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**A preliminary model for estimating the economic impact of  
broadband connectivity in African high school education  
based on large TVWS trials**

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**ABSTRACT**

This paper proposes an initial rough model to evaluate the economic impact created by provision of Internet connectivity in an educational setting in a developing country. The research is based on three Television White Space technology (TVWS) trials, where over 20,000 pupils and teachers in 20 schools in two African countries were connected to Internet, some for the very first time. A large impact is hypothesized to result from the additional skills development, resulting in a learners' higher income earning capacity. The estimated approximate economic impact value generated over 4 years, under main assumptions of uniform effect on different income groups and negligible expenses, is around ZAR296m or USD21m and still growing, strongly highlighting why it is critical for policy makers to support investment in the communication technologies and related information technology skills and education.