**SAIP2023** 



Contribution ID: 30

Type: Oral Presentation

## **Evaluating Essential Skills**

Wednesday, 5 July 2023 15:20 (20 minutes)

Operating from the University of Zululand, Unizulu Science Centre (USC) had been running face to face matric workshops for 25 years, presenting practicals and sharpening skills for over 200 000 matric science students. The 2020 lockdown presented a dilemma: matrics needed assistance more than ever, but schools were closed and large gatherings impossible. USC piloted a unique offline, digital video project (Essential Skills for Matric Science – ES) which was reported on at the 2021 SAIP conference. USC worked to convert a 4 hour contact workshop into first 8, then later 16, one-hour videos, highlighting the essential skills for Matric Science Paper 1 – the physics paper. While these videos were made available on the internet (via the SAIP website) for download or streaming, they were physically distributed on memory sticks to teachers, along with an accompanying workbook. Local industry funding initially and then further SAIP funding (with support from Allan Gray) saw 100 000 booklets printed and 2 000 memory sticks manufactured over the next three years. These have been distributed to schools in all nine provinces and also used as the basis for teacher training, especially by the SAIP. The framework for ES has already been used to generate a similar tool for Life Science and Chemistry. Videos and booklets for Mathematics are under development.

Looking back over three years, it is essential to try to measure the impact of this project and how it can be made more effective for the future. A simple evaluation tool was used with key stakeholders who had been very involved in ES during this time, to gather their inputs on the ES project, how well it had worked and what could be improved. A synthesis of their responses will be presented to inform an evaluation of what has been achieved and what can be achieved in future. In particular the transition of ES from a distance only model (during lockdown) to a hybrid one (after lockdown) will be discussed. The inputs of the Physics Education Group members (many of whom had personal experience of ES) will be much appreciated.

## Apply to be considered for a student ; award (Yes / No)?

No

## Level for award; (Hons, MSc, PhD, N/A)?

N/A

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Session Classification: Physics for Development, Education and Outreach

Track Classification: Track E - Physics for Development, Education and Outreach