

**The Quality of  
Teaching in Years 4  
and 8: Health and  
Physical Education**

**March 2007**



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## **Executive summary**

*Health and Physical Education in the New Zealand Curriculum* is one of seven curriculum statements covering the essential learning areas of the New Zealand curriculum. In health and physical education, students develop skills, knowledge, and attitudes that will help them to look after themselves and others.

ERO evaluated the quality of teaching of health and physical education at Year 4 and Year 8 in 151 schools during Term 3, 2006.

Overall, ERO found that just over a third of teachers were effective teachers of health and physical education. Thirty-six percent of teachers were effective or highly effective in all six areas of good quality teaching. A further 57 percent of teachers were effective in some areas of teaching but less effective in others. Seven percent of the teachers reviewed need to improve significantly across all aspects of their teaching of health and physical education.

### **Recommendations**

Based on the findings, ERO recommends teachers focus on improving the following areas of teaching practice:

- providing learning programmes that reflect the intent and philosophy of *Health and Physical Education in the New Zealand Curriculum*;
- collecting, analysing, and using good quality assessment information that shows students' progress in health and physical education;
- identifying and responding to the diversity of students, and creating a positive learning environment where all students are comfortable in their learning;
- integrating Information and Communication Technologies (ICT) into the health and physical education programme.

Based on the findings, ERO recommends schools focus on improving the following areas of school-wide practice:

- consulting with the school community about the implementation of the health education components of the curriculum;
- increasing the knowledge and understanding of the health and physical education curriculum of teachers of Year 4; and
- implementing effective school-wide systems to support teachers with planning, assessment, reporting, and evaluation of health and physical education programmes.

## Introduction

The Education Review Office (ERO) has been conducting an ongoing series of national evaluations reporting on the quality of teaching for specific learning areas and skills. These evaluations align with the National Education Monitoring Project (NEMP). They represent a systematic review of curriculum and learning areas and follow on from work ERO has done in previous years.<sup>1</sup>

This evaluation of the teaching of health and physical education is the tenth in the series. ERO has previously evaluated the quality of teaching in Years 4 and 8 in science; the visual arts; information skills of graphs, tables and maps; music; reading; speaking; technology; mathematics; and social studies. ERO has also produced three supplementary reports *The Quality of Teaching in Music, Reading, Speaking and Technology: Good Practice*, *The Quality of Teaching in Mathematics: Good Practice* and *The Quality of Teaching in Social Studies: Good Practice*. These reports present case studies of good practice observed in the 2004/05 and 2005/06 evaluations. ERO also produced *The Quality of Teaching Years 4 and 8 for Diverse Groups of Students*, which is a comparative analysis of the quality of teaching for different groups of students across six learning areas.

NEMP provides information about student achievement but does not provide information on factors that influence student achievement. ERO's evaluations complement the NEMP studies by focusing on the quality of teaching, arguably the largest single school influence on student achievement.

NEMP (set up in 1995) measures the educational achievement of students at two levels, four years apart: Year 4 (age 8-9) and Year 8 (age 12-13). Learning areas and skills, covering a broad range of content included in the New Zealand school curriculum, are assessed on four-yearly cycles.<sup>2</sup> The evaluations of the quality of teaching carried out by ERO also focus on the Year 4 and Year 8 levels and on the learning areas assessed by NEMP each year.

The two areas for 2006/07 were health and physical education, and writing. This report evaluates the quality of teaching of health and physical education in Years 4 and 8.

This evaluation report, *The Quality of Teaching in Years 4 and 8: Health and Physical Education*, also has a companion good practice report, *The Teaching of Health and Physical Education: Good Practice*.

All of the reports discussed in this section are available on ERO's website: [www.ero.govt.nz](http://www.ero.govt.nz).

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<sup>1</sup> In 2001, health and physical education was reported on in *Health and Physical Education in the New Zealand Curriculum* (February) and in *Physical Activity in Primary Schools* (May).

<sup>2</sup> <http://nemp.otago.ac.nz>.

## **The quality of teaching**

The quality of teaching has been identified as potentially the largest single schooling system influence on student achievement, accounting for between 16 and 60 percent of the differences in student achievement in schooling.<sup>3</sup> John Hattie has noted that,

*'...it is what teachers know, do, and care about which is very powerful in this learning equation. And it is the one source of variance that can be enhanced with the greatest potential of success.'*<sup>4</sup>

*Te Kōtahitanga*<sup>5</sup>, commissioned by the Ministry of Education, reports on Māori students' experience of education and on ways of improving the achievement of Māori students. This study found that good quality of teaching, in particular high quality relationships and interactions between teachers and Māori students, was the most influential factor on Māori student achievement.

Good quality teaching is crucial to the effectiveness of New Zealand's education system.

## **Health and physical education in the New Zealand Curriculum**

The curriculum for the New Zealand school system follows an 'outcomes-based' rather than a 'syllabus' approach. Schools and teachers are responsible for course content and planning:

*'...the New Zealand Curriculum provides for flexibility, enabling schools and teachers to design programmes which are appropriate to the learning needs of their students.'*<sup>6</sup>

*Health and Physical Education in the New Zealand Curriculum* states that through the teaching of health and physical education:

*'...students will develop the knowledge, skills, attitudes, and motivations to make informed decisions and to act in ways that contribute to their personal well-being, the well-being of other people, and that of society as a whole.'*<sup>7</sup>

*Health and Physical Education in the New Zealand Curriculum* is underpinned by four concepts that contribute to the well-being of the self, other people, and society – well-being (hauora), health promotion, the socio-ecological perspective and the importance of attitudes and values that promote hauora.<sup>8</sup>

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<sup>3</sup> Ministry of Education, *Education Indicators 2002. A report on the health of the New Zealand education system*, (Report for internal distribution, November 2002), p 94.

<sup>4</sup> Hattie J, 2003. *New Zealand Education Snapshot* (paper presented at Knowledge Wave 2003 – the leadership forum), p9.

<sup>5</sup> Bishop R, Berryman M, Tiakiwai S & Richardson C, 2003. *Te Kōtahitanga: The Experiences of Year 9 and 10 Māori Students in Mainstream Classrooms*, (Wellington: Ministry of Education).

<sup>6</sup> Ministry of Education, *The New Zealand Curriculum Framework* (Wellington: Ministry of Education, 1993), p6.

<sup>7</sup> Ministry of Education, *Health and Physical Education in the New Zealand Curriculum* (Wellington: Ministry of Education, 1999), p6.

<sup>8</sup> *Health and Physical Education in the New Zealand Curriculum*, p6.

The 1999 curriculum for health and physical education has four strands – personal health and physical development, movement concepts and motor skills, relationships with other people, and healthy communities and environments. These strands and concepts are introduced to students through seven key areas of learning: Mental Health, Sexuality Education, Food and Nutrition, Body Care and Physical Safety, Physical Activity, Sport Studies, and Outdoor Education. The strands and key areas of learning are described in Table 1.<sup>9</sup>

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<sup>9</sup> *Health and Physical Education in the New Zealand Curriculum*, pp8-9.

Table 1: Health and Physical Education Strands

Strand	Personal Health and Physical Development	Movement Concepts and Motor Skills	Relationships with Other People	Healthy Communities and Environments		
<b>General Aim</b>	Develop the knowledge, understanding, skills, and attitudes needed to maintain and enhance personal health and physical development	Develop motor skills through movement, acquire knowledge and understanding about movement, and develop positive attitudes towards physical activity	Develop understanding, skills, and attitudes that enhance interactions and relationships with other people	Participate in creating healthy communities and environments by taking responsible and critical action		
<b>Key Areas of Learning</b>						
Mental Health	Sexuality Education	Food and Nutrition	Body Care and Physical Safety	Physical Activity	Sport Studies	Outdoor Education
<b>Concepts</b>						
Hauora /Well-being – physical, mental and emotional, social, and spiritual		Health Promotion – healthy environments	Socio-ecological Perspective – healthy choices and recognising barriers	Attitudes and Values – positive and responsible attitudes, respect for others’ rights, care and concern for others and the environment, and sense of social justice		

**Legislative requirements and curriculum expectations**

Schools must meet several legislative requirements for teaching health and physical education.<sup>10</sup> These include:

- boards of trustees must consult with their school community at least once every two years on the content of, and the way in which, the school should implement the health curriculum(p39 and p53);<sup>11</sup>
- boards must prepare a draft statement that includes a clear description of the way in which the school will implement sexuality education (p39 and p53);
- schools should follow safe practices and comply with legislative requirements when developing outdoor education programmes (p46); and
- boards must give priority to regular quality physical activity that develops movement skills for all students, especially in years 1-6.<sup>12</sup>

Schools are also expected to provide particular learning opportunities to students. These include:

- schools should provide all students with practical cooking experiences by the end of Year 8 (p40); and
- schools should provide all students with opportunities to learn fundamental aquatics skills by the end of Year 6 (p42).

<sup>10</sup> As outlined in *Health and Physical Education in the New Zealand Curriculum*.

<sup>11</sup> Section 60B of the Education Act 1989.

