

# WHOSE KNOWLEDGE IS OF MOST WORTH? THE IMPORTANCE OF LISTENING TO THE VOICE OF THE LEARNER

MARGARET J. SCRATCHLEY

*Department of Sport and Leisure Studies  
The University of Waikato*

**ABSTRACT** *This paper discusses some of the data produced in the course of a research study that examined the perceptions that primary school aged children (7-13 year olds) had about their learning in health education. The study explored children's knowledge about their own health, their issues and concerns about health and health education and what they thought they should be learning about in health education at school. The research used mixed methods to collect data and several themes emerged that were central to listening to children and gaining their perceptions. The importance of understanding children and taking time to listen to what they were saying was the major theme and also the negation of children's views in favour of adult agendas. This study has shown that children have opinions and they also have something to say, and that what they have to say is worth listening to. Moreover, children possess knowledge that can contribute to classroom health lessons and health curriculum design.*

## INTRODUCTION

Historical notions have been that children were passive innocents who were in need of adult control and discipline; that the adult was the protector, nurturer, educator, counsellor and the purveyor of knowledge, and that children's roles were largely to be determined by others (Aries, 1962; Kline, 1998; Hendrick, 1994; Jenkins, 1998). As Mayall (2000) pointed out, children have been taught to fit in with society and not the other way around. Because adults and institutions such as schools were deemed to have superior social and academic knowledge it was they who should assume responsibility for determining what knowledge children should be exposed to at the different stages of their development. Any knowledge or personal views that children had were seen as being unreliable and therefore given little importance by adults. Children as a group have generally belonged to a voiceless community.

Many researchers are now recognising children as social beings rather than members of a voiceless group being prepared to become legitimate participants in an adult society. Researchers such as Wetton and Moon (1988), Aggleton, Knight, Prayle, Warwick and Rivers (1998), McWhirter (1998), Wetton and McWhirter (1998), Greig and Taylor (1999), Christensen and James (2000) and Smith and Taylor (2000), among others, have acknowledged children as competent reporters of their own experiences, who have their own views and opinions about matters affecting their own lives. Mayall (2000) argues that when "Conversing with children we can learn about what they know, and, to some extent, how they learn" (p. 120) and Garbarino et al. (1992) stressed "Children can tell us more than we thought possible, if we adults are ready and able to play our part" (p. 317). Listening to children and hearing what they are saying can reveal a very different

social world to that which many adults experienced as children. As Alderson (1995), James and Prout (1997), Kiddle (1999) and Christensen and James (2000) have argued, adults need to listen to what children are saying.

Alderson (2000), a long time advocate for children, and Waksler (1991) have commented that consulting with children and listening to their points of view has had its critics. Some critics believe that if children are allowed to tell adults what to do it will undermine the control that adults seek to maintain. Those against encouraging consultation and partnerships with children feel that children are not able to represent their thoughts reliably or to think sensibly (Alderson, 2000).

Aggleton et al. in 1998 suggested that there had been little research into the 'commonsense' ideas that children and young people have about health and the causes of illness. They pointed out that little research has been done into how children might feel about programmes developed for them in the school curriculum. Health promotion and curriculum in both England and New Zealand seem to be motivated by those health behaviours and issues which cause panic amongst health professionals, such as drugs, alcohol and tobacco, sexual health (particularly teenage pregnancy) and teenage suicide. As Aggleton et al. (p. 217) comment:

The curriculum is unfortunately based very much around sex education, drug education and the big moral type panics, the big issues, whereas it's very much the everyday issues that kids might want to talk about, that are more important and pertinent to them.

In view of the above concerns this study explored with a small sample of primary school children their perceptions about their own health and their learning in health education. The following research questions were devised that enabled children's views to be heard.

- What health knowledge and perceptions did children already have about health and health issues?
- Where did children acquire their health knowledge and perceptions?
- What aspects about their own health were children concerned about?
- What did children think they should be learning about in health education?

## **METHODOLOGY**

This study used mixed methods to obtain answers to the research questions and the research was carried out with 160 children from a full-status primary school (Years 1-8) located in a residential suburb in a large New Zealand city. The socio-economic level of the school was mid-range, drawing its population from a wide range of social and ethnic groups.

Children for the study were drawn from six classes, representing Years 3 to 8 (seven to 13 year olds). Teachers from each of the six participating classes volunteered their participation, but the children were also given the option of whether or not they wished to participate. This ensured that children had a sense of control and ownership and were aware ethically of what they were to be involved in and why.

Participatory methods were used to get children's views and hear their voices. The draw-and-write (d-w) illuminative technique, as used by Williams, Wetton and Moon (1989), Pridmore (1996), Pridmore and Lansdown (1997),

