Kenyatta University and Syracuse University*: Africa-U.S. Higher Education Initiative Partnership

Building Capacity Through Quality Teacher Preparation

Resource packet developed from

Workshop on Teaching and Learning in Large Classes
Thursday, October 13, 2011
9:00 am – 4:00 pm
Kenyatta University Conference Centre

Resource Packet 11-01-KUSU

Kenyatta University Vision and Mission

Kenyatta University's *vision* is "to be a dynamic, an inclusive and a competitive centre of excellence in teaching, learning, research and service to humanity." The University's *mission* is "to provide quality education and training, promote scholarship, service, innovation and creativity and inculcate moral values for sustainable individual and societal development."

Kenyatta University-Syracuse University Partnership

The Kenyatta University-Syracuse University Partnership is funded by the United States Agency for International Development (USAID), which through a grant to Higher Education for Development (HED), funded 11 innovative new partnerships in 2011 between 22 universities in Africa and the United States to address issues in the areas of (1) agriculture, environment and natural resources, (2) health, (3) science and technology, (4) engineering, (5) education and teacher training/preparation, and (6) business, management and economics in Africa. These resulted from the Africa-U.S. Higher Education Initiative, a collaborative effort started in 2007 by a number of higher education associations and other organizations and led by the Association of Public and Land-grant Universities (A·P·L·U) to advocate for increased engagement in African higher education capacity development.

The Schools of Education of Kenyatta University (KU) and Syracuse University (SU) have had an institutional linkage since the year 2000 and have collaborated in research projects, mentoring doctoral students, and hosting international conferences. Additionally, a number of students who graduated from Kenyatta University have earned graduate degrees (M.S. or Ph.D.) at Syracuse University in teacher education.

The overall objective of the Kenyatta University and Syracuse University partnership is to build capacity at the secondary school level through quality teacher preparation across the span of teacher education—from preservice teacher preparation, to novice teacher induction, to practicing teacher continual growth— through enhancing the capacity of Kenyatta University in its faculty, educational programs, research, and engagement with stakeholders that will result in improved secondary education in Kenya. Along with this objective, we have a long-term goal of developing and establishing a model for teacher preparation and education that we will share with other universities in Kenya and other East African countries.

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Background for the Workshop

As part of the KU-SU partnership activities, we conducted a survey of all of the Department of Educational Communication and Technology faculty members to gain baseline data on a variety of teaching and learning issues; included among these issues were class size, supporting all learners, and integrating technology into teaching. Twenty-one faculty members completed the survey and the respondents identified large classes as one of the top two concerns related to teaching the teacher education units. Nearly 95% of the respondents reported that classes are too large while nearly 90% noted that tutorials are too large. Due to the faculty members' responses on this issue, we chose to address teaching and learning in large classes for our first workshop sponsored through the Kenyatta University-Syracuse University partnership.

Participants

Prof. Henry Ayot, Dr. Hamisi Babusa, Mr. Abbey Chokera, Prof. Agnes Gathumbi, Ms. Mary Gikonyo, Dr. Ndichu Gitau, Dr. David Khatete, Dr. Mueni Kiio, Dr. John Kimenia, Mr. Robert Kimotho, Prof. Joanna Masingila, Dr. John Maundu, Ms. Florence Miima, Mr. Harrison Mulwa, Ms. Mary Nasibi, Dr. Sophie Ndethiu, Ms. Doris Njoka, Mr. Lordvicus Olanga, Dr. David Oludhe, Dr. Samson Ondigi, Dr. Karen Oyiengo, Dr. Nicholas Twoli, Ms. Agnes Wanjau

Report of Workshop Activities

Dr. Samson Ondigi, Dr. Sophie Ndethiu and Prof. Henry Ayot planned and led the workshop, which consisted of five activities, each with brainstorming followed by group discussion and prepared input. The workshop ended with a discussion of the way forward.

Large classes are often perceived as one of the major obstacles to the attainment of quality education. Several research studies have been carried out that directly point to the disadvantages of large classes. Many have advocated for small classes as a key factor in ensuring quality education for all learners. In spite of these efforts, large classes remain a reality in many countries affecting learners across all levels of the education system. Biggs (1999) observed that the practical problems faced by students and instructors increase and change in nature as class size increases. Researchers have found that student motivation, perceived learning and teacher sensitivity are factors commonly affected by large classes. Large classes inhibit students' opportunities to receive feedback and interaction with other students and teachers. Carbone and Greenberg (1998) found a general dissatisfaction among students related to large classes.