<sup>12</sup> Ministry of Education, *The National Administration Guidelines (NAG) 1 ic* (Wellington: Ministry of Education, revised 2006).



## Methodology

### *Evaluation framework*

ERO gathered information from schools in response to the following evaluation questions:

- How effectively does the content of the learning programmes reflect *Health and Physical Education in the New Zealand Curriculum*?
- How effectively are resources and technologies used in the teaching of health and physical education in the classroom?
- Does the teacher have the subject and pedagogical knowledge to allow the school to offer an effective health and physical education programme?
- How effectively are the needs of diverse groups of students in the class identified and met by the teacher?
- How effective is the assessment of student achievement in health and physical education?
- How effectively are students motivated and engaged to achieve highly in health and physical education?

An evaluation worksheet is included as Appendix 1.

Review officers made evaluative judgements based on the evidence found for indicators of good quality teaching in health and physical education for each of these key evaluation questions. They identified whether the teaching of health and physical education by the teacher was highly effective, effective, partially effective or not effective for each area of teaching. Table 2 describes how each of the terms is defined for the purpose of this evaluation.

*Table 2: Definition of ratings for evaluation questions*

<b>Level of effectiveness</b>	<b>Definition<sup>13</sup></b>
Highly effective	<b>Clear, consistent and convincing</b> evidence of teaching practice that reflects indicators of quality teaching
Effective, but with minor weaknesses	<b>Clear</b> evidence of teaching practice that reflects indicators of quality teaching (practice reflects indicators but may not be as consistent or convincing across all sources of evidence)
Partially effective but with substantial weaknesses	<b>Limited</b> evidence of teaching practice that reflects indicators of quality teaching
Not effective	<b>No</b> evidence of teaching practice that reflects indicators of quality teaching

<sup>13</sup> The descriptive phrases in bold type are based on the terminology of scoring rubrics used by the National Board for Professional Teaching Standards (USA), see [www.nbpts.org](http://www.nbpts.org).

ERO also asked schools about:

- school-wide systems for teaching health and physical education;
- teachers' confidence in teaching health and physical education;
- the training teachers received to teach health and physical education; and
- any professional development undertaken specific to learning in health and physical education.

### **Data analysis**

Review officers gathered data for this evaluation using ERO's *Evaluation Indicators for Education Reviews in Schools*. These evaluation indicators are based on recent research on the quality of teaching and ERO's own experience.

ERO's evaluation indicators distinguish between process indicators and outcome indicators. The quality of teaching is considered a key process indicator. Process indicators reflect what best evidence shows is likely to have a positive influence on student achievement and engagement with learning. High quality teaching is expected to contribute to high levels of student engagement with learning, and to high levels of achievement.

ERO looks for evidence of:

- high standards and expectations for learning;
- capable knowledgeable teachers;
- a wide range of teaching strategies, effective planning and classroom management, and
- the use of appropriate resources.

Other variables contributing to educational outcomes that have strong relationships with the quality of teaching have also been included. They are:

- curriculum design and access;
- assessing and feeding back; and
- student engagement with learning.

### **Sample**

ERO evaluated the quality of teaching of health and physical education in all schools (with Year 4 or Year 8 students) where ERO carried out an education review in Term 3, 2006. ERO randomly selected one teacher who taught Year 4 or Year 8 from each of the 151 schools. Teachers of composite classes (that is, taught more than one year level in their classroom) were included in the selection. The types of schools, school locality (urban or rural) and decile ranges of the schools are shown in Tables 3 to 5 below.

Table 3: School types

School type	Number	Percentage of sample	National percentage <sup>14</sup>
Full Primary (Y1-8)	83	55	50
Contributing (Y1-6)	41	27	36
Intermediate (Y7-8)	12	8	5
Secondary (Y7-15)	10	7	4
Composite (Y1-15)	5	3	5
Total	151	100	100

Table 3 shows that contributing schools were under-represented in the sample. In contrast, full primary schools were slightly over-represented, in comparison to national figures.<sup>15</sup>

Table 4: School locality

Locality	Number	Percentage of sample	National percentage
Urban	107	71	68
Rural	44	29	32
Total	151	100	100

Table 4 shows that the numbers of urban and rural schools in the sample is representative of national figures.

Table 5: School decile ranges

Decile <sup>16</sup>	Number	Percentage of sample	National percentage
Low decile (1-3)	51	34	30
Middle decile (4-7)	52	34	40
High decile (8-10)	48	32	30
Total	151	100	100

Table 5 shows that medium decile schools in the sample were slightly under-represented, in comparison to national figures.

### Focus on Years 4 and 8

In this study, ERO evaluated the quality of the teaching of health and physical education at both Years 4 and 8, the year levels in the NEMP study. Of the 151 teachers reviewed, 83 taught students at Year 4 and 68 taught students at Year 8.

<sup>14</sup> The national percentage of each school type is based on the total population of schools as at 1 July 2005. For this study it excludes Years 9-15 secondary schools, special schools, kura kaupapa Māori and The Correspondence School. This applies to locality and decile in Tables 4 and 5.

<sup>15</sup> In the full primary schools, the quality of the teaching of health and physical education was evaluated in Year 4 in 41 schools and in Year 8 in 42 schools. In the composite schools, the quality of the teaching of health and physical education was evaluated in Year 4 in one school and in Year 8 in four schools.

<sup>16</sup> A school's decile indicates the extent to which a school draws its students from low socio-economic communities. Decile 1 schools are the 10 percent of schools with the highest proportion of students from low socio-economic communities, whereas decile 10 schools are the 10 percent of schools with the lowest proportion of these students.

## **Data Collection**

### **Data collected by ERO during on-site evaluations**

During an education review, ERO collects information from a variety of sources including:

- self- review information provided by the school;
- school strategic plans;
- school annual reports;
- the board of trustees' assurance of legal compliance (Board Assurance Statement and Self-Audit Checklist);
- other documentation including information held by ERO; and
- ERO's institutional database.

During an education review ERO has discussions with:

- members of the board;
- the principal;
- school managers;
- school staff;
- students;
- the Friend of the School (if involved); and
- members of the community (if appropriate).

For this evaluation ERO also considered information and observations from the following sources, gathered during the on-site part of the education review:

- teachers' work plans and assessment documents;
- classroom and playground observations;
- classroom and playground environments and displays;
- samples of students' work; and
- teaching and learning resources for health and physical education.

## Findings

This section presents the information gathered in response to each evaluation question.<sup>17</sup> A rating of the overall effectiveness for each of the six questions is presented first. This is followed by information on the indicators of high quality teaching for each question. A summary of the overall findings is presented at the end of this section.

### **School characteristics**

For each of the six evaluative questions, ERO compared overall effectiveness for each of the six evaluative questions by school type, locality, and decile grouping. ERO also compared the performance of teachers of Year 4 with that of teachers of Year 8. Where there was a statistical difference within each of these groupings this is included in the findings.<sup>18</sup>

### **School organisation of health and physical education**

ERO gathered information from schools about their school-wide systems for teaching health and physical education. These findings are based on self-reported information.

#### **Timetabling of health and physical education**

Almost all of the schools timetabled the teaching of health and physical education as two separate subjects. While many primary and intermediate schools taught physical education as a stand-alone subject, health was integrated into other learning areas, particularly reading, writing, science, and social studies. Years 7 to 15 secondary schools were more likely to have different teachers responsible for teaching health and physical education as two stand-alone subjects.

All schools reported that their students participated in planned physical activities five days a week. This typically included 15-minute energising sessions usually at the start of each day, as well as lessons that largely focused on movement concepts and motor skills that lasted between 30 to 50 minutes twice a week. In most schools, students also participated in both organised and informal physical activity during morning intervals and lunchtimes. At certain times of the year, students also had more timetabled physical activities and learning opportunities when they participated in sports events and swimming lessons.

Teachers reported that they taught programmes that focused on key areas of learning other than physical activity and sport studies for 10 to 20 hours per term. At most schools, health was incorporated into 'topic' time, where it may or may not have been the major focus of the programme.

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<sup>17</sup> All questions and indicators are included in the Evaluation Worksheet. See Appendix 1.

<sup>18</sup> Differences in ratings between the types of schools were checked for statistical significance using a Kruskal-Wallis H test, as were differences in ratings between decile groupings. The differences in ratings between urban and rural schools (locality) were checked for statistical significance using a Mann Whitney U test, as were differences in ratings between teachers of Year 4 and Year 8. The level of statistical significance for all statistical tests in this report was  $p < 0.05$ .

### **Use of outside agencies**

All the schools reported that outside agencies regularly contributed to health and physical education programmes. For programmes based on movement concepts and motor skills, the most common agencies included: regional sports trusts; sporting code groups; swimming instructors; Ministry of Education advisors; and Sport and Recreation New Zealand. For the remaining programmes based on this learning areas, the most commonly used agencies included: the New Zealand Police (Kia Kaha, Road Safety, Keeping Ourselves Safe, DARE); the New Zealand Fire Service, Public Health and Dental Nurses; Life Education Trust; and sexuality education providers. Schools drew on the expertise of these agencies throughout the year to ensure an even spread of learning opportunities and to take advantage of weather (for example, tennis in warmer months).

