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A triggering strategy for improved pass rate in a software-managed evaluations in Physics practicals for Engineering and Health Science Diploma Programmes at the University of Johannesburg

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Abstract content
 (Max 300 words)
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The non-traditional approach to the evaluation of Physics practicals through an innovative software embedded system, first of its kind in South Africa, allows students to execute and report the results of an experiment independently. This system evaluates the individual performance in an experiment in terms of accuracy, analysis of data and a report of the necessary results obtained. As part of the evaluation of the experimental report, the students' data is loaded into a software system and checked against the pre-loaded data for the particular experimental set-up and equipment. Thus, students are unaware of the exact requirements for securing marks at each step and process of the report. To overcome this difficulty, the experimental group of students are given support through rigorous tutorials and consultations in contrast with a control group of students. Results reveal that in relation to the control group, a good correlation exists between good marks attained through such support system in comparison to the control group. This has become a valuable outcome in view of the fact that Physics practicals carry a full modular credit in the Diploma Programmes in Health Sciences and Engineering.

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