The goals for the workshop were that by the end, participants would be able to:
1. Discuss the concept of large classes.
2. Identify factors that are responsible for large classes
3. Highlight issues relating to large classes.
4. Discuss the role of teachers and learners in large classes.
5. Identify and discuss various assessment techniques suitable in large classes.
6. Suggest practical techniques for teaching and learning in large classes.
7. Discuss the role of ICT in large class size management.
8. Discuss the use of resources in large classes.
9. Discuss teaching without laboratories.

Activity 1: The Concept of Large Classes
Participants first considered the concept of a large class and brainstormed about the following questions: (1) What do you consider to be a large class? and (2) Is class size a concern to you as a lecturer? If so, why?

Comments generated during the discussion were that what is a large class (1) depends upon the program (some programs may not have as many students as others and so 60 may be a large class in some programs while not in others); (2) depends upon the institution or school; and (3) may be perceived from different perspectives depending upon available resources, size of the classroom, purpose of the class, etc.

Input from the planning team noted that class size might be determined by institutional policy and nature of programme, both undergraduate and postgraduate, Arts or Science. In developing countries, normal public university undergraduate class size is around 300 for Science and 400 for Arts. In postgraduate, class size is around 10 for master's students and 5 for doctoral students. However, sometimes numbers are much larger than these.

Discussion on the second question generated comments that class size is a concern because (1) if skills are to be developed, that may not be possible with a large class; (2) of the availability of resources, such as ICT; (3) instructors will need to use a variety of teaching strategies; (4) teaching is not as effective as with smaller classes; (5) if an instructor tries to use groups, some students may not participate; (6) marking is an issue and it is often difficult to meet university deadlines; (7) it is difficult for an instructor to give students feedback, both while teaching and after marking; (8) it is difficult for an instructor to monitor student attendance and understanding during a lesson; (9) learner satisfaction may be an issue due to minimal participation and lack of time to reflect in class; (10) instructors may burn out due to being overwhelmed, while too small of a class may leave the lecturer feeling underutilized; and (11) quality is compromised when the class size is large.

Input from the planning team noted that some issues concerning large classes relate to (1) time constraints, (2) access to ICT and technical skills, (3) setting and sticking to deadlines, (4) effective communication, (5) giving and obtaining feedback, (6) monitoring and evaluating higher-level learning, (7) coherence in team teaching, (8) supporting all learners, (9) monitoring class attendance, and (10) assessment.

Activity 2: Causes and Problems Related to Large Classes
Participants brainstormed about the following questions: (1) What are the causes of large classes? and (2) Identify various problems that you experience when handling large classes in your areas of specialization in the Department of Com-Tech at Kenyatta University.

Discussion related to the causes of large classes generated the following: (1) pressure for higher education from stakeholders, (2) increase in enrollment, (3) poor planning for infrastructure, (4) increase in the number of programs offered, (5) pressure on instructional space, (6) lack of firm policies (i.e., open admission), (7) inadequate number of teaching staff members, and (8) income generating venture.

Input from the planning team noted that some of the causes of large classes are (1) economic factors, (2) increased demand for university education, (3) institutional factors, and (4) pressure from the government.

Discussion related to the problems that arise due to large classes resulted in a list of challenges for instructors, which were that (1) different schools and disciplines may face specific difficulties especially pertaining to instruction, (2) timetabling is a challenge because of the limited number of large lecture halls, (3) there is a lack of professional satisfaction when teaching a large class where you don't get to know the students, (4) instructors are not able to effectively develop the required skills in students adequately, (5) there is a lack of teaching and learning resources, (6) lecturer fatigue, burn out and attrition may occur, (7) cheating may occur more since it is difficult to

monitor a large number of students during examinations, (8) giving students feedback is difficult, (9) there may be low learner participation, (10) classroom activities may be limited due to space and resources, and (11) supervising teaching practice is difficult.

Activity 3: Teaching Strategies
Participants brainstormed about the following: (1) Comment on this statement: "Even if you have a very large class, your job is not to lecture." and (2) Discuss various practical strategies that you use in dealing with large classes.

Discussion on the first item emphasized the need to prepare professionally qualified and effective teachers. This preparation needs to take place with students engaged in practical, hands-on learning. In the Department of Educational Communication and Technology the major focus is on skill development for classroom practitioners, which cannot be fully realized through lecture.