### **Support from non-teaching staff and volunteers**

Over three-quarters of the schools reported that non-teaching staff and volunteers supported the teaching of health and physical education. Most of these schools used the expertise of parents and community members to coach sports teams. At some of these schools, teachers and non-teaching staff shared responsibility for the physical activity and sports programmes. Teachers and teacher aides with specific expertise taught all students certain aspects of health and physical education, such as gymnastics or sexuality. Schools were less likely to use non-teaching staff or volunteers for teaching the personal health and physical development strand. A third of schools used the expertise of specialist providers for this strand, for example, the New Zealand Fire Service, the New Zealand Police, and sexuality education providers.

### **Legislative requirements**

Legislation requires boards of trustees to consult with their school community about their implementation of the 'health education components' of the curriculum at least once every two years. Just over two-thirds of schools (68 percent) met these legislative requirements.

### **Teachers' perception of their competence in teaching health and physical education**

Almost all (98 percent) teachers stated that they felt confident with and capable of teaching health and physical education. Ninety-eight percent of the teachers also reported that their pre-service training had prepared them well to teach health and physical education.

Half (51 percent) of the teachers had some formal qualification specific to the teaching of health and physical education in addition to their pre-service training. The most common were: sports coaching qualifications, particularly swimming, and university degrees in either physical education or education with a major in physical education.

Teachers of Year 8 were more likely than teachers of Year 4 to have a relevant university degree, usually specialising in physical education. ERO found that teachers at intermediate schools and Years 7 to 15 secondary schools were more likely to have

formal qualifications specific to health and physical education than teachers at full or contributing primary schools. These findings were statistically significant.<sup>19</sup>

### **Professional development**

Two-thirds of the teachers reported they had undertaken some form of professional development specific to health and physical education since becoming teachers.

Professional development included:

- courses specific to particular sports coaching or Education Outside the Classroom (EOTC);
- some form of in-service training through an Advisory or School Support Service (contracted by the Ministry of Education);
- participation in Active Schools through Sport and Recreation New Zealand (SPARC);
- specific physical education/physical activity courses such as Jump Jam, SwimSafe, KiwiSport, and KiwiDex; and
- courses about sexuality, mental health, drugs and alcohol, and peer mediation.

ERO found that teachers of Year 8 were more likely to report they had undertaken professional development specific to health and physical education since becoming teachers. This finding was statistically significant.

### ***Design and implementation of the health and physical education programmes***

*How effectively does the content of the learning programmes reflect Health and Physical Education in the New Zealand Curriculum?*

A well-designed and well-implemented curriculum and learning programme is likely to enhance student engagement and achievement. In an effective health and physical education programme, the content of learning programmes will have breadth and balance and be in line with the national curriculum.

This section reports how effectively schools designed and implemented health and physical education programmes in relation to the following indicators:

- learning programmes have appropriate sequences and coherent progression over the years;
- there are clear links between the national curriculum statement for health and physical education and classroom planning;
- there is a match between learning outcomes and the learning needs of students; and
- there is a clear relationship between planning documents and teaching delivered.

Review officers also considered any additional or supporting information concerning the design and implementation of programmes.

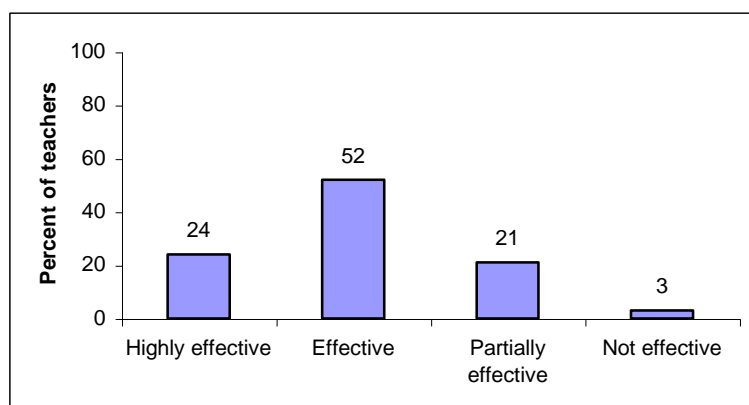
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<sup>19</sup> A Kruskal-Wallis H test was used to test for a statistically significant difference in the distributions of the test scores for each of the different school type samples. Subsequent Mann-Whitney U tests were used to test for statistically significant differences in distributions of the test scores for each of the different school type samples.

## Overall effectiveness of the design and implementation of health and physical education programmes

Figure 1 shows that nearly a quarter (24 percent) of all teachers in this study were highly effective at designing and implementing health and physical education programmes and 52 percent were effective with minor weaknesses. A further 21 percent were partially effective with significant weaknesses and three percent of teachers were not effective.

Figure 1: Design and implementation



## School characteristics

A comparison of schools by locality revealed statistically significant differences in how teachers had designed and implemented health and physical education programmes. Rural schools were more likely than urban schools to design and implement effective learning programmes in health and physical education. This finding was statistically significant.

## Sequence and progression of learning programmes

In an effective school-wide health and physical education programme, students' learning in health and physical education builds on prior learning experiences and achievements as they progress through the school. ERO examined school-wide health and physical education programmes to determine the extent to which programmes had appropriate sequencing of course content over the years of learning.

Sixty percent of the schools had developed guidelines for teaching health and physical education that provided appropriate sequence for progression through the year levels. In schools where ERO found highly effective practice, school-wide guidelines included references to teaching strategies and resources. These guidelines also provided teachers with information about possible integration with other learning areas, assessment, and evaluation of programmes.

In 31 percent of schools, the school guidelines for health and physical education were partially effective. In most of these schools, guidelines lacked a progression of knowledge and skills through the year levels. In other schools, school-wide plans were either poorly linked to the curriculum or lacked comprehensive coverage and integration of the four strands of the curriculum.



In nine percent of schools, school-wide guidelines were not effective. In most of these schools, there was no school-wide plan for the implementation of health and physical education. Teachers taught programmes independently of what was happening in the rest of the school. Teachers could not be assured of students' development in health and physical education, or that students were covering the content of the curriculum.

### **Classroom planning using *Health and Physical Education in the New Zealand Curriculum***

Seventy percent of the teachers had planned classroom programmes that were linked to the national curriculum statement *Health and Physical Education in the New Zealand Curriculum*. These teachers' plans had clear links between achievement objectives, learning intentions, and success criteria. In many classes, classroom programmes were also related to syndicate or school-wide long-term planning.

The classroom programmes planned by about a third (30 percent) of teachers did not closely reflect the strands and achievement objective of *Health and Physical Education in the New Zealand Curriculum*. In many of these schools, there were links to achievement objectives in lesson plans for the movement concepts and motor skills strand of the curriculum, but there was no integration of the other curriculum strands.

### **Planning to meet the identified needs of students**

Sixty-one percent of the teachers had planned health and physical education programmes to promote learning outcomes that matched the requirements, experiences, and interests of their students.

In schools where ERO found highly effective practice, teachers were more likely to use pre- and post-assessment information to develop and adapt lessons. These teachers designed programmes in health and physical education that gave students opportunities for both success and challenge. To provide programmes that met the needs and interests of the students, teachers at these schools also sought the involvement of parents and whānau. This consultation was more evident in key areas of learning such as sexuality, mental health, and body care and physical safety.

From the remaining 39 percent of the teachers there was little or no evidence that they were planning health and physical education programmes that identified appropriate learning outcomes for their students. Teachers were more likely to consider relevant learning outcomes in lessons relating to physical activity, as skill abilities were more visible. These teachers did not use assessment information to inform planning or to identify the learning needs of individuals or groups of students. Students usually participated in whole-class activities rather than a variety of settings that enabled them to participate fully. Where teachers placed students in large groups, these groupings did not always cater for the individual learning needs or abilities of the students.

## Teaching and learning resources in health and physical education

*How effectively are resources and technologies used in the teaching of health and physical education in the classroom?*

Effective schools ensure that they have teaching and learning resources that support good quality teaching. Resources should be appropriate and relevant to the lives and experience of students.

This section reports how effectively teachers used teaching and learning resources in health and physical education in relation to the following indicators:

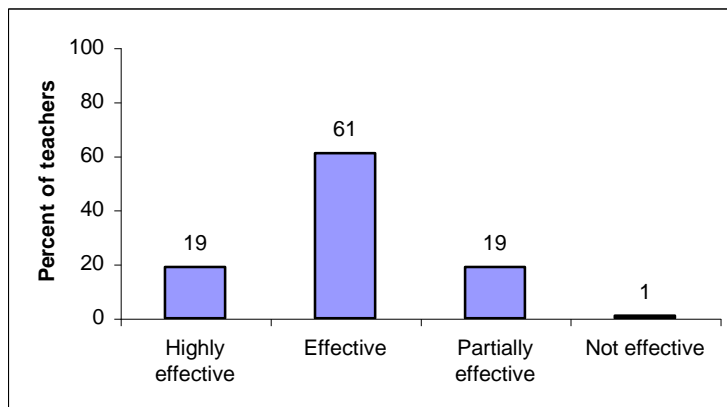
- appropriate teaching and learning resources are present in classrooms;
- appropriate teaching and learning resources are being used;
- teachers are confident in the students' use of resources; and
- Information and Communication Technologies (ICT) are used appropriately to support teaching.

