

**Pelaksanaan Pentaksiran Amali Sains Berasaskan Sekolah
Di Beberapa Buah Sekolah Menengah Daerah Hilir Perak**

ABSTRAK

Kajian ini bertujuan untuk meninjau pelaksanaan pentaksiran amali sains berasaskan sekolah di beberapa buah sekolah menengah harian dalam daerah Hilir Perak. Pentaksiran amali sains berasaskan sekolah dijalankan menerusi program PEKA Sains. Pelaksanaan program PEKA ditinjau daripada empat aspek iaitu (i) kefahaman guru tentang prosedur untuk melaksanakan PEKA selepas menghadiri kursus yang berkaitan, (ii) kebolehan guru untuk melaksanakan program PEKA mengikut prosedur yang telah disyorkan, (iii) kesediaan pelajar untuk ditaksirkan melalui PEKA dan (iv) faktor yang menjadi penghalang kepada keberkesanan pelaksanaan program PEKA di bilik darjah.

Sampel kajian mengandungi 30 orang guru sains dan 200 orang pelajar tingkatan empat aliran sains daripada beberapa buah sekolah menengah harian daerah Hilir Perak. Dua instrumen dalam bentuk soal selidik, masing-masing untuk guru dan pelajar telah digunakan bagi tujuan pengumpulan data. Instrumen kajian ini telah diuji dan disahkan terlebih dahulu menerusi satu ujian rintis untuk menentukan kesesuaian soalan yang dikemukakan. Di samping itu kebolehpercayaan instrumen kajian ini juga turut ditentukan. Analisis data hanya menggunakan statistik deskriptif sahaja.

Keputusan kajian menunjukkan bahawa kursus berkaitan program PEKA yang telah guru hadiri masih belum memadai untuk membantu guru tersebut memahami sepenuhnya prosedur melaksanakan PEKA Sains. Walau bagaimanapun majoriti guru didapati berkebolehan untuk melaksanakan PEKA Sains mengikut prosedur yang telah

disyorkan. Majoriti pelajar pula didapati telah bersedia untuk ditaksirkan menerusi program PEKA.

Faktor yang dikenal pasti boleh menjelaskan keberkesanan pelaksanaan program PEKA di bilik darjah mengikut perspektif guru adalah (i) masa yang tidak mencukupi, (ii) kesukaran menentukan skor dengan tepat, (iii) bilangan pelajar yang terlalu besar, (iv) elemen yang hendak ditaksirkan terlalu banyak, (v) pemberian skor yang tidak adil, (vi) kesukaran mendapatkan sumber rujukan untuk guru, (vii) sikap negatif pelajar, (viii) pelajar yang pasif, (ix) kekurangan kerjasama daripada pelajar, (x) bilangan alat radas dan bahan yang tidak mencukupi, dan (xi) ketiadaan pemantauan terhadap pelaksanaan PEKA Sains di sekolah.

Akhir sekali implikasi kajian dan beberapa cadangan kajian selanjutnya turut dibincangkan.

**The Implementation Of School Based Practical Science Assessment
In Several Secondary School InThe Lower Perak District**

ABSTRACT

The purpose of this study is to investigate the implementation of the school based practical science assessment in several secondary schools in the Lower Perak District. The school based practical science assessment is carried out through the PEKA programme. Four aspects of the implementation of the PEKA programme was studied. The four aspects were (i) teachers' understanding of procedures in carrying out the PEKA programme after having attended relevant courses, (ii) teachers' ability in carrying out the PEKA programme, (iii) students' readiness to be assessed via PEKA, and (iv) factors which hinder the effectiveness of the implementation of the PEKA programme.

The sample of this study consisted of 30 science teachers and 200 Form IV science students from ten secondary schools in the Lower Perak District. Two sets of instruments in the form of questionnaires, one for the teachers and another for students were used to collect data. Both instruments were validified through a pilot test to determine the suitability of the items. The reliability of the instruments were also determined. The data was analyzed using descriptive statistics.

The results of this study showed that the PEKA programme courses which the teachers have attended were insufficient to help them to understand all procedures in the implementation of the PEKA programme. However, the majority of the teachers felt that they were capable of carrying out the PEKA programme in their classroom according to

the procedures suggested. It was also found that the majority of the students showed readiness to be assessed through the PEKA programme.

The constraints that hinder the effectiveness of implementing the PEKA programme in classroom from the teachers' perspective were attributed to (i) insufficient time, (ii) the difficulties involved in determining the scores, (iii) large class size, (iv) large number of elements to be assessed, (v) unfair scoring, (vi) unavailability of teachers' reference materials, (vii) students' negative attitude, (viii) passive students, (ix) lack of co-operation from students, (x) lack of apparatus and materials, and (xi) the implementation of the PEKA programme in school was only rarely monitored.

Finally, the implications of the study and the various suggestions to further research were also discussed.