Discussion on the second item generated the following strategies: (1) use group work; (2) use ICT—give student some content prior to classes, perhaps by posting content on Moodle; (3) have an interactive lecture—pose problems, questions, have students discuss with students sitting near them; (4) have a discussion with class about "What are the lecturer's responsibilities and what are the students' responsibilities?"; (5) agree with the class on instructor and student responsibilities; (6) assign students to share information in class; (7) divide the class into project groups and give assignments for the groups every two weeks; and (8) make use of multiple choice testing format.

The planning team provided input on what the role of the lecturer can be when teaching large classes. The suggestions were for the lecturer to (1) carry out a needs assessment, (2) encourage interpersonal interaction and active learning (questioning, learning cells, buzz groups, problem posting); (3) equip students with coping strategies while in large classes; (4) organize the physical environment for teaching and learning; (5) build a strong psycho-social environment; (6) use team teaching; (7) combine use of audio-visual materials to enhance auditory and visual information retention; (8) plan for large classes (planning for individual differences); (9) plan for extra work out of class; (10) promote learner independence; (11) use methods and materials that reflect diversity; (12) encourage students' ownership of classroom expectations (let students have a say in learning activities and outcomes); (13) create a student-advisory group to monitor student needs; (14) handle indiscipline in large classes; and (15) use effective methods of obtaining and using student feedback.

Activity 4: Learning Strategies
Participants brainstormed about the following: (1) From your perspective, what challenges do students face while learning in large classes? and (2) What advice would you give to students to help them cope with the above challenges?

Participants discussed that challenges for learners are that (1) the more students there are, the less the interaction; students may feel emotionally distant from the instructor and course content; (2) students may feel like they can hide in the class; (3) students' needs may not be met leading to frustration; (4) there may be low interaction between lecturer and students; (5) below and above average students may be left out; lecturers may tend to focus on the average learner; (6) there is inadequate availability and access to resources; (7) there is inadequate exposure to hands-on experiences; and (8) there is a lack of feedback from the instructor.

Advice for learners is for them to (1) use readily available resources maximally; (2) learn to share resources among classmates; (3) take on responsibility for their learning; (4) form study groups; (5) seek assistance from academic advisors and mentors; and (6) have a positive attitude and confidence in one's self.

A key complaint from new students is that they are unprepared for many of the requirements of university learning. Hence, there is need for these students to (1) apply learning styles appropriate for large classes (e.g., collaborative learning, participatory learning); (2) inculcate and apply personal discipline (coming early to class, consulting and supporting others); (3) increase knowledge and expectation of the syllabus; (4) become independent and responsible for self-learning and that of their colleagues; (5) evaluate and monitor self-learning and work out means of improving performance where necessary; and (6) use peer teaching/learning.

Activity 5: The Role of the Administration, Assessment of Students and Use of ICT in Large Classes
Participants brainstormed about the following: (1) How do you assess the role of the administration in managing teaching and learning in large classes?; (2) What is the overall impact of large classes on both students and lecturers?; and (3) What is the role of ICT in managing large classes?

The group generated several suggestions at the department level and for Advisory Services: (1) have a student desk where students can go for consultation and advice; and (2) have a departmental website where course descriptions and information are posted. Related to the role of the administration, participants suggested that (1) the administration of CAT 1 and CAT 2 should be left to lecturers instead of timetabling them; (2) the policy on marking used in ECT 300 should be used; and (3) master's students should be used to invigilate and mark.

Input from the planning team included that (1) there should be support for the use of tutorials; (2) there should be availability of infrastructure; (3) more teaching staff members should be hired; (4) there should be use of ICT/e-learning/Moodle/PAS; and (5) master's students should be used in invigilating and marking.

Participants recommended that there should be LCD projectors installed in all lecture halls that have the capability of projecting information simultaneously to multiple screens so all students can see. Input from the planning team noted that ICT (1) reinforces learning; (2) is not restricted to particular times or places; (3) can be used to manipulate teaching/learning to cater for individual differences; (4) is suitable for large audiences; and (5) can be used for evaluation.

The planning team also shared that ideas for assessment in large classes are to (1) use short and frequent tests; (2) use peer marking; (3) use continuous and accumulative assessment; (4) mix questions to avoid cheating; (5) use feedback from one-on-one consultations with struggling students; and (6) use self-computerized tests.

Way Forward
The following ideas were generated during the discussion of the way forward:
- Use information gathered in our survey of higher education institutions in Sub-Saharan Africa.
- Follow up with people who gave email addresses on the survey.
- Make recommendations to the University and country on reducing and coping with large classes.
- Urge the university to hire more staff members.
- Make use of master's students and doctoral students to assist in lectures, tutorials, invigilating and marking scripts

References and Resources

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