

## HUMAN RESOURCES AND WORKFORCE

### The University of Washington Strategic Analysis, Research and Training (START) Center: an innovative applied research and training model

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**Program Purpose:** To meet evolving public health needs, global and domestic health organizations are leveraging external consultants for data analysis, technical advising, and program evaluation. The Strategic Analysis, Research & Training (START) Center provides high quality research and analytic support while simultaneously mentoring and training the next generation of public health professionals. START was established in 2011 through a partnership between the University of Washington Department of Global Health and the Bill & Melinda Gates Foundation.

**Structure/Method/Design:** The START Center provides valuable research, evaluation and training opportunities for faculty and students from multiple disciplines. Under the START model, teams of graduate student research assistants and faculty mentors in Global Health, Epidemiology, Public Health, Medicine, Business Administration, Law, Education and Public Policy deliver high quality consultation for global and domestic health program efforts. These teams are student-led and managed, providing quality hands-on experience for future professionals.

Graduate Research Assistants work closely with Faculty Mentors in a structured training and mentorship experience to strengthen the following START competencies: leadership and interpersonal communication, synthesis and presentation skills, analytical thinking, team dynamics, and client engagement.

**Outcome & Evaluation:** To date, the START Center has completed over 85 research requests, serving both global and domestic clients in Washington State and beyond, and delivered more than 150 reports, presentations and tools for these clients. START has trained over 40 graduate Research Assistants in leadership, project management, communication and analysis. Today, the Center engages a team of 7 faculty, 12 masters and doctoral students from the Schools of Public Health, Business, Law and Education, and 3 staff members, working on 15 active research projects.

**Going Forward:** START continues to refine its interdisciplinary model and effective cross-university collaborations to optimally serve diverse global and public health clients. Client organizations benefit from the expertise of University faculty, while engaging well-trained global and public health students to tackle challenging questions from a variety of angles and disciplines.

**Funding:** Bill & Melinda Gates Foundation, with additional project-specific funding from the World Health Organization, the Center for Strategic International Studies, Healthentic, Sherris Consulting, and the Natural History Museum in London.

**Abstract #:** 1.001\_HRW

### Teaching global health issues in online graduate MBA courses: the international technological university experience

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**Program/Project Purpose:** International Technological University is a WASC-accredited graduate school with students from 30 countries. This project focused on course development for and performance of MBA students enrolled in the Healthcare Management concentration in two online courses, *Health Promotion* and *Global Health*.

**Structure/Methods/Design:** The instructor used the course design process Link described in his 2003 book, *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses*. Link emphasizes a “backward design” effort that starts with: “What would I like the impact of this course to be on students, 2-3 years after the course is over?”

Students summarized their understanding of weekly materials in personal essays, and made at least four comment about the essays of other students. A lottery rewarded a weekly extra point for posting more than four comments.

For *Health Promotion* essay prompts, the instructor selected six journal articles and six videos that mirrored chapters from Kirsten and Karch's 2012 book *Global Perspectives in Workplace Health Promotion*. Written assignments captured the before-and-after status of individually-designed health improvement plans. A slidecast assignment envisioned students' pitches to WHO executives to fund workplace health improvements in student-chosen countries.

For *Global Health* essay prompts, the instructor selected descriptions of twelve goals from the UN's Global Goals for Sustainability. Students were invited to find videos for marketing campaigns to engage viewers in caring about specific goals. Students introduced themselves in slidecasts during the first week, announcing their global health interests. Written assignments directed students to research problems and possible solutions for their selected interests.

**Outcome and Evaluation:** Eighteen students completed the *Health Promotion* course. Sixteen students completed the *Global Health* course. At the end, students reflected upon accomplishments, evaluated learning tools, and shared insights such as “Technology and social media (are) powerful tools.” Students detailed health education needs of themselves, relatives, and friends. Students shared their visions for global health improvement efforts. Most students singled out

pleasure and empowerment with learning how to record slide narrations.

