

NEMP Stories: Teachers talk about the assessment resources of the National Education Monitoring Project (NEMP)

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Introduction

Since 1995, the National Education Monitoring Project (NEMP) has been monitoring and reporting on New Zealand primary school children’s achievement, values and attitudes at Years 4 and 8. Over a four-year assessment cycle all areas of the curriculum are covered.

The stated purpose of NEMP is to ‘meet public accountability and information requirements by identifying and reporting patterns and trends in educational performance...[and]...to provide high quality, detailed information which policy makers, curriculum planners and educators can use to debate and review educational practices and resourcing.’ (Flockton & Crooks, 1998). It fulfills these purposes well. An external review of NEMP undertaken by a panel of international scholars and experts in assessment has acknowledged that NEMP is an exemplary model of national monitoring, with the review panel concluding that NEMP

...is well conceived and admirably implemented.... the project has considerable potential for advancing the understanding of and public debate about the educational achievement of New Zealand students.’ Black, Kane & Linn in (Flockton et al., 1998, p. 12)

While NEMP seeks to provide information at a “system level” about how children are performing nationally, there is an equally important educative or formative purpose of NEMP. This is evidenced by Flockton’s (1999)

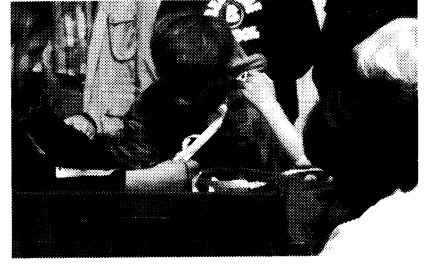
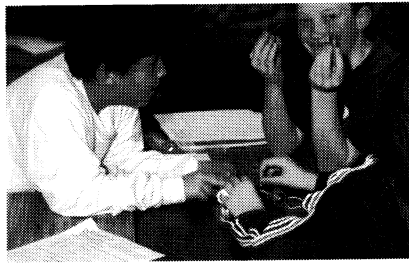
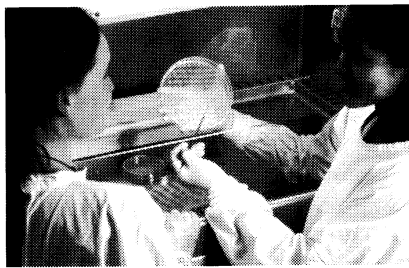
greatest connections should be with learners, whether those learners are whole schools, groups of teachers or individual students” (p. 28). A second international review panel in 1998, similarly positive about the validity of NEMP, also concluded that assessment processes adopted by NEMP reflect the directors’ strong commitment to achieving maximum formative value from the project (Eisner, Gipps, & Harlen, 1998).

NEMP reports released each July summarise the performance of children separately on all the assessment tasks, both overall and within subgroups (by gender and ethnicity, location in New Zealand, type of community, and type of school attended). In addition, the reports provide excellent models of assessment (and accompanying details of resources, instructions, marking criteria and examples of children’s responses).

Several projects have investigated the ways in which teachers can make meaningful use of the NEMP reports and assessment tasks within their classroom and school (e.g., Gilmore, 2001a, 2001b; Lovett, 1999). Lovett used a Quality Learning Circle as a model of professional development to introduce a group of teachers to NEMP reports and the assessment tasks within them. Through the Circle, teachers’ understanding, experimentation and implementation of NEMP tasks within their classrooms flourished. With the appropriate introduction of NEMP materials to teachers,



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they used the tasks in innovative, creative and meaningful ways. This was found to be the case also by Gilmore (2001a). Teachers who had had the experience of administering and marking NEMP tasks generally found that the tasks were very valuable teaching and assessment resources which they could adapt and use in their classroom and school (Gilmore, 2001a). This is reflected in the following teacher comments: "Fabulous, easy to use ideas back in the classroom - were fun but appropriate and easy to evaluate"; "have adapted and used many, school-wide and in own room"; "I have specific ideas for units of study and classroom emphases to take back and implement in my programmes. This information is more up-to-date than any, and since I've learned about these before publication, I feel very privileged and up to date"; "[the resources were] attractive to the children"; and "Activities where students have to think up their own questions or things they'd like to find out...are a 'useful window on children's thinking'".

