

## A REVIEW OF STATISTICS EDUCATION IN KENYA

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### INTRODUCTION

With a phenomenal growth in the ICT industry in the last few years, Kenya today prioritizes availability of statistical information, statistical skills and statistical knowledge. This has led to a marked growth in student's enrollment in Statistics courses at the universities and other tertiary institutions. Despite the widespread emphasis on reform in the teaching of Statistics and the increase in papers on Statistics education in the research literature, Statistics is still viewed as a discipline with a need for significant improvement in how students are educated (Garfield and Ben-Zvi, 2008). This paper reviews Statistics education in the Kenyan public education system with emphasis on Scope and use of technology

### AN OVERVIEW OF SCOPE OF STATISTICS EDUCATION IN KENYA

Public Education in Kenya follows an 8-4-4 system with eight years of primary education (standard one to eight); four years of secondary education (form one to four); and four years of university education leading to the award of a bachelor's degree. Statistics is introduced in the fifth year of primary school where it is taught as part of the Mathematics curriculum where subtopics such as interpretation of simple graphs and simple measures of central tendency (mean, mode and median) are taught. At secondary school level Statistics and probability are introduced as independent topics. Topics taught include data collection and presentation, more complex computations of measures of central tendency and dispersion and Elementary concepts of probability. Statistics is taught as a topic in a compulsory math course to all students enrolled at the public universities. Courses in theoretical and applied Statistics are taught at different levels for students pursuing majors in education, psychology, sociology, business studies, medicine, and natural sciences. There has been a lot of pressure from the industry to have Statistics taught across all programs.

### ADOPTION OF INNOVATION AND TECHNOLOGY IN TEACHING STATISTICS

Despite the fast growing ICT sector in Kenya, technology is yet to be fully integrated into the Statistics education. Opportunities of adopting technology include use of computing software and web technology. There has been very little adoption of technology at the primary school level while Students get introduced to scientific calculators at the secondary school. There is room for introduction of more technology and innovations in teaching statistics. At the university level technology has been adopted at different levels at different universities. Some universities introduce students to computing software and other technologies such as web data collection and management while others don't. Employers generally perceive students from private universities as more techno survey than students from public universities.

### CONCLUSION

Given the current emphasis on statistical knowledge in Kenya, there is need to review the scope of Statistics education in the primary and secondary school curriculum in Kenya. There is need to realign the Statistics education at tertiary institutions to trends and requirements of the industry. Technology should be adopted as much as possible at all levels of Statistics education.

### REFERENCES

- IRM. (2004). International Review of UK Research in Mathematics. Report on the Review undertaken on behalf of the EPSRC and the CMS.  
<http://www.epsrc.ac.uk/SiteCollectionDocuments/Publications/reports/irmaths2003.pdf>
- Garfield, J. and Ben- Zvi, D. (2008). Developing Students' Statistical Reasoning: Connecting Research and Teaching Practice, Springer.