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## Africa Build Educational Widget for Capacity Building in Health Education and Research

SK Afagbedzi<sup>a\*</sup>, S Dery<sup>a</sup>, J Adziakpor<sup>a</sup>, M Ramirez-Robles<sup>b</sup> A Jimenez-Castellanos<sup>b</sup>, V Maojo<sup>b</sup>, R. Aryeetey<sup>a</sup>

<sup>a</sup>School of Public Health, University of Ghana, Accra, Ghana. <sup>b</sup>Universidad Politecnica de Madrid, Madrid, Spain

**Background and Purpose:** Many Sub-Saharan African countries are unable to take full advantage of the rapidly growing Information and Communication Technology (ICT) revolution to improve human health and health delivery. This is partly due to inadequate human resource capacity, weak infrastructure, underinvestment in research and lack of information on existing health training institutions in Africa. The challenge of inadequate health education information compels health professionals seeking advancement in knowledge and research to study outside Africa which is expensive and majority do not return back to their countries. The question therefore is which institutions in Africa are offering such programmes? What is the scope of the programmes they offer and at what cost? In line with the larger objective of the EU-funded *AFRICA BUILD Project* to implement an ICT-enabled, open and collaborative infrastructure for health research and education through the provision of informatics tools, collaborative training infrastructure were developed which include Educational widget and database to provide access to information on all health educational programmes and institutions in Africa which is currently difficult to obtain.

**Methods:** The widget was built with a social-media orientation using an open source platform ELGG which provides the basic functionality to run a social network and MySQL database, both of which will help to achieve sustainability of the portal. The widget was designed with a backend database of information such as name of institution, country, programmes offered, level, duration etc. Data was obtained through phone calls, email surveys and online searches which are technology driven and making responses more reliable cheaper and faster as compared to traditional postal questionnaire surveys.

Some of the limitations include lack of online presence of some institutions and programmes, non response, language barrier and lack of cooperation from some institutions.

**Results:** A functional educational programmes widget has been developed and currently running on the e-laboratory page of the AFRICA BUILD Portal. About 970 universities were identified in Africa out of which 213 have been contacted and 86 have responded. Analysis of the database information showed the following:(i) there were a total of 506 programmes offered by 38 different institutions; (ii) Bachelor's Degree programmes constituted the largest, 186 (36.8%), followed by Master's programmes, 136 (26.9); (iii) Of the different categories, Biomedical Research was the commonest, 340 (67.2%) followed by Public Health Research,151 (29.8%); (iv) detailed descriptions of the various programmes were only available in 193 (38.1%) cases; (v) offline/classroom mode of teaching was used in 282 (55.7%) of the programmes; (vi) programmes with English as a medium of instruction were 246 (48.6%) and those in Afrikaans were 178 (35.2%); and (vii) the majority of the programmes are offered in South Africa, 228 (45.1%) and Nigeria, 124 (24.5%). Information gathering for populating the database is still ongoing.

**Conclusions:** A functional widget has been developed and tested. This widget will provide information about the existing health educational programmes in Africa on lunch of the Africa Build Portal.

Keywords: AFRICA BUILD, Educational Programme, Widget, Ghana, UG-SPH

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<sup>\*</sup>Corresponding author: University of Ghana, School of Public Health, Box LG 13 Legon-Accra, Ghana. Email: safagbedzi@gmail.com, Tel: +233-244-591953