



## EDUCATIONAL RESEARCH

**What is the Current State of UNMDG Educational Research?**  
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U21 UN MDG WORKSHOP MONTERREY '10

## Historically...

- The evaluation sub-committee have been employing a very broad ecological model in building a UN MDG curriculum from an international and interdisciplinary standpoint
  - Developed a Evaluation Toolkit
    - Framework
    - Logic Model
    - Student Evaluation Tool

## U21 UNMDG WORKSHOP HK

### Next Steps (5)

- Develop an educational research agenda around UN MDG education
  - Define research questions
  - Establish a working group with IP faculty and student input
  - Closely connecting global health and health professions
  - Inventory of research
  - Tighten evaluation around educational outcome
  - Find ways to share and showcase research
  - Jointly pursue educational research grants (e.g. NIH)

## Educational Research Goals

- Establish a working group with IP Faculty and Students
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**Establish Working Group With IP Faculty & Students**

### Educational Research Working Group

- AbiSriharan
- DevinaWadwha\*
- Derek Chambers
- Helen Novak Lauscher\*\*
- Jacinta Tobin
- Janie Sheridan
- Jesse Jensen\*
- Kevin McCartney
- KileBrokop
- Nelson Shen
- Sophia Khan
- Susan Dahinten
- VideshKapoor


\* UBC Medical Students, \*\*Committee Chair



### Educational Research Goals

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**RESEARCH MARKETING**



## What we've done so far...

- Engaged in a preliminary discussion surrounding the integration of educational research into the existing evaluation framework to achieve the outlined goals.
- Priorities identified was the development of:
  - Educational research based on student outcomes
  - Common indicators and data collection tools across contexts
  - Collection and inventory of tools to facilitate/support evaluation



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## Educational Literature Review

**Objective #1:** To create a platform upon which the educational framework can be developed  
Help develop some research questions

- Review what has been done globally in terms of UNMDG curriculum, instruction, competency, and evaluation
- Identify gaps and help develop research questions



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## Educational Literature Review

**Objective #2:** Build an inventory of tools or instruments that measure the effectiveness of UN MDG instruction and student learning outcomes



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## Methodology

- Iterative approach
- Phase I – quick scan of available literature on UNMDGs and Education
  - To assess the amount of literature available
- Phase II – “refine” search by broadening to Global Health and Education
  - Map literature to UN MDG goals and consider as a surrogate



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## Methodology

### Indexes:

EBSCO  
Academic Search  
Premier  
ISI Web of Knowledge  
PsychInfo  
Education Resource  
Complete  
Education Index  
FullText  
NIH PubMed  
PubMed Central  
JSTOR

- Search Terms:
  - All 8 UNMDGs and similar search terms
  - Service learning, global citizenship, evaluating global health education, international health education, canadian health education, health knowledge, health attitude, health practice, global health, development, curriculum, global health experiences



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## What we Found...

- Phase I yielded a paucity of literature on the topic of Teaching UNMDG especially in Health Sciences
  - Focus was usually on education as a vehicle to achieve UN MDGs, not about integration into curriculum and learning outcomes
- Phase II yielded more than 50 articles
  - Included some grey literature found in academic journals



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## What We Found...

- UNMDG education literature is lacking, needed to use GH as an substitute
- Literature is growing from 8 articles in 2003 to 50+ based on our search
- Need for more quantitative data
- Need for valid and transferrable research\*\*

\*\*Haines 2005



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## Some Limitations

- Limitation in Scope – substantial search but non-exhaustive
  - Provide starting point for future research
- Mostly qualitative, very little quantitative
- Limited to English language and has an unintentional North American bias
  - Most studies found were USA based and little knowledge sharing across language boundaries



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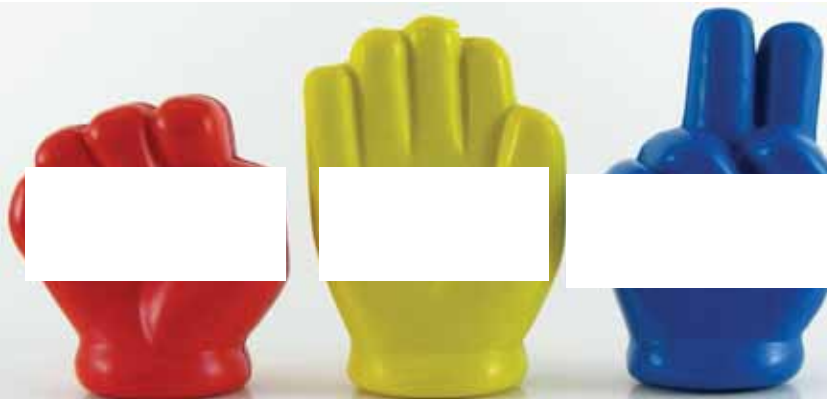
## One Particular Limitation

- There is very or no dialogue between the three “streams” found in the literature
  - Although the problematizing literature responds to program evaluation literature, program evaluation literature does not reciprocate
  - There are vastly different assumptions and ideologies in the literature that make comparisons challenging.
    - Thompson 2003 was the only meta-review that came up in the search – only 8 articles at the time



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## The Three Streams



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## Pedagogical Evaluation

- **Focus:** the best approach to teach and learn about GH issues
  - Responsibilities and Sensitivities towards GH issues\*\*
  - Skills\*\*
- **Indicators:** Knowledge, participation, student value of education, perception of developing countries, student involvement

