

Implementing Learner-Centered Teaching Approaches in Ghana

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Introduction/Need for Research

The Ghanaian Ministry of Education has responded to prior research and recently called for a transformation in their education system from restrictive, teacher-centered instruction, to a more learner-centered approach with the purpose of improving economic outcomes throughout the country (Psacharopoulos & Patrinos, 2004). Although these methods are supported by the Ghanaian government, international aid agencies, and other non-governmental organizations, implementation of these methods has yet to be seen in schools (Dei, 2004). The literature revealed several themes regarding the difficulty of implementing learner-centered education in Ghanaian education, however the studies we reviewed predominantly utilized pre-service teachers (Akyeampong, 2002 & Akyeampong, Pryor, & Ampiah, 2006). Many studies identified barriers to implementing learner-centered strategies, highlighting the need for more professional development for in-service teachers (Vavrus, Thomas, & Bartlett, 2011). However few studies measured the rate of adoption following a learner-centered strategies training program specific to secondary agriculture programs (Mizrachi, Padilla, & Susuwele-Banda, 2010; Kroma 2003).

The purpose of our study was to determine which learner-centered techniques secondary Ghanaian teachers are most likely to implement in their own classrooms after completing a three-day training program. Pre and post surveys were administered to participants assessing demographic data, prior knowledge of the session topics, current teaching techniques, and likelihood of adoption after training. The goal of our research was to assess current teaching strategies Ghanaian teachers use as well as identify which learner-centered teaching strategies they are likely to adopt. We implemented this research through partnership with AgriCorps, a U.S. based non-profit organization dedicated to improving agricultural education and practices in developing nations. As a result of our partnership, we were able to work with in-service agriculture teacher participants to improve their teaching practices.

Theoretical Framework

The theoretical framework of this study was the transtheoretical theory which focuses on the stages and processes of change (Prochaska & DiClemente, 1982). We focused this study on the heuristic five step model that outlines stages of change, paying particular attention to the first stage of change, precontemplation, a phase in which there is no recognition of need or interest to change. Other constructs in this theory such as decisional balance, self-efficacy, and processes of change, help in identifying factors preventing people, in this case in-service teachers, from changing their behavior with respect to their teaching practices.

Methodology

Data were collected from 81 teachers from three regions in the Northern, Eastern, and Ashanti regions of Ghana. Participants included agriculture teachers from schools which housed an onsite AgriCorps Fellows as well as non-agriculture teachers, headmasters/headmistresses, and Ghana 4-H staff. Pre and post training survey instruments were developed by AgriCorps Fellows. Given the uniqueness of the audience, we were only able to assess validity by use of a panel of local experts, and were unable to establish reliability measures. We did however, gather

reflections during the survey, and data from pre and post training surveys were summarized and analyzed using descriptive statistics.

Results/Findings

Table 1: Participants Value and Use of Concepts

<i>Concept</i>	<i>What concept did you find valuable? (%)</i>	<i>What concept(s) will you use in your classroom? (%)</i>
Role as an Educator ^a	63	1
Experiential Learning	69	48
Engaging Students	68	40
Mini Lessons ^b	26	0
Problem Based Learning ^b	54	16
Classroom Management	65	38
Planning a lesson	49	11

^aRole as an Educator session did not include specific strategies to implement in the classroom, but rather was a session devoted to understand the purpose of teaching and the role a teacher plays in shaping a pupil's development.

^bSession 4 (Mini Lessons) and session 5 (Problem Based Learning) were not taught at the Pong-Tamale training.

Conclusions/Implications/Recommendations

We were excited to see that participants found value in all of the concepts presented during the three-day training, with sessions on the experiential learning cycle, how to engage students, and classroom management as the most favored concepts. All participants indicated they would implement at least one of the concepts learned into their classroom and gave the training an average rating of 9.5 out of 10. Post training surveys indicated all participants could explain what experiential learning and teaching were as well as describe classroom management strategies that did not include corporal punishment. All participants noted they found the training useful and would recommend it to other teachers. Several participants noted they would like to have additional training on topics including but not limited to: how to build positive relationships with students, how to incorporate technology into the classroom, how to plan a lesson, how to better prepare teaching and learning materials, and how to motivate girls to be interested in science. These responses align with prior literature addressing the need for increased professional development opportunities for in-service teachers.

Upon conclusion of the training, AgriCorps Fellows worked with their agriculture teacher participant counter-part to implement strategies presented at the trainings. Researchers also created online group texting forums through the WhatsApp application to check in with participants after the training to offer assistance and further teaching ideas. We recommend continued research to assess the short and long-term effectiveness of this type of training.

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