Review officers also considered any additional or supporting information concerning the use of resources and technologies.

### Overall effectiveness of the use of resources in health and physical education

Figure 2 shows that 19 percent of the 151 teachers were highly effective at using resources and 61 percent were effective with minor weaknesses. Nineteen percent of the teachers were partially effective with significant weaknesses at using teaching and learning resources in health and physical education, and one percent were not effective in this area.

Figure 2: Resource use



### Resources in schools

*Action for Wellbeing*<sup>20</sup> states that resources for health and physical education should reflect the attitudes and values of the *New Zealand Curriculum Framework* and the school's community, and meet the needs of the students in their school. These resources include: people, places, organisations and occasions as well as learning materials.

<sup>20</sup> Ministry of Education, *Action for Wellbeing* (Wellington: Ministry of Education). Accessed on [www.tki.org.nz](http://www.tki.org.nz).

The Ministry of Education provides teaching and learning resources to schools to support the teaching of health and physical education. These include materials such as the *Curriculum in Action* series and the *Exemplars for Health and Physical Education*.<sup>21</sup> Teachers are also able to get other resources and information through a section of *Te Kete Ipurangi, Health and Physical Education Online*, which provides information on health and physical education teaching resources for Years 1 to 13.

### **Availability of teaching and learning resources**

In 82 percent of the classes, students had a good range of appropriate resources for learning programmes in health and physical education. The resources for both health and physical education were suited to the age and needs of the students in the class. In almost all of these schools, teachers encouraged students to also use equipment for physical activity during breaks.

Resources were well organised and maintained and teachers were easily able to use resources that suited their classroom programmes. In programmes related to movement concepts and motor skills, resources included access to a variety of indoor and outdoor spaces, and classroom sets of equipment sufficient for whole-class participation. In other units of work, teachers had access to a range of resources in the school, including books, videos, posters, and online resources.

In the remaining 18 percent of classes, teachers did not have access to appropriate and well-maintained resources that supported their classroom programmes.

### **Teachers' and students' use of resources**

In 82 percent of classes observed in this study, teachers and students were using health and physical education resources effectively. Teachers and students used a variety of resources that extended students' learning. Teachers showed students how to use equipment, particularly for physical activity and sports. In these classes, all students were able to practise and participate in the lesson. Teachers at these schools also made good use of resources external to the school. These included externally developed programmes, and sporting facilities.

In the remaining 18 percent of classes, teachers and students did not use appropriate resources to support the students' learning. In most classes, this was because resources were limited or not well maintained. There was also limited use of external health providers and their resources. Teachers did not integrate these external programmes into their own classroom programmes.

### **Integration and use of Information and Communication Technologies**

In 47 percent of the classes observed, teachers integrated ICT into the health and physical education programme and, along with the students, made effective use of ICT. Examples of how teachers and students used ICT to support the health and physical education curriculum included:

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<sup>21</sup> The exemplars are a collection of authentic pieces of students' work. They are annotated to illustrate learning, achievement, and quality. The exemplars package includes teacher notes and matrices of learning paths in each strand and KAL. The *Curriculum in Action* series supports the implementation of *Health and Physical Education in the New Zealand Curriculum* by providing teachers with ideas for planning units of work to meet the identified learning needs of students. These are available on the *Te Kete Ipurangi* website and in hard copy (See [www.tki.org.nz](http://www.tki.org.nz)).

- accessing information on websites, and accessing digital learning objects using ClickView;
- presenting and discussing information on Smartboards and data projectors;
- using digital and video cameras for assessment and technique development; and
- using audio-visual equipment for fitness routines and to motivate students.

In over a third (37 percent) of classes, there was limited use of ICT to support the health and physical education programme. While many of these students and teachers used computers and other technologies, at times this was not planned or did not add to the students' learning experiences.

In other classes (16 percent), there was no evidence of ICT in the health and physical education programme. In some of these classes, a lack of equipment in the classroom or school meant access for both teachers and students was limited. In other classes, teachers did not incorporate ICT into the lessons because of their lack of confidence.

### **Subject and pedagogical knowledge of teachers**

*Does the teacher have the subject and pedagogical knowledge to allow the school to offer an effective health and physical education programme?*

The knowledge and skilled use of a range of effective pedagogical practices is likely to contribute to high levels of student engagement and achievement in health and physical education.

This section reports on teachers' subject and pedagogical knowledge in health and physical education in relation to the following indicators:

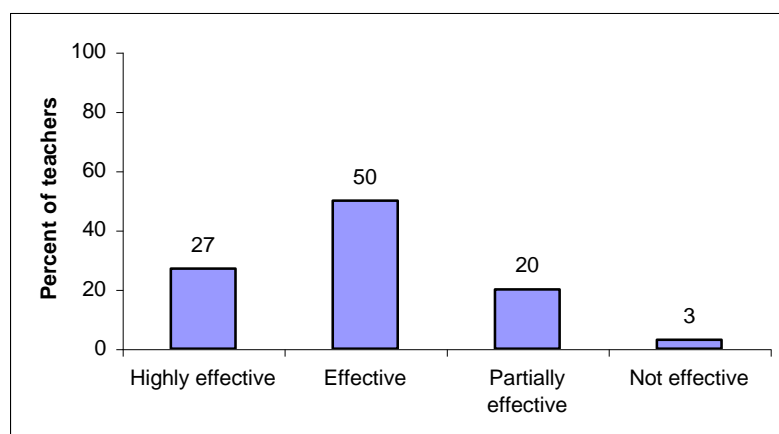
- teachers have appropriate subject knowledge to provide accurate information to students at a level appropriate to their understanding and life experiences;
- teachers are suitably qualified to identify and respond effectively to the learning needs of students in health and physical education; and
- teachers establish appropriate expectations for learning, ensure these are clear to students and encourage students to set high personal goals.

Review officers also considered any additional or supporting information concerning the teachers' subject and pedagogical knowledge.

### **Overall effectiveness of teachers' subject and pedagogical knowledge in health and physical education**

Figure 3 shows that 27 percent of teachers had highly effective subject and pedagogical knowledge and 50 percent were judged effective with minor weaknesses. Twenty percent were partially effective with significant weaknesses in this area. Only five teachers (three percent) had 'ineffective' subject and pedagogical knowledge.

Figure 3: Subject and pedagogical knowledge



### School characteristics

ERO compared the performance of teachers of Year 4 with that of the teachers of Year 8. ERO found that teachers of Year 8 were more likely to have effective subject and pedagogical knowledge than teachers of Year 4. This finding was statistically significant. This was consistent with earlier findings from self-reported information about the qualification levels and professional development undertaken in health and physical education by teachers of Year 8. Teachers of Year 8 were more likely than teachers of Year 4 to report that they had a formal qualification, and to have undertaken professional development in health and physical education.

A comparison of teachers by school type revealed statistically significant differences in teachers' application of their subject and pedagogical knowledge. Teachers at Years 7 to 15 secondary schools were more likely than teachers at contributing and full primary schools to have effective subject and pedagogical knowledge.<sup>22</sup> This finding was statistically significant. This was also consistent with findings from self-reported information about qualifications specific to health and physical education for teachers at Years 7 to 15 secondary schools. Teachers at these schools were more likely than teachers at full and contributing primary schools to have a qualification in health and physical education.

### Subject knowledge of teachers

Sixty-nine percent of teachers had appropriate subject knowledge to provide programmes that were suitable for the students in their class. They provided students with good information, used appropriate language, and made sure that students understood concepts and ideas. In physical activities, these teachers had sufficient knowledge and skills to teach students how to master new skills. For some aspects of the curriculum, for example, mental health and sexuality education, many of these teachers consulted with external providers about the programmes. Highly effective teachers drew on the expertise of external providers to present programmes in the class. Teachers taught these aspects of the curriculum using contexts that were meaningful to students, to ensure that students were interested and able to apply their learning to their own lives.

<sup>22</sup> A Kruskal-Wallis H test was used to test for a statistically significant difference in the distributions of the test scores for each of the different school type samples. Subsequent Mann-Whitney U tests were used to test for statistically significant differences in distributions of the test scores for each of the different school type samples.

The remaining 31 percent of the teachers did not have the appropriate subject knowledge to enable them always to give their students appropriate learning experiences in health and physical education. In some of these classes, the teachers' knowledge of *Health and Physical Education in the New Zealand Curriculum* was limited. Where external providers offered programmes, some teachers were unable to incorporate the learning into their own classroom programme.

### **Pedagogical knowledge of teachers**

Sixty-nine percent of teachers used effective teaching strategies to promote students' learning in health and physical education. These teachers used strategies and approaches that responded to their students' interests and abilities. They also used assessment information to inform decisions about appropriate teaching practice. In physical activity and sports, teachers planned a variety of activities within lessons to provide for students' different skill levels and abilities. In other aspects of the curriculum, teachers gave students opportunities to work at different levels by incorporating an inquiry approach in lessons, and by questioning and extending students' thinking. Many of these teachers reported that ongoing professional development, school-wide guidance, and collegial support helped them continue to increase their pedagogical knowledge and expertise in health and physical education.

