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PEER ASSESSMENT
OF A MATHEMATICS GROUP PROJECT
OF A PRE-UNIVERSITY PROGRAMME

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ABSTRACT

This is an exploratory study of peer-assessment on a Mathematics group-project by a group of Pre-University students focusing on a method to assess the individual contribution within a group. The study investigates whether there is a way to discriminate between the contribution of individual student within a group project and to determine whether it is appropriate to make process assessment of the group projects as a part of the peer assessment. It also attempts to find an alternative method to reward individual effort in a group-project.

The subjects of this study consist of four groups of Pre-University students. Each group comprises four students of mixed abilities. The students are required to complete a report and make a presentation on a chosen Mathematics project.

The instrument used is adapted from Lopez-Real and Chan (1999). It consists of three parts. Part 1 comprises the process assessment by students within the group. Part 2 is the assessment on presentation by both teacher and students across the groups. Part 3 consists of students' evaluation of peer assessment on presentation and contribution of the peer assessment to the group projects mark.

The findings indicated that students showed high degree of acceptance of the use of peer assessment in the Mathematics group-projects. Most of the students felt that they had performed better by participating in the peer assessment process and that the participation had exposed them to new ideas. The distinction of overall marks obtained

by each member in the group as the result of peer assessment was found to be a fair way to justify individual contribution and efforts towards the group project. However, students indicated reservation of the use of peer assessment in the oral presentation of the project in view of the lack of confidence and experience.

PENILAIAN SEBAYA SUATU PROJEK MATEMATIK BERKUMPULAN DARI PROGRAM PRA-UNIVERSITI

ABSTRAK

Kajian ini adalah suatu kajian eksplorasi tentang penggunaan penilaian sebaya untuk suatu projek Matematik di peringkat pra-universiti, dengan fokusnya ke atas suatu kaedah untuk menilai sumbangan seseorang individu dalam suatu kumpulan. Kajian ini menyelidik suatu kaedah untuk mendiskriminasikan sumbangan seseorang pelajar dalam projek berkumpulan dan menentukan kesesuaian untuk menjadikan penilaian proses projek berkumpulan sebagai sebahagian daripada penilaian sebaya. Ia juga mencari kaedah alternatif untuk menilai usaha seseorang pelajar dalam projek berkumpulan.

Subjek kajian ini terdiri daripada empat kumpulan pelajar pra-university. Setiap kumpulan mengandungi empat orang pelajar yang mempunyai taraf pencapaian yang berbeza. Pelajar-pelajar ini dikehendaki menjalankan suatu projek Matematik. Projek ini perlu dibentangkan dalam kelas disertakan dengan satu laporan projek.

Insrumen kajian ini diubahsuai dari Lopez-Real dan Chan (1999). Ia mengandungi tiga bahagian. Bahagian I mengenai penilaian proses oleh pelajar di dalam sesuatu kumpulan. Bahagian II terdiri daripada penilaian pembentangan projek yang diberi oleh guru dan pelajar. Bahagian III adalah tentang penilaian terhadap penggunaan

penilaian sebaya dalam pembentangan projek serta sumbangan penilaian sebaya dalam pemberian markah projek berkumpulan.

Hasil kajian telah menunjukkan bahawa penerimaan pelajar adalah tinggi terhadap penggunaan penilaian sebaya dalam projek berkumpulan. Kebanyakan daripada mereka berpendapat bahawa prestasi mereka meningkat dengan penyertaan dalam proses penilaian sebaya. Ia juga mendedahkan mereka kepada idea yang baru. Perbezaan dalam markah keseluruhan yang diperolehi oleh setiap pelajar dalam sesuatu kumpulan menunjukkan penggunaan penilaian sebaya adalah suatu cara yang adil untuk menjustifikasikan sumbangan dan usaha seseorang pelajar dalam projek berkumpulan. Walaubagaimanapun, pelajar menyuarakan reservasi terhadap penggunaan penilaian sebaya dalam pembentangan projek kerana kekurangan keyakinan dan pengalaman.

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