\*\* Edmunds & Wall 2009, Wall & Edmunds 2009, Krain&Lantis 2007



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## Pedagogical Evaluation

\*\* Tippett 2006



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## Program Evaluation

- **Focus:** Future successes rather than student self-assessment, personal perspectives, or objective indications of knowledge acquisition
  - What educational inputs are available to students?
  - Competency based and measured in means of career performance
- **Indicators:** Career choice, perceived value of education, student desire for global health content



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## Program Evaluation

Question: "What exactly constitutes global health, and how much do medical practitioners need to know about it?"\*\*

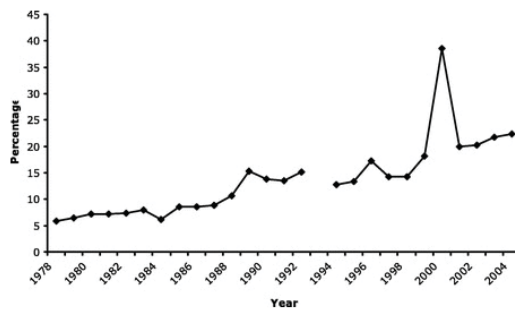
Question: How do we develop a program aimed at determining what competencies are required for a global health practitioner or global citizen?

\*\*Haupt, Pearson, Hall 2007



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## A Break from the Streams



Percentage of medical school graduates who participated in international health experiences during medical school between 1978 to 2004\*\*

\*\* Drain et al 2007



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## “Despite the substantial growth...

... in the global health activities at medical schools, the **haphazard** nature of this growth has contributed to a **highly variable** amount and quality of training across different medical school's curricula\*\*”

\*\* Brewer, Saba, and Clair, 2009



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## Problematizing Literature

- **Focus:** How to comprehend all the different and sometimes conflicting perspectives, goals, and ideals taught in curriculum?
  - Ensuring consistency and quality across academic institutions, service learning programs, and professions
  - Ethical critiques of service learning programs as potentially exporting western knowledge, rather than giving a global perspective\*\*

\*\*Sugarman and Crump 2008



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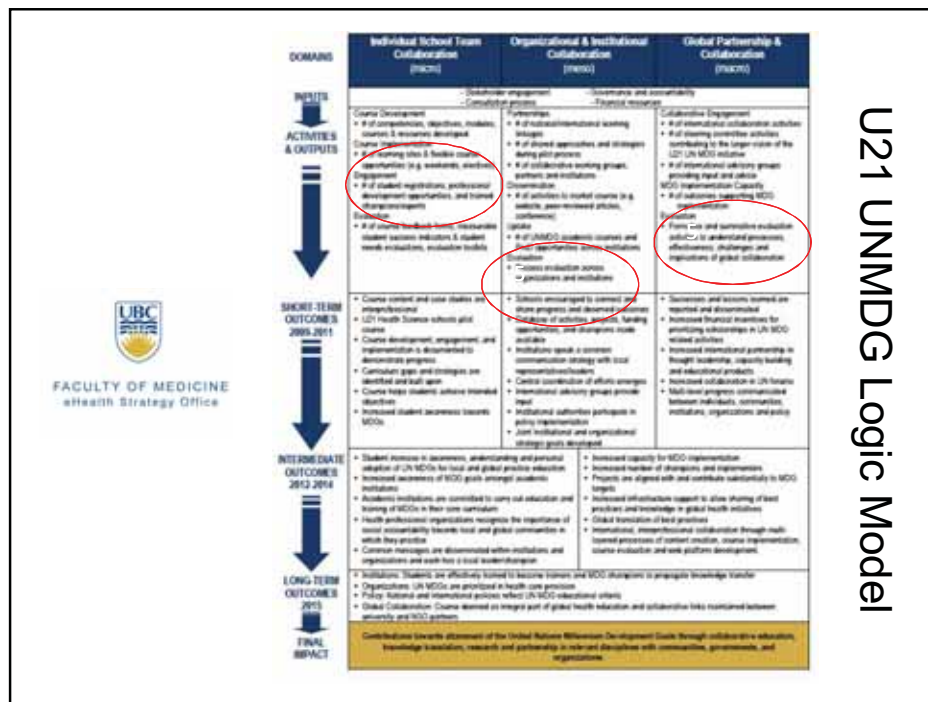
## With Respect to U21 UNMDG

There are parallels to what we've done so far...

Pedagogical Evaluation	Program Evaluation	Problematizing Literature
Knowledge Participation Perceptions Values	Career Choice Perceived Values MDG Content	Context Standards Quality
<b>Student Engagement</b> Student Guide	<b>Student Evaluation Tool</b>	<b>Educator's Guide</b> Case Studies/PBL



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U21 UNMDG Logic Model

## Moving Forward

- Developed a U21 UN MDG Educational Research Platform/Package that sets out to meet some of the research objectives outlined. Includes:
  - Literature Research Methodology
  - Preliminary literature review,
  - Evaluation tool inventory,
  - Annotated bibliography



## Moving Forward

- Opportunity!
  - UN MDG education literature is lacking;
  - there is a common sentiment that more quantitative data should be collected in the field\*
  - Need for valid and transferrable research\*\*
  - Need for multiple disciplines – epidemiology, biostatistics, health economics, sociology, anthropology, and policy analysis\*\*

\*Drain et al. 2007, \*\*Haines et al. 2008,



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## Moving Further Downstream

- MDG literature and education is fragmented
  - Do we try to reconcile Pedagogical and Program evaluation through problematizing?
    - Whole picture approach
  - Systematic reviews are difficult due to the methodological challenges in synthesizing evidence from different contexts using a range of methodological approaches



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