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The Use of Technology Based Tools in Mathematics Teaching at One University in South Africa

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ABSTRACT Technology has impacted every aspect of the human lives and as lecturers within Higher Education the researchers need to ensure that they are capable of transforming human practices to suit the requirements and learning styles of the technology savvy students. Moreover, research has shown positive developments in the teaching of mathematics through the use of technology based tools, thus, this qualitative study explored the lecturers' views on the use of technology in mathematics teaching. This study was located at one university in KwaZulu-Natal (KZN), South Africa and was framed within the ambits of teacher¹ knowledge. Qualitative data was collected during the 2013 and 2014 academic year from 12 mathematics and mathematics education lecturers via a questionnaire and semi-structured interview schedules. Thematic coding and interpretive techniques were used to analyze the data gathered. The findings are important for advancing mathematics curriculum development and may be useful to mathematics lecturers at institutes of Higher Education.