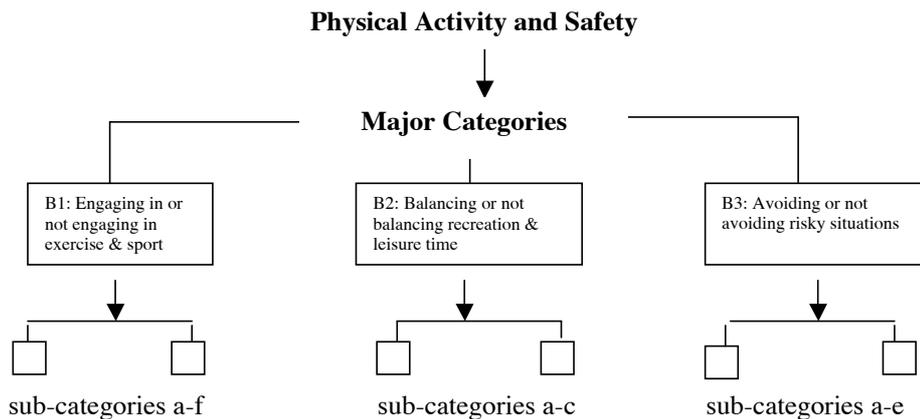
MacGregor, Currie and Wetton (1998) and others, was employed to explore children's existing health knowledge, and informal small group conversations enabled a smaller sample (63 children) to expand on their existing knowledge and to raise points of interest and concern.

The d-w participatory technique requires researchers to invite children to respond to an open-ended question by drawing pictures and then writing about what is happening in those pictures, why they might have drawn what they did and supply any additional information they might wish to share about the drawings. In this study the regular class teacher was trained to carry out two tasks with the class. For Task One, children were asked to draw pictures on a sheet of A4 paper in response to the question "What makes and keeps you healthy?" and then asked to write something about what was happening in their pictures. The process was repeated for Task Two with the question "What makes you not so healthy?" The d-w tasks were a point of entry to the next phase of the research.

Once the d-w tasks had been coded and analysed informal conversations were carried out with a small sample of 10 to 12 children (representing a range of ability, ethnicity and gender) from each of the six classrooms. During these informal conversations children were invited to talk to the researcher about their pictures and then led into the research questions about their sources of information, their thoughts about health education at school, what they would most like to learn about and their concerns and issues about their health (Appendix A). Children were allowed to talk without undue interruption. The small groups of children sat round a tape-recorder, in a circle with the researcher. Key issues were addressed as they arose in the conversation and children were encouraged to illustrate their talk with personal stories.

The d-w tasks were coded and categorised into super-ordinate groups, each with major categories and further sub-categories. To reach this categorisation, drawings were initially colour-coded under temporary subject headings. At the conclusion of the initial coding it was found that the individual colour coded items were so numerous that there was a possibility of the data becoming unmanageable. For example, where pictures represented any type of sport or physical activity they were originally individually itemised. Grouping them into sub-categories (a, b, c, etc.) within a major category and then grouping them together under one super-ordinate heading made the analysis more manageable. Table 1 illustrates how the super-ordinate group about physical activity was recorded for analysis.

**Table 1. Structure of a Super-ordinate Category**



Interaction with the d-w data revealed several major themes which were incorporated under key super-ordinate group headings. These were (A) Body care and personal health, (B) Physical activity and safety, (C) Ingestion and inhalation and (D) Mental and social health (Table 2). These headings were found to closely reflect the key areas of learning of *Health and Physical Education in the New Zealand Curriculum* (Ministry of Education, 1999). However, it was careful auditing of the children's drawings and not the curriculum statement that influenced the choice of super-ordinate category.

**Table 2. Diagram Showing Super-ordinate Groups and Their Major Categories**

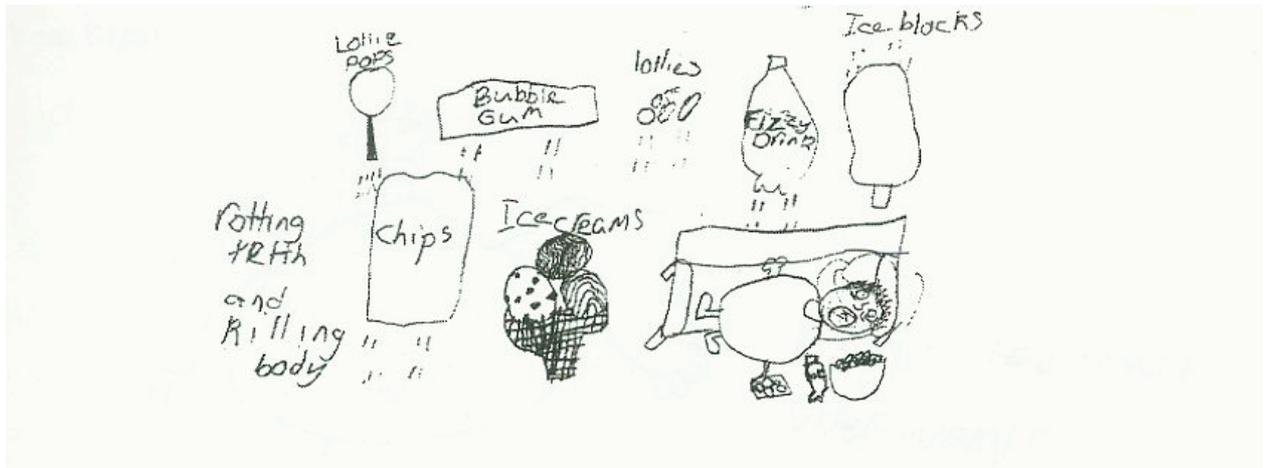
Super-ordinate Group:	Category:	Sub-Cat:
A. Body care – personal health	A1: Affecting personal and environmental health	a – k
	A2: Taking or not taking preventative health measures	a – k
B. Physical activity and safety	B1: Engaging or not engaging in exercise and sport	a – f
	B2: Balancing or not balancing recreation and leisure time	a – e
	B3: Avoiding or not avoiding risky situations	a – c
C. Ingestion and inhalation	C1: Concerning eating habits	a – m
	C2: Concerning drugs, alcohol and chemicals	a – e
D. Mental and Social health	D1: Affecting relationships	a – g
	D2: Involving or not involving intellectual stimulation	a – c

