GLOBAL PROBLEM SOLVING:

Using an Interdisciplinary Approach to Engage College Students in Addressing Global Problems

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What Should Christian Higher Education Include?

- More than information transfer
- Instill a heart for service
- Develop skills in problem solving
- Move beyond disciplinary silos
 How can we accomplish this in a small college setting?

Our Approach

Implement a project that is:

- Interdisciplinary
- Campus-wide

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• Tackles a real world problem

The Problem

884 million people worldwide lack sustainable access to safe drinking water and current human influence continues to threaten future access.



Water Crisis has Many Aspects

- Political
- Technical
- Educational
- Ecological
- Sociological/cultural
- Many ways to tackle the problem

How did we Address the Problem?





What Did This Project Entail?

- Over 475 students from many different disciplines
- 25 faculty members and courses
- Modeled interdisciplinary group problem solving
- Replaced a major assignment in the course, 10-15% of final grade

How did the disciplines contribute to the project?

- Professors helped students bring their discipline into the conversation
 - Provided additional resources
 - Led discipline specific class discussion(s)
- Students acted as "disciplinary experts"

- Lecture by visiting speaker
 - Provided context for prompting question



- Lecture by visiting speaker
- Written response to lecture



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- Dinner and interdisciplinary group discussions
 - Define a facet of the problem concretely
 - Brainstorm avenues to explore for solutions



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- Written response to lecture
- Dinner and interdisciplinary group discussions
- Research the problem and interact with experts in the field
 - Questions to experts were submitted online and the experts responded to a selection of them



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- Present a poster on one approach to the problem



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- Present a poster on one approach to the problem
- Evaluate other solutions
- Individual reflection papers

How did it go?

"The Water Project has shown me that even firstand second-world countries can lack clean, safe drinking water, and has given me the chance to help creatively solve a real world problem with no "correct" or known solution"

Katie T., freshman biology major



How did it go?

"I am really excited about the water project! I enjoy how the project is bringing people of different disciplines and backgrounds together. As a nurse, I am bringing the healthcare perspective to the table as I draw from experiences and research that I have done for other classes.....Dordt is providing a fantastic opportunity for students to gather around an important issue and consider real world solutions to an extensive and complex problem."

Lindsay H., Senior Nursing Major

Room for Improvement

- Disciplinary connections need to be stronger
 - Seemed like a course add-on for students
- Project seemed abstract, didn't hit home for some students
- Lack of follow-up to students' good ideas
- Project was more work than the grade allotment



Version 2.0 Improvements

- Class time dedicated to making disciplinary connections
- Chapel talks will tie in to the project
- Partner with existing NGOs
- Opportunities for service trips to the NGO over Christmas break
- Reduced time expectations

Next Year's Version: AGILE <u>Approaching G</u>lobal <u>I</u>ssues through <u>Interdiscipinary Learning Experiences</u>

This year's problem: Almost nine million children still die each year before they reach their fifth birthday.



What does this approach hope to develop?

Students who have:

- An eye for complex world problems
- A <u>heart</u> to tackle these problems
- <u>Ears</u> to learn all aspects of the problems
- <u>Hands</u> equipped to serve their neighbor and their Lord



"Whatever you did for one of the least of these brothers of mine, you did for me." Matthew 25:40

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