Almost a third (31 percent) of teachers lacked the pedagogical expertise to promote students' learning in health and physical education. In some classes, teachers did not provide differentiated learning programmes in response to students' differing abilities and needs. In other classes, a lack of planning and assessment meant that teachers had limited means to identify and respond to learning needs.

### **Setting high expectations for achievement in health and physical education**

High learning and behavioural expectations contribute to high levels of achievement. Teachers need to establish appropriate expectations for learning and behaviour, and to communicate these to students. They also need to encourage students to set personal goals.

Seventy percent of the teachers set high expectations for achievement in health and physical education with their students. These were shared with, and understood by, their students. Teachers encouraged students to monitor their own progress against these expectations and their own personal goals.

For the remaining 30 percent of the teachers, there was little evidence of their setting high expectations for achievement in health and physical education.

### **Meeting the needs of diverse groups of students**

*How effectively are the needs of diverse groups of students within the class identified and met by the teacher?*

The New Zealand student population is diverse. Gender, ethnicity, socio-economic background, home language, and individual student ability all need to be taken into account by teachers. Teachers need to be able to teach all students in their class effectively, regardless of the background of students and teachers.

This section reports on how effectively teachers were meeting the needs of diverse groups of students within their class in relation to the following indicators:

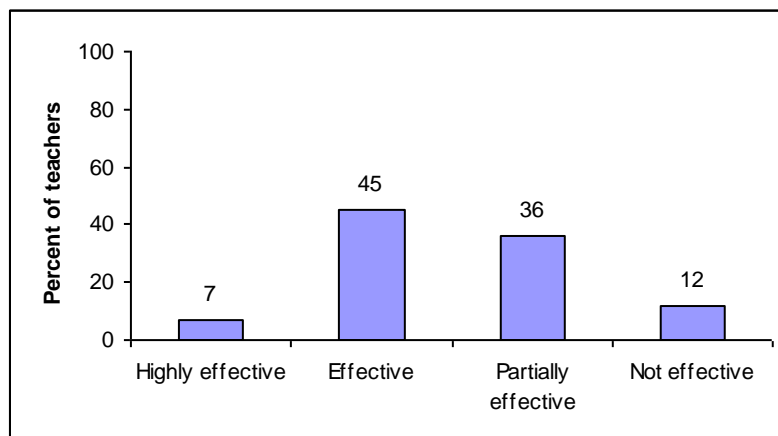
- teachers have appropriate processes for identifying the diversity of student characteristics within their class;
- teachers have appropriate strategies for responding to the diversity of student characteristics within their class;
- teachers collect achievement information in health and physical education for diverse groups of students in their class;
- teachers analyse achievement information in health and physical education for diverse groups of students in their class; and
- teachers use achievement information in health and physical education for diverse groups of students in their class to make evidence-based decisions about current and future learning programmes in health and physical education.

Review officers also considered any additional or supporting information concerning how well teachers identified and met the needs of diverse groups of students.

### **Overall effectiveness of teaching diverse groups of students**

Figure 4 shows that seven percent of all teachers in the sample were highly effective at identifying and meeting the needs of diverse groups of students and 45 percent were effective with minor weaknesses. A further 36 percent were partially effective with significant weaknesses and 12 percent of teachers were not effective.

*Figure 4: Teaching diverse groups of students*



### **Identifying and responding to diversity of student characteristics in the class**

When teachers identify the full range of student needs in their class they are able to plan and adapt learning programmes that meet the needs of all their students. Teachers are also more likely to create a positive learning environment where students feel that their personal beliefs, customs and attitudes are taken into account.

#### *Identifying the diversity of students*

Just under half (43 percent) of teachers had effectively identified the diverse range of needs in their classroom. These teachers used a variety of processes to identify students with special beliefs, needs, or abilities. These included: the teacher’s knowledge of students, including their skills, abilities, needs and interests; observations during activities; students’ evaluation of activities; collecting information on students’ goals and reflection on these goals; communication with parents; and use of assessment information.

Fifty-seven percent of teachers did not have any processes for identifying the diverse range of needs amongst their students.

### *Responding to the diversity of students*

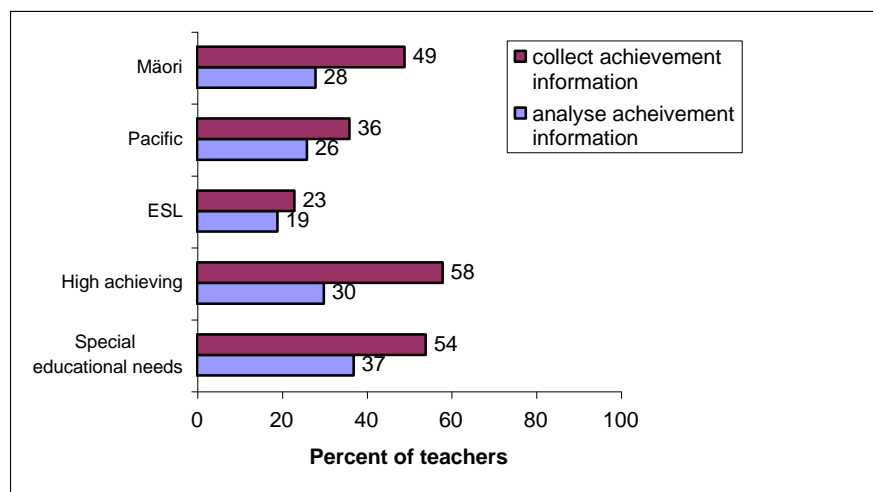
Forty-two percent of teachers responded appropriately to the diversity of needs in their class. These teachers provided a wide range of learning experiences to meet the needs of their students, and modelled questioning and activities. Students worked cooperatively in pairs or small groups based on similar ability or in tuakana-teina roles. The teachers in these classes used a variety of assessment strategies, such as observations, and student self and peer assessment, to identify the needs of the students in their class.

Over half (58 percent) the teachers did not respond to the wide range of needs in their class. Many of these teachers had no information about the diversity of student needs in their class, or were using inappropriate or a limited range of strategies to respond to any identified need.

### **Collection, analysis, and use of student achievement information**

Teachers need to collect, analyse and use the achievement information of all students to enable them to respond to the needs of diverse groups of students in their class. ERO investigated the extent to which achievement data on Māori students, Pacific students, students for whom English is a Second Language (ESL)<sup>23</sup>, students who were high achievers, and students with special education needs in health and physical education was collected and then analysed for that group of students. The results are presented in Figure 5. The figures in this following section are of the proportions of the number of teachers who have Māori, Pacific, or ESL students in their class, not of the 151 teachers in the sample. The figures for high achieving students and those with special educational needs are proportions of teachers in the sample that were accurately identifying these students.

*Figure 5: Collection and analysis of student achievement information*



Many teachers did not collect or analyse achievement information for these groups of students. Over half of teachers collected achievement information for students who were high achievers or had special educational needs (58 percent and 54 percent).

<sup>23</sup> ESL students include all students for whom English is a second language, rather than only students who are funded for ESOL (English for Speakers of Other Languages) instruction.



Nearly half (49 percent) of teachers collected achievement information for Māori students. A third of the teachers (36 percent) collected achievement information about Pacific students, and less than a quarter (23 percent) for ESL students.

Not all teachers who collected student achievement information analysed it. About a third of teachers analysed this achievement information for students who were high achievers or had special educational needs (30 percent and 37 percent). Just over a quarter of teachers analysed achievement information for Māori and Pacific students (28 percent and 26 percent). Nineteen percent of teachers analysed achievement information for ESL students.

### **Māori students**

Of the sample of 151 teachers, 123 teachers (81 percent) were teaching students who identified as Māori.

Thirty-five of the 123 teachers (28 percent) used information about the achievement of their Māori students to make decisions about learning programmes in health and physical education for these students. Most schools used this information to adapt learning programmes at the classroom level.

### **Pacific students**

Forty-seven of the 151 teachers (31 percent) were teaching students who identified as Pacific.

Eight of these 47 teachers (17 percent) used information about Pacific student achievement to make decisions about learning programmes in health and physical education for these students. Adaptations to learning programmes were also more likely to occur in the physical activity and sport studies key areas of learning.

### **Students for whom English is a second language**

Forty-seven teachers (31 percent of the sample) were teaching students from non-English-speaking backgrounds.

Six of these 47 teachers (13 percent) used information to make decisions about current and future learning programmes in health and physical education for ESL students.

### **Students identified as high achieving in health and physical education**

A boards of trustees, through its principal and teachers, is required to identify students and groups of students who have special needs, including gifted and talented students.<sup>24</sup>

Forty-two teachers (28 percent of the 151 teachers) had an effective process in place to identify students who were high achievers in health and physical education. In most of these classes, teachers identified high achievers based on observed skills and abilities. In some aspects of the curriculum, parents and regional sporting organisations helped identify these students. Where ERO found highly effective practice, teachers were using assessment information to identify high achieving students.