## FINDINGS

For the purposes of this paper findings are reported under the major themes that emerged, first from the d-w data and second the conversations. Some key themes that emerged in relation to development issues are presented in two categories: 'Younger' children are those in Years 3, 4 and 5 while 'older' children are those in Years 6, 7 and 8. Where quotes from children's conversations are used, the children are identified by pseudonyms.

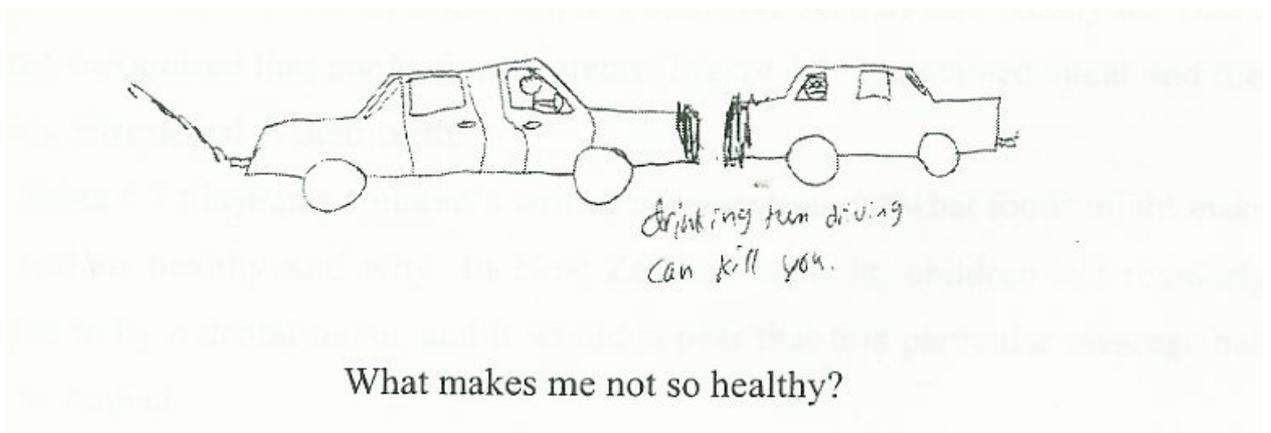
### Draw and Write

Of the 160 children engaged in the d-w, 153 of them referred to poor eating habits, 68 mentioned poor hygiene and 70 depicted lack of exercise as contributing to making them not so healthy while 155 drew pictures of themselves eating healthy foods, 84 referred to keeping themselves and their teeth clean and 148 children considered that plenty of exercise helped to keep them healthy. Tables 3-8 (Appendices B & C) indicate the results of the d-w tasks. In most cases these responses would most likely be the result of the daily health messages children received from home or school. Figure 1 illustrates a typical response to dental health and what children thought they ought not to eat.



**Figure 1.** Year 3 (males) Confectionary and Dental Health

One of the most often drawn pictures beyond the eating, hygiene and exercise issues was in response to doing things that were not so healthy. Many children from an early age drew the picture of a crashing car with reference to drinking and driving (Figure 2).



**Figure 2.** Year 7 (males) The Risks of Drinking and Driving

A large number of children also drew pictures of alcohol, smoking and other drugs. In Year 6, for example, 26 out of 27 children identified alcohol and drugs as an unhealthy practice (Figure 3).



On the left of Figure 4 is a Year 5 girl's drawing of what it means emotionally to be healthy and on the right is a Year 8 girl's representation of what might make her not so healthy. Some children also referred to the importance of mental stimulation to keep them healthy.

### **Summary**

The children's drawings yielded insight into their existing health knowledge. One shortcoming was that the drawings were an immediate response to the task question and therefore did not allow for any real 'thinking time' for the children. There was also the question of whether younger children truly understood the concept of being 'healthy'. In hindsight it may have been wiser to use language more commonly understood by all children such as "feeling well" and "feeling unwell".

One of the key findings from the accumulated data was the spiral progression of children's knowledge between Year 3 and Year 8. Children started with a fairly narrow perception of what made them healthy or not so healthy in Year 3 while, with age and maturity, by Year 8 some of the children were beginning to interact with fairly sophisticated health knowledge which extended beyond exercise, hygiene and diet to the inclusion of social, emotional and mental health.

### **Informal Group Conversations**

In attempting to capture children's voices about and beyond their drawings a small sample from each participating class engaged in informal conversations with the researcher. The conversations were based on the four research questions and were the key to this study. The sample of 63 children were made up of 10 children from each class with the exception of Year 4 (12 children) and Year 8 (11 children) who were selected by the class teacher to be representative of the class population.

To present their existing health knowledge and what they knew about health issues the initial conversation focused on what children had drawn and why. This has been reported in the draw-and-write section. Children's responses proved illuminating, providing a basis for further conversations that targeted the final three questions.