For Gilmore's (2001b) project six teachers were invited to work intensively over a six-day period to map the NEMP tasks onto the curriculum. The project has produced two resources for teachers: (i) the NEMP-Curriculum Map and (ii) Teachers' Choice (of) NEMP Tasks. These are outlined at the end of this paper.

Through this project teachers have shared their NEMP "stories" – experiences of how they have used and adapted NEMP resources in their classroom and school. The purpose of this paper is to communicate some of these stories and advice so that other teachers may gain an understanding of the range of

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ways in which NEMP resources (the models of assessment and the reports of results) may be used meaningfully in classrooms and schools throughout New Zealand.

Introducing the teachers – the story tellers

This group of teachers represented a cross-section of teaching experience and experience with the NEMP materials. Four teachers had administered NEMP tasks previously to 60 children in five schools. Two had also marked children's responses to the NEMP. Two had participated in Lovett's (1999) quality learning circle professional development programme with NEMP reports. One teacher was relatively young and had had no previous direct experience with NEMP.

Teachers' NEMP Stories

1. How to approach the NEMP Report

Beyond what looks like another lengthy ministerial report lies a wealth of exciting educational ideas.

These ideas are multi-purpose. They include:

1. Practical teaching experiences.
2. Assessment samples.
3. Current national statistics.
4. Attitudinal surveys.

Each report covers a range of activities that focuses on a curriculum area. However, many of the skills and processes apply across a wide range of subject areas. Likewise, activities can be used and adapted for Levels 2 to 4.

Start by selecting a curriculum area of interest to you. Choose an activity which requires little modification to use within your class. Have a go! Now you have unlocked another exciting resource. The possibilities are endless. Some activities from the 2000 reports are available to purchase or visit <http://nemp.otago.ac.nz>

A useful marking scheme (with criteria) is described with each activity.

Each activity includes statistical information from a national sample. You may find it interesting to compare your results with these. Although the NEMP results are limited to Years 4 and 8, they provide guidelines for comparisons. The commentaries summarise these data.

Another strength of the reports is the survey at the back. These surveys probe children's attitudes to each curriculum. These can be administered with your own class and will reveal pertinent needs. The survey could be used as a discussion document during parent interviews and/or for professional purposes.

A number of tasks lend themselves to assessment exercises, either as a classroom test or in a school-wide setting. Benchmarks and specific marking criteria ensure uniform marking necessary for reliable data.

For those requiring a more detailed analysis, the report includes statistics on sub-group performances (for example, gender, ethnicity, and school type). Later reports revisit assessment tasks in order to comment upon changes in student performance over a four-year period. For example, the Art 1995 – 1999 report reveals that New Zealand teachers are innovative and creative. These activities are suitable for such treatment.

2. Students' Attitudes and Interests

"Students' attitudes, interests and liking for a subject have a strong bearing on progress and learning outcomes," Flockton and Crooks have concluded. (*Reading and Speaking Report*, 1996, p.58).

I learned of the NEMP booklets and sent away for my own copies. Thumbing through them I found the Year 4 Reading Survey and thought what a good thing it would be use with the class. The quality of the questions grabbed my attention. I was interested to find out what my children thought.

The results were very enlightening, and gave me a wide range of data about the reading attitudes of my children. For example, my extension reading group showed a similar need to discuss reading material and what makes good literature. Now I ask for their opinions in more depth and extend their options.

I was able to locate a number of children who wanted more opportunities to read to the class. Most children really enjoyed teacher read stories. Two children who didn't enjoy the books I'd chosen to read to the class were asked to choose the next book.

3. Be Brave and Have a Go! – Even an inexperienced teacher can use NEMP ideas

NEMP tasks are available for all teachers to study and adapt. Teachers generally bring with them many years of adaptation skills and a wealth of prior knowledge. But how does a 'beginner' respond to

these tasks? Are they easy to follow and practical in the classroom?

I introduced my Year 3 Teacher Training student to the NEMP programme, and directed her to the Art 1995 document. I suggested she might try Firebird (pp. 22-27). We discussed using music as a motivation but I left the organization and implementation to her.

The results were impressive. She enjoyed using the resource – and the ideas provided gave her the structure for two lessons. The results were varied but, given the exemplars in the NEMP report, she was able to comment on the overall response and ability of the class. From this, she planned two further lessons.

This exercise was valuable in three main ways:

1. It was accessible to and manageable for an inexperienced teacher.
2. It provided information for assessing children's work.
3. It introduced a 'new' teacher to the wealth of ideas and information available in NEMP.