**Going Forward:** Lessons learned: let students choose videos; the lottery worked well for one course, but not for the other; keep before-and-after reporting and slide narrations.

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### The impact of a health professions and public health educational intervention on native american students at a tribal college in North Dakota

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**Background:** The American Indian/Alaska Native (AIAN) population of the United States (US) experiences greater health disparities than nearly all other US ethnic groups, including a higher prevalence of obesity, mental illness and substance abuse. It has been theorized that racial concordance between patients and providers leads to better health outcomes. Therefore, one factor that may contribute to the disparity in disease prevalence among AIAN people is the disproportionately low number of AIAN health professionals. Leaders from a tribal college in North Dakota collaborated with medical professionals from Icahn School of Medicine at Mount Sinai and the North Dakota State University School of Nursing to develop a college course to encourage more AIAN students to pursue careers in healthcare. The aim of this study was to assess the impact of the course on former students.

**Methods:** Former students were invited to participate in focus groups to discuss how the course may or may not have affected them and their desire to pursue a career in health. Fifteen participants were hosted in four focus groups of 3–5 participants per group. The focus groups were recorded and participants received a light meal and a \$10 Walmart gift card for their time. Qualitative data were analyzed using grounded theory methodology.

**Findings:** Participants affirmed that the course is successful in increasing enthusiasm for and knowledge of health professions. Other major themes discussed included the perceived benefits of cultural intermingling between medical trainees from New York and Native community college students, and barriers to entering careers in healthcare (i.e., finances, family struggles). Participants also discussed personal growth during the class and the impact their learning had on friends and family.

**Interpretation:** The course has been successful in increasing interest in health professions, but the most significant benefit of the course may be the cultural exchange. Additionally, the information gathered, including that of the barriers to entering careers in healthcare, can be instrumental for the design of future iterations of the course and the potential development of additional interventions.

**Funding:** Icahn School of Medicine at Mount Sinai and The University Partnership Research Grant for Health Professional Opportunity Grant # 90PH0019, Office of Planning, Research, and Evaluation, Administration for Children and Families.

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### Hands-On educational model in Nigeria increases interest in STEM careers

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**Background:** The shortage of STEM professionals in low-income countries like Nigeria has been linked to an unending cycle of underperformance in multiple economic sectors (OECD, 2006). We studied the effectiveness of hands-on field experiences as a model in addressing the problem of a lack of adequate student participation in 21<sup>st</sup> century STEM careers. This field experience addresses this problem by providing focused hands-on activities and professional development seminars that expose students to a spectrum of STEM careers (including medicine, computer science, and public health).

**Methods:** 61 students in their penultimate year of precollege education were enrolled for the study from 4 high schools in Lagos, Nigeria: Queens College, Kings College, Federal Science and Technical College, Yaba Technical College. Participants were recruited in partnership with local teachers, and educators by letters sent to principals with a request to nominate a pre-determined number of students for participation in the program. Parent and student consent were obtained per IRB review. Recruited students attended a 3-day field experience where they participated in epidemiological case studies, suturing workshops, programming session and other activities. Participants completed an anonymous survey before and after the program to evaluate interests in STEM career fields.

**Findings:** There was an increase in interest in science related careers amongst participants as a direct result of the program. There was an increase understanding of the difference between different STEM career paths. Participants indicated an increased interest in being paired with STEM Field mentor.

**Interpretation:** Analysis of the data indicates a hands-on focused educational model might be effective at influencing interests in STEM careers amongst Nigerian student. Further analysis is needed to evaluate the long term impact of the educational model on future career decisions. Future directions is focused on long-term impact through mentorship.

**Funding:** Duke University School of Medicine, DukeMed Engage, Queens College, Andela.

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### 1.006\_HRW The global health minor: is it time to establish a core curriculum?

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**Program Purpose:** Global health has catapulted in popularity as a focus for US college students. To respond to this demand, many