s, this resource is essential for those dealing with all aspects of fish and aquatic biology.

**GreenFILE**

*GreenFILE* offers well-researched information covering all aspects of human impact to the environment. Its collection of scholarly, government and general-interest titles includes content on global warming, green building, pollution, sustainable agriculture, renewable energy, recycling, and more. The database provides indexing and abstracts for more than 384,000 records, as well as Open Access full text for more than 4,700 records.

**Health Business FullTEXT**

This database provides full text coverage for nearly 130 well-known administrative journals. Critical for hospital administrators and managers, this database includes publications covering the business of health care administration and much more.

**Health Source: Nursing/Academic Edition**

This database provides nearly 550 scholarly full text journals focusing on many medical disciplines. *Health Source: Nursing/Academic Edition* also features the *Lexi-PAL Drug Guide*, which covers 1,300 generic drug patient education sheets with more than 4,700 brand names.

**Historical Abstracts**

*Historical Abstracts* is an exceptional resource that covers the history of the world (excluding the United States and Canada) from 1450 to the present, including world history, military history, women's history, history of education, and more - essential for libraries supporting upper-division and graduate research. This authoritative database provides indexing of more than 1,700 academic historical journals in over 40 languages back to 1955. History and social science researchers have used *Historical Abstracts* to discover significant and groundbreaking work for more than 50 years.

**Index Islamicus**

*Index Islamicus*, produced by Brill Academic Publishers, is an international bibliography of publications in...
European languages on all aspects of Islam and the Muslim world.

**Index to Jewish Periodicals**

*Index to Jewish Periodicals* is the definitive index on Jewish history, activity and thought. This database provides a comprehensive guide to English-language articles, book reviews, and feature stories in more than 220 journals devoted to Jewish affairs. *Index to Jewish Periodicals* is intended for students of Jewish thought and others interested in contemporary Jewish and Middle Eastern affairs. Journal coverage dates back as far as 1988.

[More Information](#)

**Left Index**

*The Left Index* is a complete guide to the diverse literature of the left, with an emphasis on political, economic, social and culturally engaged scholarship inside and outside academia. Coverage includes more than 247,500 citations and abstracts (with some full text) and spans from 1982 and earlier to present.

[More Information](#)

**LGBT Life with Full Text**

*LGBT Life with Full Text* contains all of the content available in *LGBT Life* as well as full text for more than 100 of the most important and historically significant LGBT journals, magazines and regional newspapers, as well as more than 110 full-text monographs and books. The database includes comprehensive indexing and abstract coverage as well as a specialized LGBT Thesaurus containing over 6,400 terms.

[Title List](#)  [More Information](#)

**Library, Information Science & Technology Abstracts**

*Library, Information Science & Technology Abstracts* (LISTA) indexes more than 500 core journals, more than 50 priority journals, and 125 selective journals; plus books, research reports and proceedings. Subject coverage includes librarianship, classification, cataloging, bibliometrics, online information retrieval, information management and more. Coverage in the database extends back as far as the mid-1960s.

[Title List](#)  [More Information](#)

**Mental Measurements Yearbook**

*Mental Measurements Yearbook*, produced by the Buros Institute at the University of Nebraska, provides users with a comprehensive guide to over 2,000 contemporary testing instruments. Designed for an audience ranging from novice test consumers to experienced professionals, the MMY series contains information essential for a complete evaluation of test products within such diverse areas as psychology, education, business, and leadership. First published by Oscar K. Buros, the MMY series allows users to make knowledgeable judgments and informed selection decisions about the increasingly complex world of testing. MMY provides coverage from Volume 9 to the present.

[More Information](#)

**MLA Directory of Periodicals**

The *MLA Directory of Periodicals* offers detailed information on over 5,500 journals, with 4,400 currently indexed in the International Bibliography. The detailed entries include editorial contact information, as well as frequency, circulation, subscription prices and submission guidelines.

[More Information](#)

**MLA International Bibliography**

*MLA International Bibliography* offers a detailed bibliography of journal articles, books and dissertations.
Produced by the Modern Language Association, the electronic version of the bibliography dates back to the 1920s and contains over 1.8 million citations from more than 4,400 journals & series and 1,000 book publishers. The indexed materials coverage is international and includes almost 60 titles from J-STOR's language and literature collection as well as links to full text.

**Peace Research Abstracts**
*Peace Research Abstracts* includes bibliographic records covering essential areas related to peace research, including conflict resolution, international affairs, peace psychology, and other areas of key relevance to the discipline. The index contains 115,000 records, which are carefully selected from the most important sources within the discipline.