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<sup>24</sup> Ministry of Education, *The National Administration Guidelines (NAG) 1 iii c* (Wellington: Ministry of Education, revised 2003).

Of the teachers who were effective in identifying high achieving students, 24 used assessment information to develop learning programmes in health and physical education for these students. Students were encouraged to take on leadership roles and to support their peers. For example, teachers encouraged these students to support and coach other students in games or activities at lunchtime or during lessons, and encouraged them to be peer mediators. Where health and physical education was part of an integrated inquiry approach, high achieving students had opportunities to work independently to explore pathways that interested them. Teachers encouraged and supported students who were high achieving in sports to participate in community and representative sporting events.

### **Students requiring extra assistance in health and physical education**

A board of trustees, through its principal and teachers, is required to identify students and groups of students who are not achieving, are at risk of not achieving, or have special needs<sup>25</sup>.

Thirty-eight teachers (25 percent of the 151 teachers) had an effective process in place for identifying students who had special educational needs in health and physical education. In these classes, teachers identified these students through teacher observation and by analysing achievement data. In some cases, Special Education Needs Coordinators (SENCO) identified these students and, with teachers, developed an Individual Education Programme for their learning in health and physical education.

Of the teachers who were effective in identifying these students, 29 were using achievement information to make decisions about current and future learning programmes in health and physical education for these students. Teachers maintained regular contact with parents and professionals such as Resource Teachers: Learning and Behaviour (RTL) and the SENCO. These professionals provided support for learning programmes, as did teacher aides.

### **Assessing learning in health and physical education**

*How effective is the assessment of student achievement in health and physical education?*

Assessment is an ongoing process that involves gathering, analysing, and using meaningful data about student learning. Assessment information assists teachers to develop a good knowledge of their students and set the next steps for students' learning. It is a prerequisite for teacher reflection on the effectiveness of their teaching strategies and for school self review.

The effective gathering and use of assessment data has a strong influence on students' achievement. Used appropriately, it can also have a positive impact on students' motivation and self-esteem.

To be effective, assessment processes or mechanisms need to be valid and reliable. Valid assessment processes are those that measure what they are intended to measure.

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<sup>25</sup> *The National Administration Guidelines (NAG) 1 iii a, b, c.*

Reliable assessment processes result in teachers reaching consistent conclusions about a student's performance.

When teachers gather assessment information from a range of sources, (including self, peer, activity-based, oral and written assessments) they are more likely to make accurate judgements about student achievement. Fairness to students is another important reason for teachers to use a wide range of assessment processes to measure student performance in health and physical education. This contributes to an assessment process that allows all students to demonstrate their achievements.

This section reports on the effectiveness of assessment of learning in health and physical education in relation to the following indicators:

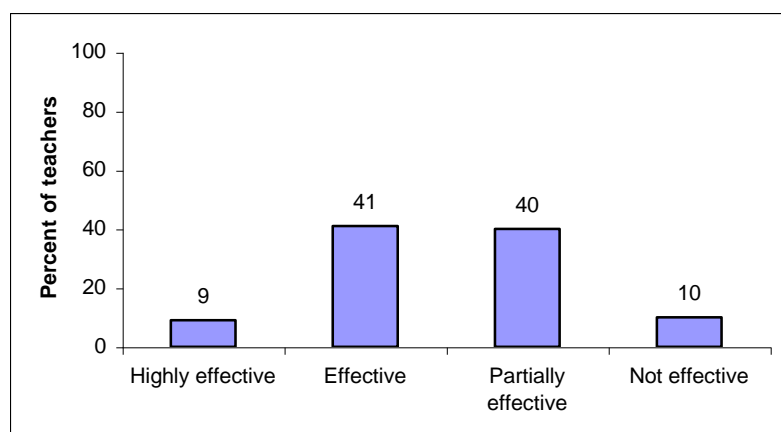
- assessment information demonstrates student achievement and progress;
- teachers provide regular, specific and constructive feedback and information on students' performance that contributes to the next stage of learning;
- assessment information is used to inform programme review and decisions about policy and resources and teacher professional development;
- students are taught to evaluate their own learning and are aware of their achievements; and
- assessment processes are fair in that they allow all students to demonstrate their achievements.

Review officers also considered any additional or supporting information concerning the assessment of student achievement in health and physical education.

### **Overall effectiveness of assessment of health and physical education**

Figure 6 shows that nine percent of teachers were highly effective at assessing students' achievement in health and physical education and a further 41 percent were effective with minor weaknesses. Forty percent were partially effective with significant weaknesses and 10 percent were not effective.

*Figure 6: Assessment of health and physical education*



## Quality of assessment information

ERO evaluated the quality of assessment information gathered by teachers to ascertain the extent to which it was valid and reliable for the purpose for which it was used, and the extent to which it enabled all students to demonstrate their health and physical education knowledge and skills.

Gathering quality assessment information that demonstrated what students knew and could do, and their progress, in health and physical education was a challenging task for many teachers. Forty-five percent of teachers gathered information on their students' progress in health and physical education using a range of assessment information, including self, peer, and teacher assessment. This assessment clearly linked to planned learning objectives and students were aware of the expectations for achievement. Many of these teachers used marking schedules or assessment rubrics based on the *Health and Physical Education Exemplars*, and achievement objectives outlined in *Health and Physical Education in the New Zealand Curriculum*. These assessment tools identified success criteria that measured students' progress against learning intentions and achievement objectives.

Fifty-five percent of teachers were gathering limited assessment information. Such assessment information showed attainment of skills but did not show the progress students had made over time. In many cases, the criteria for assessment of achievements were unclear and did not relate to achievement objectives in *Health and Physical Education in the New Zealand Curriculum*. Most of the teachers did not focus on student achievement and learning in health and physical education. Rather, teachers focused on assessing particular physical skills, or what students could remember about a particular topic. This type of assessment did not show how students were progressing over time in all aspects of health and physical education.

## Feedback and feedforward<sup>26</sup> information

It is important that teachers provide regular, specific, and constructive feedback on students' work, and information on their next steps for learning. These processes are key elements of formative assessment. Formative assessment, often referred to as assessment for learning, refers to all those activities undertaken by teachers, and by the students in assessing themselves to modify teaching and learning activities.<sup>27</sup>

Fifty-eight percent of the teachers gave students constructive feedback and feedforward on the students' work. These teachers frequently revisited the learning outcomes for the lesson so students could identify how to make improvements and progress. Many of these teachers provided students with opportunities to discuss and reflect on their learning in a range of ways.

The remaining 42 percent of the teachers gave their students little feedback or feedforward about their learning in health and physical education.

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<sup>26</sup> 'Feedforward' refers to the process of identifying future learning goals, in partnership with the student, by building on current learning.

<sup>27</sup> Black P. & Wiliam D., *Inside the Black Box: Raising Standards Through Classroom Assessment* (London: King's College London School of Education, 1998).

## **Student self and peer assessment**

Self and peer assessment are tools for promoting student thoughtfulness and self-management. Teaching students the skills to take charge of their learning is a vital part of preparing them to be lifelong learners.

Forty-nine percent of the teachers were teaching students strategies for self and peer assessment. Students were most likely to set personal learning goals for the key areas of learning of physical activity and sport studies. Assessment of progress towards these goals was verbal and students recorded their progress formally. Students evaluated their progress towards their learning goals in other key areas of learning using self assessment checklists based on learning criteria.

Fifty-one percent of teachers did not give students frequent opportunities for self or peer assessment. Students did not have regular opportunities to evaluate their achievement and progress in relation to learning intentions or their own personal goals for learning in health and physical education.

## **Communication with parents**

Teachers at 45 percent of schools communicated effectively with parents about their child's achievement in health and physical education. The majority of schools used twice-yearly written reports as the main way of communicating achievement information to parents. The most effective practice observed was where these reports outlined student progress and achievement, indicating what the student could do, and where appropriate, how that related to next steps for learning.

All these schools held parent-teacher interviews. Many schools supplemented interviews by giving students the regular opportunity to regularly take portfolios of their learning home. Parents had opportunities to discuss their children's learning, progress, and the next learning steps with the teachers.

Other formal and informal opportunities for communication with parents were most obvious in the context of sporting achievement and school events. Most schools sent home newsletters that included achievements in sport. Most teachers had regular contact with parents outside school hours, as many parents were involved in their children's sporting events.

Teachers at 55 percent of schools were less effective in their communications with parents. While these teachers typically reported to parents as part of a school-wide once-a-year reporting system, usually through a written report and formal parent-teacher interview, the information reported was limited. Some schools reported students' achievement and progress in health and physical education. However, schools did not base this reporting on reliable and valid assessment information nor did they relate the assessment to curriculum levels or national benchmarks. In many of these schools, the formal reporting process provided a general comment about student participation and enjoyment, but did not also indicate progress and learning needs specific to health and physical education.

In a small number of these schools, written reports included information on physical activity and sport studies key areas of learning only, or did not include health and physical education as a learning area.

