

PEER-ASSESSMENT OF DATA HANDLING (GR 5'S)

Helena Müller, Laerskool Lynnwood, Pretoria.
Student: D.ED (Mathematics Education), UNISA

The South African authorities have realised the need for an education system which equip learners with the necessary knowledge, skills and disposition to cope successfully in the world when they leave school. As part of this strategy in mathematics, data handling was recently introduced in the curriculum of the intermediate phase (gr 4 – 6) and presently gr 5's for the first time encounter data handling activities. Facilitating and assessing these activities according to the problem-centered approach gave rise to this experiment.

Peer-assessment is a powerful but lesser known assessment strategy in the new dispensation, and presented a challenge to the facilitator. The linking of classroom activities with real life situations in Outcomes-based Education and especially the assessment of learners' knowledge and skills in data handling has been the focus of this experiment.

Three classes of 30 learners each participated. The classes were divided into five groups of six each. Learners had to solve the problem of determining the most popular chocolate bar in the class and representing the information graphically, in an open socio-constructivistic learning environment. Activities include: collection of information, design of a data sheet to organise information, drawing of a graph, group presentation to explain the whole process, writing of recommendations to the school tuck shop owner based on the conclusions of the survey and assessment of the whole process. Materials: data sheets and graphs from newspapers and other sources, grids for peer-assessment, self-assessment and facilitator assessment of the groups.

Despite a lack of systematised procedural skills and a tendency to over decorate, learners enthusiastically joined in all the activities. Interesting information gathering and data organising techniques were used and different graphs drawn; group co-operation and presentation skills were also developed. The use of peer-assessment techniques proved a useful tool to the facilitator and the learners in the realising of the outcomes for the mathematics strand data handling.

References

- Drummond, M J 1993 *Assessing children's learning* London: David Fulton Publishers
Van Den Heuvel-Panhuizen, M 1996 *Assessment and Realistic Mathematics Education* Utrecht: Freudenthal Institute