### **Where Did Children Acquire Their Health Knowledge and Perceptions?**

Fifty-six of the 63 children identified television as the major contributor to their source of health knowledge. Mothers were the second most likely source (39) with the teacher (38) as the third most likely source. Self knowledge was mentioned by younger children and 20 children identified peers. Table 3 shows the overall spread and frequency of children's sources of knowledge by year group.

**Table 3. Frequency of Children's Most Likely Source of Knowledge**

Numbers of children	Frequency by Year and Gender												Totals	Rank
	YEAR 3		YEAR 4		YEAR 5		YEAR 6		YEAR 7		YEAR 8			
	Boys (5)	Girls (5)	Boys (6)	Girls (6)	Boys (5)	Girls (5)	Boys (5)	Girls (5)	Boys (5)	Girls (5)	Boys (6)	Girls (5)		
Source														
Television	5	-	4	6	5	5	5	5	5	5	6	5	56	1
Self-knowledge	5	2	-	-	1	2	3	4	-	4	-	-	21	4
Teacher	5	3	6	6	1	3	4	5	5	-	-	-	38	3
Mum	5	5	4	6	-	1	-	-	3	4	6	5	39	2
Both parents	-	-	-	-	-	-	3	5	2	1	2	2	15	6
Other family members	-	-	3	2	-	-	-	-	-	-	2	2	9	7
Health professionals	-	-	1	1	-	-	-	-	-	-	-	-	2	9
Friends	-	-	1	-	3	1	3	3	4	-	-	5	20	5
Sports coach	-	-	-	-	1	-	-	-	-	-	-	-	1	10=
Community workers	-	-	-	-	-	-	-	-	-	-	5	1	6	8
Internet	-	-	-	-	-	-	-	-	-	-	1	-	1	10=
Totals	20	10	19	21	11	12	18	22	19	14	22	20		

**Key:**

Self-knowledge: The children in Year 3 referred to this as their 'bottle of knowledge' – a place (brain) where they stored knowledge until it was needed.

Other family members: Members of the family other than parents, such as siblings, grand-parents and other relations.

Health professional: Doctors, dentist, health nurse, alternative health carers.

Community workers: Those who run youth organisations, church or community houses.

**What Aspects About Their Own Health Were Children Concerned About?**

Children were asked if they had any issues or concerns about their own health and during these conversations it emerged that, while younger children had some views, it was older children who were beginning to identify critical issues for which they were seeking answers. These results point to the progressive knowledge of children as they moved through the age-groups. The conversations with children Year 6 onwards revealed some sophisticated thinking around personal and general health issues while generally, but not exclusively, younger children focused more on their pictures and the more tangible health behaviours such as exercise, eating, alcohol and smoking. The key conversations across the age-groups focused on the following issues: exercise, eating habits, food and diet, pressures to take and queries about drugs, alcohol and tobacco, personal and environmental hygiene and the transmission of disease, sex information and sexual behaviours and orientation, safety issues such as suicide, violence, guns and aggression and, finally, issues about the manner in which health was taught in school classrooms.

**What Did Children Think They Should Be Learning About In Health Education?**

The final question asked children what they thought they should be learning about in health education and what they thought should be included in their school health lessons. Table 4 indicates the selected areas of learning by younger and older children. The results show that younger and older children both considered they should be learning more about drugs, alcohol and smoking.



health. This method was used initially by Williams, Wetton and Moon (1989) to elicit children's understanding of health and the findings in this study parallel those of the 1989 study. Since there was no preliminary brainstorming of the concept of health and what being healthy meant, the responses may not have been as wide as they might have been in the draw-and-write exercise. However, the spiral of progressive health knowledge between Year 3 and Year 8 in the later conversations suggests that while the youngest children had relatively narrow knowledge, by Year 5 they had a more concrete knowledge base and by Year 8 were aware of and beginning to apply a more critical focus to health issues. When children were given the time to think about the meaning of health it became clear that their knowledge base was much wider than was first suggested.

### Children's Sources of Knowledge

The finding that television was the most frequently quoted source of health knowledge is similar to that found by Bendalov, Williams and Oakley (1996), Wetton and McWhirter (1998) and other studies. Many children in this study referred to advertisements seen on television or from the daily and weekly television soaps which often put health issues into context for them. Several children identified with issues which have been dealt with in the New Zealand programme *Shortland Street*. By far the most recurring theme shown in children's drawings and during the conversations was the drink-drive advertisements. Michael (Year 8) said that he got all his information from the television and cited *"All those drink-driving ads and smoking, like...smoking does such and such to the body."* Other issues which had been sourced from television were about body image and diet. Mandy (Year 7) commented *"I saw it on T.V. that everyone should tune up like 168 kilograms a day."*

Asked what these advertisements might teach them Alice (Year 6) responded *"Don't drink and take drugs unless they help you. Like, if you have headaches... panadol and stuff."* While many of the television promotions were hard-hitting and appeared to have had an impact on the children, those most often cited were those aimed at an adult audience but remembered by the children because of the graphics and language, such as *"If you drink and drive you are a bloody idiot"* (Year 3).