### **Using achievement information for classroom programme evaluation**

Thirty-five percent of teachers were effective in using student achievement information to evaluate and modify their classroom programme in health and physical education. In many schools, staff discussed and documented programme reviews at classroom and syndicate levels.

The remaining two-thirds (65 percent) of teachers were not evaluating their classroom programmes.

### **Using achievement information for school programme review**

Assessment information can also support school self review. Schools can use achievement information to review how well their curriculum fits with students' learning needs, and to make well-informed decisions about policy, resources, and teacher professional development.

A quarter (24 percent) of the schools were collating information on student achievement in health and physical education as part of their curriculum review. In most of these schools, curriculum reviews were discussed at a whole school or syndicate level. Boards of trustees used review information to set school expectations for student achievement, and to make resourcing decisions, in health and physical education.

Seventy-six percent of the schools did not base their reviews of their health and physical education curriculum on analysed student achievement information. Some of these schools were undertaking some evaluation of their programmes, but this was not regular enough to be used for decisions about the development and resourcing of the health and physical education programme. Other schools used limited student achievement information to review their coverage and resourcing of only certain aspects of the curriculum. This review was mostly limited to ensuring adequate resourcing of equipment, such as sports equipment.

### ***Student engagement with learning***

*How effectively are students motivated and engaged to achieve highly in health and physical education?*

Students who are engaged and motivated are more likely to achieve in health and physical education.

This section reports on how effectively teachers engaged students to achieve highly in health and physical education in relation to the following indicators:

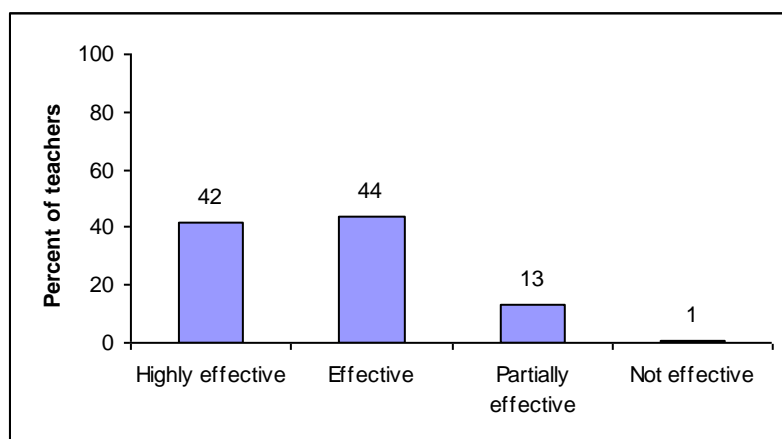
- students have access to experiences within the health and physical education curriculum that meet their particular needs, aspirations, interests and aptitudes;
- there are high levels of student interest and motivation across all groups of students in health and physical education; and
- there are strong, positive, and supportive relationships between students and with teachers in the health and physical education learning environment.

Review officers also considered any additional or supporting information concerning the motivation and engagement of students in health and physical education.

## Overall effectiveness of motivating and engaging students to achieve highly in health and physical education

Figure 7 shows that 42 percent of the teachers were highly effective over all the indicators in engaging students to achieve highly in health and physical education and 44 percent were effective with minor weaknesses. Thirteen percent of teachers were partially effective with significant weaknesses and only one school (one percent) was not effective.

Figure 7: Student engagement



## Promoting students' engagement with learning

Three-quarters (76 percent) of teachers were effective at providing students with experiences in health and physical education that met students' needs, aspirations, interests, and aptitudes. In many of these schools, teachers asked students about interests and needs so they could incorporate appropriate health and physical education programmes into long-term planning.

Many of these teachers provided learning programmes in health and physical education that were responsive to the students' life experience. Examples included focusing lessons on bullying, pubertal change, and healthy eating. Teachers planned lessons that allowed students to experience a range of physical activity and sporting codes. Students set personal goals related to health and physical education and were able to apply their learning to their own lives.

Teachers used a variety of equipment and resources to make programmes interesting and relevant to students. The resources were appropriate to the ages and abilities of the students in the classroom. In almost all these schools, students had access to a wide range of sports equipment during play times.

However, for 24 percent of teachers there was little evidence that their lessons gave students experience in all aspects of the health and physical education that engaged them well.

## Student motivation in health and physical education

There were high levels of student motivation in health and physical education in the classes of 78 percent of teachers. Students in these classes were motivated and on-task. Teachers used a variety of settings, including small group and independent work, to maintain students' focus and engagement. During physical activity and sport

studies, most of these teachers were effective at keeping students active and engaged in their learning when practising movement and motor skills. Most of the students could readily talk about the purpose of their activities in terms of the learning intentions and outcomes.

In 22 percent of classes, there was little evidence of high interest and motivation across all students. Learning programmes were not always relevant to students or the purpose of the learning was not clear. Many of these teachers did not use effective strategies during their lessons to engage students in their learning. Students in these classes were frequently off-task, particularly when waiting to take turns during physical activities.

### **Classroom relationships**

Students' learning is enhanced when there are strong and supportive relationships among students and teachers and a positive tone in the school that supports the learning of all students.

Positive and supportive relationships among teachers and students were apparent in 86 percent of classes observed. Both teachers and students were encouraging and willing to help others in the class, particularly during physical activities, and praised and celebrated students' achievements. Most of these teachers used health and physical education as a way to develop the skills students need for positive and supportive relationships within the school, and their home and community. Teachers modelled respectful behaviour and valued students' responses. These teachers provided an environment for students to take risks and participate in discussions.

The skills and attitudes that students developed as part of the health and physical education curriculum benefited students' relationships in the playground. Students knew they needed to play safely and fairly, including when playing competitively. Students demonstrated this at morning interval and lunchtime by interacting and playing together well.

In the remaining 14 percent of classes, there were poorer relationships among teachers and students. The teachers were not supportive of students or had unrealistic expectations for achievement. In many of these classrooms, there was little evidence that teachers promoted teamwork, fair play, and cooperation. Some students were aggressive and made inappropriate comments about other students' abilities. In some classes, some students appeared uncomfortable about taking part in discussions and there was little evidence of respect for others' thoughts and opinions.



## **Overall findings**

The quality of teaching of health and physical education was evaluated across the six evaluative questions.

- Thirty-six percent of teachers were effective or highly effective in all six of these areas.
- Fifty-seven percent of teachers were effective in some areas but less effective in other areas.
- Seven percent of the teachers were partially effective or not effective in all of the areas.

While just over a third of the teachers were effective or highly effective in all aspects of this evaluation, a large proportion of teachers had areas for development in aspects of their teaching of health and physical education.

ERO also found statistically significant differences between different groups of teachers:

- teachers of Year 8 were more likely than teachers of Year 4 to have a relevant university degree, usually specialising in physical education;
- teachers at intermediate schools and Years 7 to 15 secondary schools were more likely to have formal qualifications specific to health and physical education than teachers at full or contributing primary schools;
- teachers of Year 8 were more likely to report they had undertaken professional development specific to health and physical education since becoming teachers;
- rural schools were more likely than urban schools to design and implement effective learning programmes in health and physical education;
- teachers of Year 8 were more likely to have effective subject and pedagogical knowledge than teachers of Year 4; and
- teachers at Years 7 to 15 secondary schools were more likely than teachers at contributing and full primary schools to have effective subject and pedagogical knowledge.

## Conclusions

This evaluation highlights important areas for development for teaching practice and school-wide outcomes. ERO found that many schools were not fully implementing *Health and Physical Education in the New Zealand Curriculum*. Almost all schools timetabled the teaching of this learning area as two distinct subjects: health education and physical education. School-wide policies and planning at many schools did not support the teaching, assessment, and reporting of health and physical education as a cohesive learning area. This led to a narrowness of learning, where teachers taught physical activity rather than physical education, and made health a part of ‘topic time’, instead of teaching it within the context of the health and physical education curriculum.

### **Areas of strength**

ERO found that over 70 percent of teachers were effective in three of the six evaluative areas. The majority of teachers:

- were effective in engaging students in learning;
- used resources effectively; and
- had good subject and pedagogical knowledge.

### **Engaging with health and physical education**

Students that are engaged in, and motivated about learning in health and physical education are more likely to achieve in health and physical education. Most teachers were providing students with health and physical education programmes that the students enjoyed, and found interesting and challenging. Students’ well-being will contribute to their ability to build positive and supportive relationships with their classmates both in the classroom and in the playground.

### **Resourcing**

Most schools were well resourced with health and physical education equipment and resources that met the needs of their students. These schools made effective use of external providers, drawing on expertise from professional organisations, and the community. Students received information from experts and became aware of the resources within their community. Teachers had access to expertise and up-to-date, relevant information from which to continually develop their programmes in health and physical education.

### **Teachers’ subject and pedagogical knowledge**

Most teachers demonstrated knowledge of the concepts and ideas underpinning the health and physical education curriculum. Teachers taught students about these concepts in ways that were relevant and practical to the students’ everyday lives.

