Assessment Research and Technology

ssessment is an important aspect of programmes aimed at enhancing individual development, growth and empowerment in the lives of people as they study, work and enjoy their leisure time. Current transformation initiatives in the national education and training system present unique challenges in the area of assessment.

The HSRC in the past year reconceptualised its assessment role and function to keep abreast of new legislation pertaining to the South African Qualifications Authority, the Health Professionals Council, labour relations and employment equity.

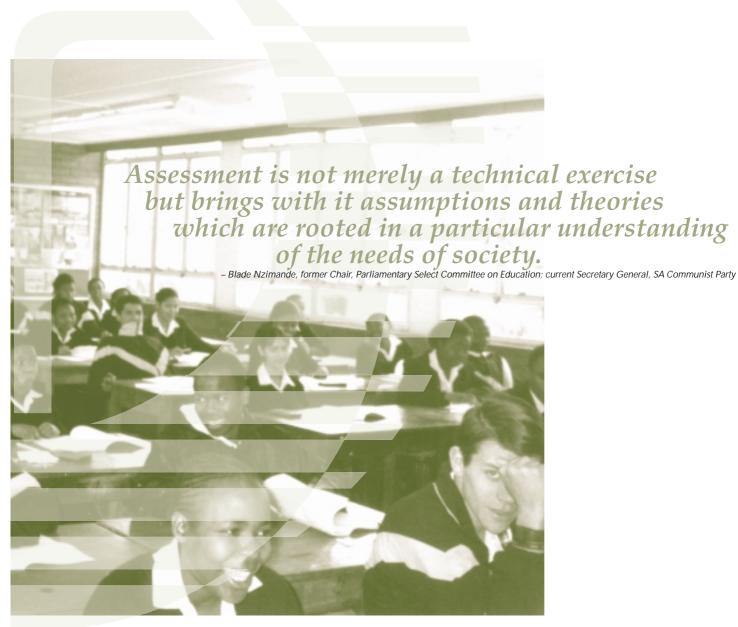
The Assessment Research and Technology NPA (New Priority Area) has gained international and national recognition for its expertise and research in the theory and practice of assessment. It focuses on:

- Conducting quality research in the area of assessment (including problem solving, policy issues, and the development of a multi-institutional, multidisciplinary approach).
- Developing new assessment technologies and enhancing existing ones to meet the requirements of an ever-changing environment.
 - Improving education by promoting assessment, enhancing ethical standards and codes of conduct, and developing capacity and wider networks.

These interrelated objectives are met by systemically monitoring and assessing learning outcomes in education and training; conducting studies to enhance the assessment of the teaching/learning process; improving the assessment of skills, abilities and competencies at the entry points into and exit points from the worlds of work and learning; developing and using relevant computer technology to enhance the assessment process, and validating and upgrading assessment instruments.

During the period under review the NPA engaged in a wide range of co-operative research projects on assessment, locally and internationally. The first **Monitoring Learning Achievement** study in Africa, commissioned by UNESCO/UNICEF, culminated in a book published in English and French. The NPA provided technical assistance for assessing the life skills, literacy and numeracy performance of Grade 4 learners from 12 African countries (Anglophone, Francophone and Arabic)





participating in the various projects. In addition to publishing the research findings, the NPA was invited to present the results at the world conference on Education for All held in Dakar, Senegal, in April 2000.

In a further long-term international assessment project, UNICEF contracted the NPA to provide technical assistance to the Ministry of Education in **Eritrea** for the development of a **national assessment system**, as well as a training programme for ministry officials.

Work continued on the **Quality Learning Project** (QLP), a five-year major school improvement project carried out on behalf of the Joint Education Trust and funded by the South African Business Trust. The QLP's objective is to ensure the effective management of the district schools selected from each province and to inculcate appropriate teaching methods in the 500 high schools concerned.

The NPA is responsible for the evaluation component of the project in years one, three and five. Phase one of the QLP was completed in the 2000/01 financial year and involved assessing the performance of Grade 9 and Grade 11

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learners from a sample of the participating schools, as well as obtaining baseline information from all district offices and sampled schools.

During February 2001 the NPA won a contract to evaluate the **Mahlahle** project for the Joint Education Trust. The study entails an assessment (over a period of three years) of Grade 9 learners' performance in mathematics and English reading and writing skills in the Northern Province. The findings of this district development project will be incorporated in the full baseline report, due for release in July 2001.

Towards the end of 2000 the Research Triangle Institute awarded the HSRC a tender of approximately R7 million (the **Assessment Modelling Initiative**) to develop assessment models and evaluate the performance of Grade 3 learners in 500 schools across four provinces participating in USAID's District Development Support Programme.

As part of a consortium led by the Centre for Education Policy Development, the NPA is evaluating the education system at Grade 3 level for the national Department of Education. The principal objective of this **Systemic Evaluation** study is the provision of baseline data for a longitudinal assessment of the education system at the end of the foundation phase (Grades 1-3).

The research will be done in cycles of approximately three years, with the NPA providing the necessary technical guidance. Instruments have been developed and piloted in all 11 official languages, concentrating on the numeracy, literacy and life skills of Grade 3 learners.

In the 2000/01 financial year the NPA was also involved in work to promote, support and facilitate the ethical, fair, informed and non-discriminatory use of psychological instruments.

Psychological assessment technology and instruments were refined, while the development and adaptation (restandardisation) of a number of instruments continued. Particular attention was given to test bias, fairness and validity.

Test instruments released include the Differential Aptitude Tests (designed to provide further training in guidance and counselling, and suitable for persons with a formal qualification equal to or higher than Grade 7) and the Learning Potential Computerised Adaptive Test (designed to provide learning experiences utilising non-verbal material as part of





the assessment of learning potential, and suitable for persons with a formal qualification as low as Grade 5).

The existing Grover-Counter Scale of Cognitive Development was extensively revised to accord with South African norms. The scale assesses intellectual functioning according to Piaget's theory of intellectual development. The assessment is finely focused, enabling the translation of the findings into meaningful recommendations for teachers.

The Computer-Aided Testing System (CATS) was designed as one of the NPA's new generation assessment instruments for creating new tests and computerising existing tests. The first software version can handle most Windows graphic formats and allows the user to specify the number and format of questions, as well as the general layout of the test.

During 2000/01 sales of HSRC assessment products and technologies increased by 20%, indicating the market's ability to adapt to the changed legal and practical requirements regarding assessment.

The NPA will in **future** continue to focus its research on educational assessment activities, the development of new assessment instruments and technologies, and the promotion of assessment generally. Some prominent themes will be policy concerns about assessment practices, popularising and demystifying assessment, the systemic monitoring and assessment of learning outcomes, and the assessment of skills, abilities and competencies in the worlds of work and

Two new projects are scheduled for mid-2001: an evaluation of the Seychelles School Improvement Programme, commissioned by the Commonwealth Secretariat, and the Assessment of Mathematics and Science Achievement programme in Africa for the International Institute for Capacity Building in Africa.

The NPA will also prepare for its participation in the 2002 repetition of the Third International Mathematics and Science Study. The focus will be on the development of new data analysis instruments for use in the study among Grade 8 learners in South Africa.

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