Mayall (1993) identified the home as a major location for learning health knowledge and it was interesting that mothers were cited in this study as the second most likely source of health knowledge. Hemi (Year 4) pointed out that *"I get a lot from my Mum"* and Angela (Year 7) commented that her mother dropped tidbits of information such as *"She won't let us have junk food. She keeps telling us it's not good for us."*

Mothers were important to boys who were around the onset of puberty but so too were siblings. Some Year 7 and 8 boys said that embarrassment led them to tell their mothers that they already knew the facts: *"Then we go and talk to brothers or sisters or our friends"* (James, Year 7).

Teachers were also identified as a source of knowledge but they were not seen in the same sense as mothers. Whereas the children said they could take their questions and concerns to mothers, teachers were more likely to be those who provided the rules such as what not to do and consequently were more likely to be viewed more negatively in terms of health.

### Children's Issues and Concerns About Health

The issues and concerns about health raised by children were those which seemed critical to them at their particular stage of development. Those reported here are limited to the major concerns raised. Worth mentioning also was extensive range of views found within each group as well as wide variations in children's levels of maturity.

Many children talked about the necessity for exercise. They said that they constantly received messages that they should exercise regularly but they were never really told why. Andrew (Year 5) suggested that they were told to warm-up but he wanted more information such as:

*You should know the effects because if you don't you're going to be stuffed. Like, once I couldn't be bothered stretching or warming-up and I pulled a muscle in my leg and couldn't play sport for days, so I always warm-up now.*

Some children wanted more information about appropriate eating and inappropriate dieting in relation to body size, body image and the media hype towards being thin. May (Year 7) pointed out:

*A lot of girls think that all there is is being skinny to look good. But you also have to know when to stop dieting, because some girls get carried away and keep trying to lose weight even though they don't need to.*

Attitudes and concerns about dieting to fit a particular image were similar to those found in other studies such as Blissett, Lysons and Norman (1996) and Watt and Sheihan (1997). Blissett et al. found that girls as young as 6-9 years of age thought it was healthy to be thin.

These findings are particularly significant because of a recent announcement by the Minister of Education that schools are now required to deliver one hour of extra exercise weekly in an effort to reduce the obesity problem in New Zealand children. In the light of what some of these children are saying, this activity must be accompanied by the appropriate positive messages.

Concerns about drugs, alcohol and smoking (DAS) were high for all children. Many referred to what they saw on television, reported in the newspaper and what they witnessed in the home. Children across all age-groups were aware of and concerned about the pressures on them to engage in taking drugs. Eddy (Year 8), like many of the other children, was well aware of what children were likely to confront once they moved to high school. He pointed out that "at high school you get offered lots of drugs like marijuana and dope." The findings of Orme and Starkey (1999) suggested that young people do have drug-related concerns and issues but are often unwilling to talk to parents about them. In this study, children as early as Year 5 revealed that they were unsure of talking to adults they knew because they did not know whether they could trust them. Anne (Year 5) argued that children needed to know who they could talk to:

*If you've got huge problems and you can't talk to your parents because you are too scared to... and your friends might take it the wrong way... and you think that if you talk to the teacher then they will tell your mother and then you will be in trouble... so who can you talk to?*

Michael (Year 7) pointed out that teachers only ever told them not to take drugs but rarely indicated why. As two Year 3 children stressed “*We want to know why people take drugs*” and “*Why do dads smoke?*” By Year 4 many of the boys were wanting to know how much alcohol they could safely drink, which drugs were safe drugs and how to say ‘no’ to drugs. Betsy (Year 6) summed up the feelings of her group pointing out “*People are always saying that we shouldn’t drink and we shouldn’t smoke and everything, but we should know what it does to us.*” Eddy (Year 8) commented that:

*We need to know not only that it destroys your body, but how it does that. Like when you get on a high and you don’t know what you are doing. Like when you ask the teachers they say it makes you do stupid things but they don’t actually say how it affects your body. They just say it’s bad for you so don’t bother trying it. But... there are some good drugs aren’t there?*

Another concern was the issue of appropriate programmes. One boy, aged nine, revealed that he did not want to learn not to smoke but how to stop! Most drug programmes taught in schools are preventative and do not recognize that many children may already be addicted to smoking. This boy made a valid point about the need for more intervention programmes and that there is a need for a continuing commitment to drug education in the primary school. It is also essential that those programmes should be age and circumstance appropriate.

Sex, sexuality and sexual relationships were high on the agenda of Year 7 and Year 8 children. Although unspoken, indications were that some of the more mature Year 8 boys may have already been sexually active and they wanted more information. Their concerns were that they wanted safety advice for when they were having a sexual relationship and they also wanted to discuss the moral dilemmas of sexual relationships. Andrew (Year 8) wanted to know about sexual protection because “*You see those ads and movies about sexual protection and that is a very important area that we need to know about.*” Conversations moved between the social issues and protection (girls) and the physical act of sex (boys); confusions surrounding sexual orientation; consequences of teenage pregnancies; Aids; sexually transmitted infections; moral dilemmas regarding sexual behaviours; relationships and information services. Lawlor, Marsden, Sanderson and Simmonds (1999), in a study of young people’s sexual needs, identified the need for more time to be allotted to sex curriculum and for sexual health counsellors to be employed in schools. This study also found that senior primary children were seeking advice and information about safe sexual relationships but teachers rarely gave it.

