CASE STUDY

A Public Health distance Training Programme: the Geneva University e-module in Public Health targeting 10 French-speaking African countries supported by the WHO and the GHWA

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Key words: Technologies, Pedagogy and tutoring in distance /blended learning

Development
The shortage of a competent health workforce is a major problem worldwide, stressed by WHO, is partly due to a lack of adequate training. International bodies have issued recommendations concerning core competencies of public health personnel likely to help governments solve health problems of the communities. Furthermore the danger of increased brain drain through out-of-country training has been identified and emphasised, pointing to new training methods especially via ICTs.

Phase 0-Fall 2008—Fall 2009: In this context WHO has launched a world-wide call for proposals for a public health training programme targeting Africa with emphasis on health workforce development. Among about 50 proposals, 2 were accepted and funded in 2010: 1 targeting English speaking Africa and 1 targeting French speaking Africa, the latter being attributed to the University of Geneva in partnership with Ministries of Health in target countries. The aim of the Geneva-based programme is to train health professionals from French-speaking African countries (Centre Afrique, Cameroon, Chad, Burkina Faso, Senegal, Ivory Coast, Congo, DRC, Mali, Burundi) in public health with a focus on health workforce development over an electronic platform – the Geneva e-module in Public Health GEMPH - in close partnership with African Universities and local Public Health authorities.

Phase 1-Spring-Summer 2010: The project began with a needs assessment through country visits by one of the main investigators from March - 2009 to April 2010, summed up in a Report transmitted to WHO and later published as a scientific contribution in ‘Advances in Health Education Sciences’.

Phase 2-Summer-Fall 2010: The project moved forward with a multiple-step student selection in fall 2010. First, WHO country offices and Ministries of Health gave a short list per country. The University of Geneva developed a test that students took in the fall of 2010; and 34 students were selected from 55 candidates with a fair country representation. In March 2011, 3 students from Burundi joined the programme on demand of WHO. The male/female ratio was 3/1; 45% were physicians, 24% managers and administrators, 31% health workers, teachers and social workers.

In December 2010 an educational workshop for local tutors was organised in Bamako, Mali, to motivate local tutors and make them familiar with the project and its educational approach. Participants were academics and health managers, WHO Focal Points, WHO-HQ, University of Geneva. In the fall 2010 an electronic platform was adopted upon the recommendations of the e-experts of the University of Geneva: the Moodle-platform of UNIGE allowing easy interactions between educators, learners and learning resources, offering asynchronous discussion forums and being adaptable to the needs and demands of teachers and students. This choice also gives access to the informatics back-office of UNIGE.
**Phase 3-Fall 2010–Winter 2010-11:** Development of the programme and its objectives was initiated. 10 priority public health topics were adopted: Traffic Accidents; Mother and Child Care; HIV/AIDS; Mental Health; Food Malnutrition; Human Resources for Health; Infectious Diseases; Essential Medicines; Chronic Diseases; Health Promotion. For each topic specific educational material was developed (case studies, readings, exercises, self-evaluation modules, assessment tools, assignments, etc.). Each topic was looked at through the lens of key public health disciplines, i.e. Epidemiology, Human Resources, Health Project/Service Planning, Health policy, Communication, Health Economics and Management, Informatics, Ethics and Human Rights.

**Phase 4-Winter 2010-11 – Winter 2012-13:** Implementation of training activities of the programme started in February 2011. Each module was run over a 2-month period up to December 2012, starting with a case study and reading assignments available on the e-platform. Each module had to be validated by a specific assignment.

**Phase 5-Winter 2012-13 - Spring 2013:** A first exercise related to the master thesis was done in August 2012. It allowed students to identify possible projects, all related to health workforce development. The writing of the master thesis is underway (early 2013) and is due in June 2013. Late Spring 2013 (June) will also be a period of final examinations. A MAS-Diploma in Public Health (orientation Health Workforce Development) of the University of Geneva will be given to the students who meet the evaluation requirements (active participation, evaluation of assignments due for each module, evaluation of final exams and of master thesis).

**Monitoring of the Programme**

**Students’ participation and satisfaction:** The number of connections made by the students was an important monitoring tool. The average number of connections made during the delivery of the modules was 5800 ranging from 3342 for Chronic diseases to 8636 for AIDS/HIV and students continued to connect in large numbers after the end of the module (e.g. 1630 to Accidents). Student satisfaction was also measured for each theme in each module and on a scale of 1 to 10 (10 being the highest) the lowest score was 6.35 and the highest was 8.4, with a global average of 7.6.

**Validation of the modules: individual “homework” due:** There were also 2 individual certifying validation tests at the end of each module (e.g. MCQ in epidemiology, project planning exercise, communication exercise, field study, community survey, etc): individual feedback and grading was done by the Geneva-based coordination team.

**SWOT analysis of the program by students and coordinating staff**

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**Weaknesses**
- non functioning of local tutorship
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- scarce Internet connection
- no new funding available

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**Threats**
- financial sustainability
- political insecurity
- plagiarism
- workload for coordination/teaching staff
Questions for discussion
How can we solve the problem of local tutors and local support?
How can we sustain the programme?
What kind of agency is necessary to support such a programme?

Veronique Zesiger: RN, MPH, M Educ, scientific collaborator and educational coordinator of several public health training programmes at the Institute of Social and Preventive Medicine, University of Geneva; former collaborator of the ICRC