ERO found that teachers of Year 8 and teachers at Years 7 to 15 secondary schools were more likely than teachers of Year 4, and teachers at contributing and full primary schools, respectively, to have effective subject and pedagogical knowledge in health and physical education. These teachers were also more likely to have formal qualifications in health and physical education. In addition to this, teachers of Year 8 were more likely than teachers of Year 4 to have undertaken professional development in health and physical education.

The knowledge and the skilled use of a range of effective pedagogy, supported by relevant qualifications and professional development, gave teachers confidence to provide students with the information and skills they needed to achieve and progress in health and physical education.

### **Areas for development**

This evaluation has highlighted four areas for development for improving teaching practice in some schools. These are:

- fully implementing the health and physical education curriculum;
- identifying and meeting the needs of all students;
- integrating ICT into health and physical education programmes; and
- improving consultation with communities.

### **Implementing the health and physical education curriculum**

Although almost all teachers stated that they felt confident and capable teaching health and physical education, about half of the schools did not have effective school-wide processes for the planning, assessment, reporting, and evaluation of health and physical education. These schools were providing limited guidance for integrating the various key areas of learning and strands into programmes. Similarly, there was little school-wide guidance for teachers on how to base health and physical education programmes on the four concepts of the curriculum. In almost half the schools, the lack of school-wide planning, and support for teachers, meant that there was little or no sequential planning of health and physical education, so many schools did not intentionally build on student progress each year.

The effective implementation of the health and physical education curriculum was hindered by the way in which most schools structured the teaching of this learning area; as two separate subjects. ERO found little or no evidence of links between the four strands and seven key areas of learning in about half the schools. Learning programmes at these schools did not emphasise the relationship between physical activity and sport studies and other key areas of learning such as mental health, body care and personal safety, and food and nutrition.

Most schools made a distinction between physical education and health. ERO found that in many of these schools teachers were better prepared and supported to teach physical education than health. Teachers were more likely to have formal qualifications and to have received professional development in the physical activity, sport studies, and outdoor education key areas of learning than in the mental health, sexuality education, food and nutrition, or body care and physical safety key areas of learning.

The assessment of these latter key areas of learning was a challenge for teachers, as was communicating student outcomes to parents. Schools found it easier to assess and report achievement and progress in physical activity, sport studies, and outdoor education, as teachers were better prepared to respond to the learning needs of their students in these key areas of learning.

The use of external providers in sexuality education, mental health, and body care and physical safety key areas of learning was extensive. Teachers were less likely to integrate these programmes into their own classroom teaching. In many schools, there was no ongoing emphasis on the skills and knowledge learnt, once the provider had left the school.

While to a certain extent schools used external providers in the key areas of learning for physical activity and sport studies to teach new skills to students, the providers also taught extension programmes for students achieving highly in these key areas of learning. ERO found that teachers were less likely to use external providers or prepare programmes themselves to provide extension programmes in sexuality education, mental health, and body care and physical safety. Teachers were also more likely to adapt programmes in physical activity and sport studies to meet the needs of all students, to assess skills, and report progress of achievement to parents.

### **Identifying and meeting the needs of all students**

Assessment information assists teachers to develop a good knowledge of their students and to set the next steps for their learning. Combined with effective pedagogical practices, appropriately analysed student achievement information helps teachers to provide high quality programmes in health and physical education. Such programmes acknowledge prior experiences and address the learning needs of the diversity of students in the class.

Of the six evaluative areas for the quality of teaching, assessing student achievement and making learning meaningful for the diversity of students in their class, were the areas where the largest proportion of teachers in this sample were least effective.

School-wide policies for assessment practices in health and physical education were limited in many schools. Only half the teachers were effectively assessing the progress of their students in health and physical education. Similarly, they did not effectively use assessment information to identify the full range of student needs within their class, or implement strategies to respond to the diversity of students in their class.

Many teachers did not use a wide range of effective assessment practices, such as classroom conversations, teacher observations, formal testing, and self and peer assessment to show what students knew and could do in health and physical education. Although teachers in some schools collected information about students' achievement, this was not always analysed at a classroom or school-wide level. These schools were unable to report accurately to parents on their child's achievement and progress, evaluate classroom programmes, or undertake a school-wide review of the health and physical education programme.

While some teachers used assessment information to adapt their programmes to meet the needs of students with special education needs and those who were high achieving, this did not always happen for Māori, Pacific, and ESL students. When teachers do not know if all students in their class understand concepts and are comfortable with activities, particularly in health and physical education, they are less likely to create an environment where learning occurs.

Collecting and using assessment information, and having appropriate strategies to identify and meet the needs of all students in the class, continue to be areas for development across ERO's quality of teaching evaluations, and indicate a need for further investigation.

### **Integrating ICT into health and physical education programmes**

Although many schools were well resourced for ICT, teachers' use of ICT was an area for development for over half the teachers in this study. ICT provides an additional avenue for teachers to engage students in learning, particularly in health and physical education, through adding an extra dimension to programmes. It is important that all teachers are confident and skilled in the use of ICT for learning. This continues to be an ongoing area of concern in the quality of teaching evaluations, and indicates a need for further investigation.

### **Consultation with communities**

Schools, through boards of trustees, are required to consult with their school community about their implementation of the health education components of the curriculum. ERO found that a third of schools were not meeting this legislative requirement. Without consultation with parents and whānau about health education components of the curriculum, schools and teachers are less likely to be aware of the diversity of beliefs, customs and attitudes amongst their students. Lacking this awareness, schools are less able to develop learning programmes that meet the well-being, health and physical education needs of all their students.

### **Recommendations**

Based on the findings, ERO recommends teachers focus on improving the following areas of teaching practice:

- providing learning programmes that reflect the intent and philosophy of *Health and Physical Education in the New Zealand Curriculum*;
- collecting, analysing, and using good quality assessment information that shows students' progress in health and physical education;
- identifying and responding to the diversity of students, and creating a positive learning environment where all students are comfortable in their learning;
- integrating ICT into the health and physical education programme.

Based on the findings, ERO recommends schools focus on improving the following areas of school-wide practice:

- consulting with the school community about the implementation of the health education components of the curriculum;
- increasing the knowledge and understanding of the health and physical education curriculum of teachers of Year 4; and
- implementing effective school-wide systems to support teachers with planning, assessment, reporting, and evaluation of health and physical education programmes.

## **Appendix 1: Evaluation worksheet**

### **Section A – Curriculum design and access**

#### **Question 1: Content of the curriculum and learning programmes**

*The content of the learning programmes reflects Health and Physical Education in the New Zealand Curriculum.*

Possible indicators/sources of evidence:

- learning programmes have appropriate sequences and coherent progression over the years;
- there are clear links between the national curriculum statement (specifically those that relate to health and physical education) and classroom planning;
- there is a match between learning outcomes and the learning needs of students;
- there is a clear relationship between planning documents and teaching delivered; and
- additional indicators/supporting evidence.

#### **Question 2: Teaching and learning resources in health and physical education**

*The resources and technologies present are effectively used in the teaching of health and physical education in the classroom.*

Possible indicators/sources of evidence:

- appropriate teaching and learning resources are present in classrooms;
- appropriate teaching and learning resources are being used;
- teachers express and demonstrate confidence in the students' ability to use resources;
- ICT and other technologies are appropriately used to support the teaching of health and physical education; and
- additional indicators/supporting evidence.

### **Section B – Quality of teaching for health and physical education**

#### **Question 3: Subject and pedagogical knowledge of teachers**

*Teachers have the subject and pedagogical knowledge to provide effective health and physical education programmes.*

Possible indicators/sources of evidence:

- teachers have appropriate subject knowledge to provide accurate information to students at a level appropriate to students' understanding and life experiences;
- teachers are suitably qualified to identify and respond effectively to the learning needs of students in health and physical education;
- teachers establish appropriate expectations for learning, ensure these are clear to students and encourage students to set high personal goals; and
- additional indicators/ supporting evidence.

**Question 4: Teaching for diverse groups of students**

*Teachers have appropriate teaching strategies in place to assess and meet the needs of diverse groups of students including:*

- Māori students;
- Pacific students;
- ESL students;
- high achieving students; and
- students with special educational needs in health and physical education.

**Question 5: Appropriate and regular assessment of student achievement in health and physical education**

*Teachers effectively use policies and activities in place to assess student achievement in health and physical education.*

Possible indicators/sources of evidence:

- assessment records demonstrate that students are making appropriate progress and achievement in health and physical education;
- teachers provide regular, specific and constructive feedback and feedforward on students' performance that contributes to the next stage of learning;
- assessment information is used to inform classroom and school programme review and decisions about policy and resources and teacher professional development;
- students are taught to evaluate their own learning and are aware of their achievements;
- teachers communicate effectively with parents about the educational progress and learning needs of their child in health and physical education; and
- additional indicators/ supporting evidence.

**Question 6: Student engagement with learning for health and physical education**

*Teachers effectively motivate and engage students so they achieve highly in health and physical education.*

Possible indicators/sources of evidence:

- students have access to experiences within the health and physical education curriculum that meet their particular needs, aspirations, interests and aptitudes;
- there are high levels of student motivation across all groups of students in health and physical education;
- there are strong, positive relationships between students and with teachers in the health and physical education learning environment; and
- additional indicators/supporting evidence.