Children in this study also had issues with the manner which health education was taught at school. Many of the children picked up on the negativity of health messages with which they were being confronted. Tui (Year 8) suggested that “*Instead of telling us what not to do, teachers should tell us why*” and Cherry followed with “*Teachers don’t actually ask us what we know, they just tell us what to do.*” In Year 5 Anne said “*Health education is a really big programme. Teachers should listen to what we have to say, like, I mean you might want to learn about food and nutrition but there are also certain other things you want to know.*” What many of these children were intimating was that health, in its present state, was not addressing their real needs and interests. Year 8 girls suggested that they only ever think of health as food and nutrition but, as one of them pointed out, “*We need to look beyond that to the other stuff that we really want to learn. They should tell us, not just the*

*main points about health but the other points as well.*" Finally, Anne (Year 5) summed it up by stating *"Health education is boring because we do the same things over and over again."*

These conversations support what Alderson (1995), James and Prout (1997), Kiddle (1999), Christensen and James (2000) and others have argued; that adults need to listen to what children are saying so that health education is based on the real issues and experiences in the lives of the children they teach. Any health education programme in schools must address the needs of children but, as Wetton and Moon (1988) and Aggleton et al. (1998) have previously pointed out, tensions will often arise between what the school, the parents and teachers think children need and what children are saying they want. This study was no exception.

### **What Did Children Want To Learn More About?**

The older children in this study indicated a desire to learn more about drugs, alcohol and smoking (DAS), body image and diets, and sex and sexuality education on a need-to-know basis. Similarly, younger children felt that DAS was important but they also emphasized that they needed to learn about exercise and fitness, and road, water, cycle and sun safety. Most children in Years 3 and 4 focused their discussions largely on daily health messages. By Year 5 and 6 some of the children were beginning to realize that health education did not address the issues they really wanted to learn about. By Years 7 and 8 many children had started to look at health from a need-to-know basis. They wanted information about the affects and consequences of certain health behaviours and they felt that they should be learning far more about the health issues that were likely to affect their immediate lives and their futures. It was found, particularly among Year 7 children, that they were particularly interested in discussing and learning more about suicide, grief and death and the effects this could have on family and friends.

### **CONCLUSION**

In summary, children did not want to be passive recipients of what adults thought they should be learning but wanted to be active participants in the construction of their learning so that their interests and concerns could be brought to the fore. As one girl retorted *"Why don't they ask me? I've got an opinion too!"* This study has found that children are generally more informed about health issues than adults might wish to believe and many, while still at primary school, are seeking sophisticated information.

The findings of this study have a number of implications for the curriculum, the first being who makes curriculum decisions about what and how health should be taught in the classroom. Bronfenbrenner (1979) always advocated for teacher and learner to work together to make programmes more meaningful to the learner. This idea is not new to teachers in New Zealand but there is a need for this to happen in health curriculum as well as other subjects.

Second, there is a need for curriculum developers to acknowledge that children really can contribute worthwhile information and that they ought to be included in the consultative processes about content and design. Throughout the informal conversations children showed that they were more than capable of informing curriculum. It was found that not only were children able to talk about

what they knew but they were able to identify those areas about which they wanted more information.

Third, emphasis should be placed on the adequate resourcing of health curriculum and the allocation of time to regular teacher development so that the teacher becomes skilled and confident in the delivery of the more sensitive issues of sex and sexuality education, intervention strategies for drug and alcohol education and issues such as violence, aggression, suicide, death and grief.

Children today are growing up in a changing world. The latter part of twentieth and the beginning of the twenty first centuries have seen many social changes. The social expectations and increasing pressures from many sources have meant that children have had to 'grow up faster' than children before them. The values and attitudes of the young may no longer exactly match the values and attitudes of their parents and other adults. As James and Prout (1997) argue, adults do not always know what is relevant for children. This present study was carried out firmly grounded in a belief that children have a wealth of knowledge and experience about health and health issues and that what they have to say is worth listening to.

## REFERENCES

- Aggleton, P., Knight, A., Prayle, D., Warwick, I., & Rivers, K. (1998). Promoting young people's health and health concerns and needs of young people. *Health Education, 6*, 213-219.
- Alderson, P. (1995). *Listening to children: Ethics and social research*. Barking, UK: Barnardo's.
- Alderson, P. (2000). *Young children's rights: Exploring beliefs, principles and practice*. London: Jessica Kingsley Publishers Ltd.
- Aries, P. (1962). *Centuries of childhood*. London: Jonathan Cape.
- Bendalov, G., Williams, S. J., & Oakley, A. (1996). It makes you bald: Children's knowledge and beliefs about health and cancer prevention. *Health Education, 3*, 12-19.
- Blissett, J., Lysons, T., & Norman, P. (1996). Dieting behaviour and views of young children in Wales. *Health Education Journal, 55*, 101-107.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments of nature and design*. Cambridge, MA: Harvard University Press.
- Christensen, P., & James, A. (Eds.), (2000). *Research with children: Perspectives and practices*. London: Falmer Press.
- Gabarino, J., Stott, F. M., and Faculty of the Erikson Institute. (1992). *What children can tell us: Eliciting, interpreting, and evaluating critical information from children*. San Francisco, CA: Jossey-Bass.
- Greig, A., & Taylor, J. (1999). *Doing research with children*. London: SAGE Publications Ltd.
- Hendrick, H. (1994). *Child welfare England: 1870-1989*. London: Routledge.
- James, A., & Prout, A. (Eds.) (1997). *Constructing and reconstructing childhood: Contemporary issues in the sociological study of childhood*. London: Falmer Press.
- Jenkins, H. (Ed.) (1998). *The children's culture reader*. New York: New York University Press.
- Kiddle, C. (1999). *Traveller children: A voice for themselves*. London: Jessica Kingsley Publishers Ltd.
- Kline, S. (1998). The making of children's culture. In H. Jenkins (Ed.), *The children's culture reader* (pp. 95-109). New York: New York University Press.