More Information

**Professional Development Collection**
Designed for professional educators, this database provides a highly specialized collection of nearly 520 high quality education journals, including more than 350 peer-reviewed titles. This database also contains more than 200 educational reports. *Professional Development Collection* is the most comprehensive collection of full text education journals in the world.

Title List More Information

**Psychology and Behavioral Sciences Collection**
*Psychology & Behavioral Sciences Collection* is a comprehensive database covering information concerning topics in emotional and behavioral characteristics, psychiatry & psychology, mental processes, anthropology, and observational & experimental methods. This is the world's largest full text psychology database offering full text coverage for nearly 600 journals.

Title List More Information

**PsycINFO**
The *PsycINFO*, database, American Psychological Association's (APA) renowned resource for abstracts of scholarly journal articles, book chapters, books, and dissertations, is the largest resource devoted to peer-reviewed literature in behavioral science and mental health. It contains over 2.5 million citations and summaries dating as far back as the early 1800s. Journal coverage, which spans from 1887 to present, includes international material selected from more than 2,200 periodicals in more than 27 languages.

More Information

**Public Administration Abstracts**
*Public Administration Abstracts* includes bibliographic records covering essential areas related to public administration, including public administration research, public administration theory, and other areas of key relevance to the discipline.

More Information

**Race Relations Abstracts**
*Race Relations Abstracts* includes bibliographic records covering essential areas related to race relations, including ethnic studies, discrimination, immigration studies, and other areas of key relevance to the discipline. The index contains 40,000 records, which are carefully selected from the most important sources within the discipline.

More Information

**Regional Business News**
This database provides comprehensive full text coverage for regional business publications. *Regional...*
Business News incorporates coverage of 75 business journals, newspapers and newswires from all metropolitan and rural areas within the United States. This database is updated bi-weekly.

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<td>Religion and Philosophy Collection</td>
<td>Religion &amp; Philosophy Collection provides extensive coverage of such topics as world religions, major denominations, biblical studies, religious history, epistemology, political philosophy, philosophy of language, moral philosophy and the history of philosophy. Religion &amp; Philosophy Collection offers nearly 300 full text journals, including more than 250 peer-reviewed titles, making it an essential tool for researchers and students of theology and philosophical studies.</td>
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<td>Research Starters - Education</td>
<td>Research Starters are study and research guides designed specifically for advanced high school students, college students and selected graduate students. They consist of comprehensive, yet concise topic summary articles of about 3,000 words in length written by researchers, scholars and other subject matter experts.</td>
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<tr>
<td>RILM Abstracts of Music Literature</td>
<td>RILM is a comprehensive music bibliography featuring citations, abstracts, and indexes. There are currently over 540,000 records in RILM on traditional music, popular music, and classical music, representing disciplines that include musicology, ethnomusicology, pedagogy, psychology, anthropology, sociology and others. All document types and media such as books, conference proceedings (going back to 1835), journal articles, dissertations as well as internet resources, sound recordings and motion pictures are included. RILM also features bilingual abstracts and all non-Roman scripts.</td>
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<tr>
<td>Sociological Collection</td>
<td>This database provides coverage of more than 500 full text journals, including nearly 500 peer-reviewed titles. Sociological Collection offers information in all areas of sociology, including social behavior, human tendencies, interaction, relationships, community development, culture and social structure. This database is updated daily via EBSCOhost.</td>
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<td>SPORTDiscus with Full Text</td>
<td>SPORTDiscus with Full Text is the world's most comprehensive source of full text for sports &amp; sports medicine journals, providing full text for more than 440 journals indexed in SPORTDiscus. This authoritative file contains full text for many of the most used journals in the SPORTDiscus index - with no embargo. With full-text coverage dating back to 1985, SPORTDiscus with Full Text is the definitive research tool for all areas of sports &amp; sports medicine literature.</td>
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<tr>
<td>The Nation Archive</td>
<td>The Nation Archive contains indexing, abstracting, and full text for the complete archive of The Nation, beginning with its first issue in 1865 all the way to the present. The Nation is America’s oldest weekly magazine and one of its premier journals of opinion since its inception in 1865. The Nation has long been regarded as one of the country’s definitive journalistic voices of writing on politics, culture, books, and the arts, and continues to stand as the independent voice in American journalism.</td>
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<td><strong>Women's Studies International</strong>&lt;br&gt;&lt;em&gt;Women's Studies International&lt;/em&gt;, produced by NISC, covers the core disciplines in Women's Studies to the latest scholarship in feminist research. Coverage includes more than 586,600 records and spans from 1972 and earlier to present. This database supports curriculum development in the areas of sociology, history, political science &amp; economy, public policy, international relations, arts &amp; humanities, business and education. Over 2,000 periodical sources are represented.</td>
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