

Taking a new



approach to student assessment



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ACER researchers have developed and trialled a new method of competency based assessments.

Doug McCurry explains.

The assessment of students and the reporting of these assessments to parents take place in a variety of ways. Some reports are oral at parent-teacher interviews, some are school report cards, some are officially printed and certified statements, as in Year 12. What these reports encompass is also varied: primarily academic achievement. However, in many places, the student's personal development, behaviour, attitudes, extra-curricular abilities and other individual attributes also get assessed and reported. In schools, most assessing and reporting procedures are conducted by one teacher about one student in one subject area.

Aiming to find an alternative form of assessment that might be less time consuming and more collegial while taking into account the student's personal attributes and abilities, ACER researchers developed and trialled an assessment procedure known as Whole School Assessment.

Whole School Assessment

The judgements made in the Whole School Assessment process are concerned with general aspects of education (cross-curricular competencies) rather than the knowledge and skills that are specific to individual subjects and which are the basis of subject-based assessments. The objective is to create an overall judgement that arises from a range of teacher perspectives that can be seen as escaping the limitations of any individual teacher's perspective, and, as a result, increasing the reliability of the assessment and giving a more in-depth view of the student's progress through the school.

In the Whole School Assessment method, judgements are made based on the individual student's achievement in the seven Key Competencies, sometimes called the "Mayer competencies". Since 2001 ACER has worked with the Victorian Curriculum and Assessment Authority (VCAA) to trial the assessment method using three



The seven key competencies as listed in the 1992 Mayer report are:

1 Collecting, analysing and organising information

The capacity to locate information, sift and sort information in order to select what is required and present it in a useful way, and evaluate both the information itself and the sources and methods used to obtain it.

2 Communicating ideas and information

The capacity to communicate effectively with others using a range of spoken, written, graphic and other non-verbal means of expression.

3 Planning and organising activities

The capacity to plan and organise one's own work activities, including making good use of time and resources, sorting out priorities and monitoring one's own performance.

4 Working with others and in teams

The capacity to interact effectively with other people both on a one-to-one basis and in groups, including understanding and responding to the needs of a client and working effectively as a member of a team to achieve a shared goal.

5 Using mathematical ideas and techniques

The capacity to use mathematical ideas, such as number and space, and techniques, such as estimation and approximation, for practical purposes.

6 Solving problems

The capacity to apply problem-solving strategies in purposeful ways, both in situations where the problem and the desired solution are clearly evident and in situations requiring critical thinking and a creative approach to achieve an outcome.

7 Using technology

The capacity to apply technology, combining the physical and sensory skills needed to operate equipment with the understanding of scientific and technological principles needed to explore and adapt systems.

elements: a framework or definition of the Key Competencies; a process for the Whole School Assessment of the competencies and; specially developed software for assessing and monitoring the performance of students. In a series of field trials at Year 10 in Victoria the original software was refined and the draft teacher support materials improved. The assessment procedure became known as "Whole School Assessment", not because it had to be applied to all students in a school, but because it attempts to take account of the whole of each student's school experience.

Whole School Assessment can accommodate different perspectives of students held by teachers in different subject areas. It encourages teachers to think about a student's performance outside the classroom as well.

It is crucial that the competency judgements made by individual subject teachers in this process are general rather than subject-specific. The competency judgements are not about students' performances in particular subject areas. The judgements are broad or global inferences made by a teacher about what is taken to be typical of the student in most subject areas and, if known, in other activities.

The trials

The initial Whole School Assessment trial took place in 1997 with funding from the federal Department of Education. It involved 10 schools from three states with 110 teachers assessing 320 students. Each student was assessed by at least three teachers. Following that initial trial, the process of Whole School Assessment was again used and refined in a project on portfolio assessment of the National Industry Education Forum in 1999 and 2000. Since then the VCAA has conducted

Source: Mayer, E. (Chair). (1992). *Putting Education to Work: The Key Competencies Report*, Australian Education Council and Ministers for Vocational Education, Employment and Training.

trials on the assessment procedures and software with 20 schools in 2002, 40 schools in 2003 and 50 schools in 2004 with positive reactions.

In proposing to schools that they participate in the trial, the research team offered three statements to accompany our assurance that we had tried to design an efficient process for undertaking Whole School Assessment:

- We believe that the Key Competencies offer an important opportunity for the development and assessment of generic, work-related skills in secondary education.
- We also believe that Whole School Assessment is the best way of assessing such challenging matters as teamwork and planning and organising.
- We recommend Whole School Assessment as a method for gaining new cross-curricular perspectives on students.

In the field trial students were assessed by as many of their teachers as possible. It was not expected that curricular programs would be changed in order to make the assessments, and no special activities needed to be undertaken by the students to be assessed. The first step was for participating teachers to get an overview of the global assessment framework, which was summarised on a single A3 page. Towards the end of the first semester, participating teachers made a global judgement of the performance of each of the target students on each of the Key Competencies. A teacher needed to take no more than a few minutes per student to arrive at his or her assessment. A global impression of the student's position in one of four categories was to be given by assigning a grade from 1 to 8 for each of the seven Key Competencies. Contact in subject classes would obviously be the main basis of the assessment, but teachers were encouraged

to take into account other information gathered from extra-curricular activities and work placements if these had occurred.

The assessments of the various teachers were entered into a piece of software, which then integrated the different judgements producing a recommended overall result. The software was able to produce reports on individual students and, further, to analyse and report on the results of the assessments for the school, and evaluate the whole trial process.

What the trials showed

The trials over a period of three years offered some challenge and enrichment to participating teachers and schools. They helped schools develop their understanding of the possibilities for Whole School Assessment, going beyond the Key Learning Areas and the requirements of any specific curriculum. Schools were also encouraged to use the Whole School Assessment method to assess other generic skills and attitudes which were important to them, in addition to trials relating to the Key Competencies.

There are a number of potential advantages in using this form of assessment. It replaces various onerous activities with one procedure which is quicker, but no less reliable. Moreover, in the long run, the procedure came to be seen as more informative and useful to students, their parents and their future teachers. It has the added advantage that teachers can more readily see that re-jigging their classroom procedures and activities, to give the Key Competencies a high profile as organising principles, improves student participation, increases motivation to learn, and allows students to see their learning whole.

They, like their teachers, came to see that the development of positive attitudes and enhancement of personal attributes has a place within, not apart from, academic advancement.

The assumption behind the process is that the judgements made in this assessment are stage related, in that they are made explicitly about students in specified grade levels, at a particular point in time (the end of Semester One of Year 10, in the case of our field trials). The judgements are made on the basis of participating teachers' knowledge and experience of students at the chosen grade level, and they are based on what teachers know and expect of students at this level.

The trials also indicated that Whole School Assessment of generic skills can yield important and useful information about the student. For example, a poll of employers showed them to be supportive of the procedure and receptive of the information provided, even if some indicated they might require more than just Whole School Assessments when choosing employees. Teacher agreement on the individual student's levels of achievement of the generic skills was consistently high, and the whole assessment and reporting model and software proved quite robust. Indications are also clear that it is able to be adapted to a range of cohorts (ages and year levels) and for a range of purposes, including diagnostic use, as a spur to student self-assessment, as well as general reporting. However, Whole School Assessment of generic skills needs to be given further endorsement and support from education authorities if it is to be widely adopted by schools.