- Lawlor, D., Marsden, C., Sanderson, J., & Simmonds, D. (1999). Rapid participatory appraisal of young people's sexual health needs: an evaluation of meta-planning. *Health Education Journal*, 58, 228-238.
- MacGregor, A. S. T., Currie, C. E., & Wetton, N. (1998) Eliciting the views of children about health in schools through the use of the draw-and-write technique. *Health Promotion International*, 13(4), 307-318.
- Mayall, B. (1993). Keeping healthy at home and school: 'It's my body, so it's my job'. *Sociology of Health and Illness*, 15(4), 464-487.
- Mayall, B. (2000). Conversations with children: Working with generational issues. In P. Christensen & A. James (Eds.), *Research with children: Perspectives and practices* (pp. 120-135). London: Falmer Press.
- McWhirter, J. (1998). Adolescents' perceptions of risk: A summary of the main findings of a study carried out in two Wiltshire secondary schools. A commissioned study presented to RoSPA's National Safety Education Committee.
- Ministry of Education. (1999). *Health and Physical Education in the New Zealand Curriculum*. Wellington, NZ: Learning Media.
- Orme, J., & Starkey, F. (1999) Young people's views on drug education in schools: Implications for health promotion and health education. *Health Education*, 99, 4.
- Pridmore, P. (1996). Visualizing health: Exploring perceptions of children using the draw-and-write method. *Promotion and Education*, 11(4), 11-15.
- Pridmore, P. J., & Lansdown, R. G. (1997). Exploring children's perceptions of health: Does drawing really break down the barriers? *Health Education Journal*, 56, 219-230.
- Smith, A. B., & Taylor, N. J. (2000). The socio-cultural context of childhood: Balancing dependency and agency. In A. B. Smith., N. J. Taylor., & M. M. Gollop (Eds.), *Children's voices: Research, policy and practice* (pp. 1-17). Auckland: Pearson Education New Zealand Ltd.
- Waksler, F. C. (Ed.). (1991). *Studying the social worlds of children: Sociological readings*. London: The Falmer Press.
- Watt, R. G., & Sheihan, A. (1997). Towards an understanding of young people's conceptualisation of food and eating. *Health Education Journal*, 56, 340-349.
- Wetton, N., & Moon, A. (1988). Lifestyles - an education in health. *Westminster Studies in Education*, 11, 59-67.
- Wetton, N, M., & McWhirter, J. (1998). Images and curriculum development in health education. In J. Prosser (Ed.), *Image-based research: A sourcebook for qualitative researchers* (pp. 263-283). London: Falmer Press.
- Williams, D. T., Wetton, N., & Moon. (1989). *Health for life 1: A teacher's guide to health education in the primary school*. London: Health Education Authority.

## Appendix A

### Basic question sheet for conversational interview with children

Procedure and guiding questions:

- Ask children to identify their own picture sheets from the class d-w tasks.  
Ask children to explain their pictures and talk about what is going on in the pictures.  
**KEY: Where did you get this information from? Who told you?**
  - Might there be other factors which make you healthy or not so healthy that you have thought of since drawing these pictures?
  - **KEY: Talk to me about any worries or concerns you might have about your health.** Explain why these concern you.
  - Let's discuss whether you think health education at school is important or not and why.  
**KEY: What are some of the things you have learnt about in health education?**  
Share with me some of the things about health that you have enjoyed learning about.
  - **KEY: What about some of the things you would like to know more about? Tell me about those.**  
Why do you think these are important to you?
- 

Allow children to listen to the tape  
Thank them for their participation and discuss with them what will happen to  
taped information

**Appendix B**

**DRAW-AND-WRITE: RESPONSE PERCENTAGE TABLES : TASK 1**

**Girls: What makes and keeps us healthy?**

Category	YEAR 3 (n=13)			YEAR 4 (n=13)			YEAR 5 (n=16)			YEAR 6 (n=12)			YEAR 7 (n=10)			YEAR 8 (n=23)		
	f	%	rank	f	%	rank	f	%	rank	f	%	rank	f	%	rank	f	%	rank
A1	6	46.15	(4)	6	46.15	(3)	14	87.5	(3)	5	41.67	(3)	7	70.00	(3)	18	78.26	(3)
A2	3	23.08	(5)	3	23.08	(4)	8	50.00	(4)	0	-	(-)	3	30.00	(4=)	9	39.13	(4)
B1	12	92.30	(1=)	13	100.00	(1=)	16	100.00	(1=)	12	100.00	(1=)	10	100.00	(1=)	20	86.96	(2)
B2	1	7.69	(6)	2	15.38	(5)	2	12.5	(7)	1	8.33	4=	1	10.00	(7)	2	8.69	(7)
B3	0	-	(-)	0	-	(-)	0	-	(-)	0	-	(-)	0	-	(-)	0	-	(-)
C1	12	92.31	(1=)	13	100.00	(1=)	16	100.00	(1=)	12	100.00	(1=)	10	100.00	(1=)	23	100.00	(1)
C2	0	-	(-)	0	-	(-)	0	-	(-)	0	-	(-)	0	-	(-)	4	17.39	(6)
D1	8	61.54	(3)	1	7.69	(6=)	3	18.75	(5=)	1	8.33	(4=)	3	30.00	(4=)	5	21.74	(5)
D2	0	-	(-)	1	7.69	(6=)	3	18.75	(5=)	0	-	(-)	3	30.00	(4=)	1	4.35	(8)