The challenge to us all is that if a trainee teacher can do it then other teachers have no excuses!

4. Professional Development

My involvement with NEMP has provided a wealth of professional development through a range of experiences over the past six years.

As a NEMP administrator I found the tasks and approach refreshing and valuable in that:

- Assessment tasks allowed children to "show off" their prior knowledge and understanding. I discovered what a child actually knew or could work out, rather than whether he or she remembered a specific fact.
- Children were learning as they proceeded through each activity. The task approaches allowed them to use the resources/ equipment or consider their answers at their own pace in a non-judgemental atmosphere.
- Activities were set in contexts that were both stimulating and authentic.
- Open-ended questions and formats encouraged children to use higher level thinking processes.
- Administrators were trained to give children time to think and experiment without interruption, and then experienced the benefits of this approach first hand.
- The unobtrusive use of video and audio equipment allowed objective data to be collected without marking and analysis tasks infringing on the role of the administrator or his or her working relationship with children.

As a NEMP marker I gained further insights into the purposes,



marking and analysis of quality assessment activities.

- Professional judgement was seen as a necessary tool in the marking of tasks and the collation of quantitative and qualitative data.
- Judging children's work against specific criteria and standards allowed teacher markers to assess more fairly. Discussion showed that individual differences will always exist in marking but systems of pair marking and check marking provided a moderating effect.
- The open-ended nature of the tasks led to an accumulation of data useful for a myriad of purposes, from demonstrating unexpected gaps in learning to highlighting the importance of teamwork and communication skills.
- Studying many video or audio tapes of children attempting the same task allowed teacher markers to appreciate the value of individuality and the ability of most children to relax quickly and communicate thoughtfully with the 'unknown' teacher administrator in an atmosphere of respect.

Back in the classroom I found myself using NEMP approaches and tasks regularly when wanting to diagnostically assess my students' knowledge, skills and progress.

- NEMP reports provided standardized assessment tasks that allowed me to check my students' work against current New Zealand results for Year 4 and 8 children. The published results allowed me to compare my Year 5 and 6 students' responses against actual New Zealand norms.
- I recognized the value of using NEMP benchmarks and exemplars against which I could compare my students' responses with.
- My experiences confirmed that the true value of utilising activity-based standardised testing is that each child is allowed an equal chance to show

what s/he knows.

- Surveys provided a valuable method of highlighting attitudes and beliefs that enhance or restrict learning for individuals or groups.
- Some open-ended tasks provided models for excellent pre- and post-test formats or styles. Obvious common weaknesses and strengths across the sample population or within my class allowed for future planning and goals.
- Many NEMP tasks provided motivating and challenging learning activities in the classroom across a range of ages and levels. The style and formats proved a "tried and true" model, flexible enough to be adjusted easily across levels, content and age.
- The published reports provided a wealth of quality learning and assessment tasks across a wide range of curriculum areas in the four-year cycle. The need to design tasks with specific marking criteria in mind and to devise fair methods of marking remained a personal commitment as I honed my professional judgement further with NEMP support.
- Some tasks and materials were available to loan on request through EARU in Dunedin. When purchasing resources I sought out quality items which would stimulate interest and provide real-life contexts for learning, e.g., thermometers. I spent more time preparing materials for use in the classroom, e.g., providing children with wrapped slices of clay, and laminating enlarged colour photographs.
- All my classes genuinely enjoyed participating in NEMP tasks, and quickly expressed interest when I introduced later activities as being NEMP-based. Although the use of stimulating materials and open formats explained their enthusiasm for the tasks themselves, it became apparent across time that children appreciated the

opportunity to compare their results with those of randomly selected New Zealand students. Not only did they gain confidence from recognising their comparative successes but they also became motivated to study and improve when they sensed weaknesses or gaps in themselves or across the NEMP sample group.

- I became more confident in using video and audio equipment as assessment and learning tools, e.g., a Dictaphone was now used for running records as it allowed the child to read independently before I wrote up and analysed errors away from the classroom atmosphere. I videoed oral and visual language presentations, and found children keen to self-assess their performance and share the tapes with parents.

My understanding of assessment practices and curriculum areas has been enhanced as a direct result of my experiences with NEMP. I have found the project and reports to be a valuable source for ascertaining what children in New Zealand can actually understand and do at Year 4 and Year 8. I find this provides a valuable balance to the curriculum documents (which state what a child should be able to understand and do as he or she moves through the levels) when making decisions about which curriculum objectives and areas to focus on in the classroom, especially at this time of curriculum overload. I am only one of many New Zealand teachers who have benefited by being directly involved.

A study of the NEMP curriculum areas has helped me gain insights into an international approach to the acquisition of knowledge, skills and processes. The importance that NEMP places on viewing school as the more formal part of education, rather than the only means of education, is helpful to teachers, parents and the wider community alike. Teachers who have been involved in NEMP usually express their appreciation for the value of the project, the professionalism and dedication of the team members, and

the personal benefits of working realistic hours while being valued and respected for their professional input. I hope the findings and benefits of NEMP become available to all schools and classroom teachers in the near future.

5. NEMP as a school-wide assessment tool

The NEMP activities are useful as teaching and assessment tools in the classroom. My school was involved in the Assessment for Better Learning (ABEL) development, and we were looking for useful activities to test school-wide skills and knowledge.

Because I had been working with a group adapting NEMP to a whole class setting, it made sense to start with some of these activities.

Our focus was on Numeracy and Literacy, but other curriculum activities were also included. There were a number of advantages in using NEMP examples:

1. The activities were already developed with specific marking criteria.
2. They included comparison statistics at Year 4 and 8.
3. These activities were unique.
4. They covered all aspects of the curriculum.

We selected activities which were able to be adapted to the whole class situation and which involved easily produced resources.

For each activity a kit was produced which included all the resources needed to administer the assessment. This included worksheets, equipment and marking criteria as well as the description from the NEMP book. These activities were spread over a two year cycle and stored in a bin.

Some extra activities were stored in a separate bin as teaching resources. Although these were not part of the assessment scheme they were seen as valuable motivators for a class lesson.

We are still refining the system, but have found already that the NEMP activities provide an excellent starting point for our school development. From the assessments we come together to discuss our class analysis and develop a school analysis to plan further teaching programmes.

6. Assessment of art across a year level

We used the Firebird task (Art, 1995, p. 22) as a common theme across all our six Year 7 classes. We did not have the NEMP video, but did use their script, Stravinsky music, the legend retold in a picture book, and various pictorial interpretations of the ballet for motivation.



Initially the children pencil sketched their ideas. Then some classes produced a firebird using pastels, some used collage material (especially brightly coloured feathers), and others made print blocks using "creative junk". The students' interpretations were varied and exciting, and demonstrated considerable originality and creativity.

The exemplars and key attributes in the NEMP marking criteria were very useful to standardize the assessment.

Concluding comments

The stories written by the six teachers illustrate their belief in the quality of the NEMP assessment resources, and reflect the variety of ways in which they have approached and used the resources in their classroom and school. An essential further step in

disseminating these resources lies in acquainting other teachers and principals with the value of the NEMP resources, allowing opportunities for teachers to experiment and implement ideas and to share those experiences with colleagues. As Lovett (1999) found, however, this is not always easy within a busy staff development programme in schools. Two resources out of this project (Gilmore, 2001a) attempt to go some way towards bridging the gap between NEMP assessment tasks and the curriculum (the NEMP-Curriculum Map), and bringing to teachers' attention "exciting", innovative, and easy to administer NEMP tasks (Teachers' Choice (of) NEMP Tasks). These resources will be available in 2001.

References:

- Eisner, E., Gipps, C., & Harlen, W. (1998). *Report of the 1998 International Review Panel for the National Education Monitoring Project*.
- Flockton, L. (1999). Connecting theory and practice in national monitoring assessment. *Teachers and Curriculum*, 3, 23-30.
- Flockton, L., & Crooks, T. (1998). *Mathematics assessment results 1997, NEMP report 9*. Dunedin: EARU, Otago University.
- Gilmore, A. (2001a). *The National Education Monitoring Project: Assessment resources for teachers*. Christchurch: Unit for Studies in Educational Evaluation, University of Canterbury.
- Gilmore, A. (2001b). The NEMP experience: professional development of teachers through the National Education Monitoring Project. *New Zealand Annual Review of Education*, 10 (in press).
- Lovett, S. (1999). *Professional development from NEMP: The learning journeys of eight New Zealand teachers*. Paper presented at the NZARE/AARE Conference, Melbourne, 29 November - 2 December.

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