**Boys: What makes and keeps us healthy?**

Category	YEAR 3 (n=10)			YEAR 4 (n=14)			YEAR 5 (n=9)			YEAR 6 (n=14)			YEAR 7 (n=10)			YEAR 8 (n=16)		
	f	%	rank	f	%	rank	f	%	rank	f	%	rank	f	%	rank	f	%	rank
A1	4	40.00	(4)	7	50.00	(3)	5	55.56	(3)	5	35.71	(3)	7	70.00	(3)	10	62.50	(3)
A2	0	-	(-)	0	-	(-)	3	33.33	(4)	1	7.14	(6)	2	20.00	(5=)	7	43.75	(4)
B1	5	50.00	(2=)	14	100.00	(1=)	8	88.89	(1)	13	92.86	(2)	10	100.00	(1=)	15	93.75	(1)
B2	0	-	(-)	2	14.29	(4=)	1	11.11	(5=)	2	14.28	(4=)	5	50.00	(4)	4	25.00	(5)
B3	0	-	(-)	1	7.14	(6=)	0	-	(-)	0	-	(-)	1	10.00	(7)	0	-	(-)
C1	10	100.00	(1)	14	100.00	(1=)	7	77.78	(2)	14	100.00	(1)	10	100.00	(1=)	14	87.5	(2)
C2	1	10.00	(5)	0	-	(-)	0	-	(-)	0	-	(-)	0	-	(-)	2	12.5	(7)
D1	5	50.00	(2=)	2	14.29	(4=)	1	11.11	(5=)	0	-	(-)	2	20.00	(5=)	3	18.75	(6)
D2	0	-	(-)	1	7.14	(6=)	0	-	(-)	2	14.28	(4=)	0	-	(-)	1	6.25	(7)

**Combined Results: What makes and keeps us healthy?**

Category	YEAR 3 (n=23)			YEAR 4 (n=27)			YEAR 5 (n=25)			YEAR 6 (n=26)			YEAR 7 (n=20)			YEAR 8 (n=39)		
	f	%	rank	f	%	rank	f	%	rank	f	%	rank	f	%	rank	f	%	rank
A1	10	43.48	(4)	13	48.15	(3)	19	76.00	(3)	10	38.46	(3)	14	70.00	(3)	18	46.15	(3)
A2	3	13.04	(5)	3	11.11	(5=)	11	44.00	(4)	1	3.85	(6=)	5	25.00	(5=)	16	41.03	(4)
B1	17	73.91	(2)	27	100.00	(1=)	24	96.00	(1)	25	96.15	(2)	20	100.00	(1=)	35	89.74	(2)
B2	1	4.35	(6=)	4	14.81	(4)	3	12.00	(6=)	3	11.54	(4)	6	30.00	(4)	6	15.38	(6=)
B3	0	-	(-)	1	3.70	(8)	0	-	(-)	0	-	(-)	1	5.00	(8)	0	-	(-)
C1	22	95.65	(1)	27	100.00	(1=)	23	92.00	(2)	26	100.00	(1)	20	100.00	(1=)	37	94.87	(1)
C2	1	4.35	(6=)	0	-	(-)	0	-	(-)	0	-	(-)	0	-	(-)	6	15.38	(6=)
D1	13	56.52	(3)	3	11.11	(5=)	4	16.00	(5)	1	3.85	(6=)	5	25.00	(5=)	8	20.51	(5)
D2	0	-	(-)	2	7.41	(7)	3	12.00	(6=)	2	7.69	(5)	3	15.00	(7)	2	5.13	(8)

Key: n = number of children engaged in task  
 f = frequency of responses (1 recorded per multiple response)

## Appendix C

## DRAW-AND-WRITE: RESPONSE PERCENTAGE TABLES : TASK 2

## Girls: What makes us not so healthy

Category	YEAR 3 (n=11)			YEAR 4 (n=13)			YEAR 5 (n=19)			YEAR 6 (n=12)			YEAR 7 (n=9)			YEAR 8 (n=23)		
	f	%	rank	f	%	rank	f	%	rank	f	%	rank	f	%	rank	f	%	rank
A1	2	18.18	(2)	8	61.54	(2)	12	63.16	(3)	3	25.00	(4=)	5	55.56	(3)	14	60.87	(2=)
A2	1	9.09	(3=)	5	38.46	(3)	7	36.84	(5)	3	25.00	(4=)	2	22.22	(5=)	7	30.43	(5)
B1	1	9.09	(3=)	3	23.07	(4=)	16	84.21	(2)	6	50.00	(3)	7	77.78	(2)	12	52.17	(4)
B2	0	-	(-)	0	-	(-)	2	10.53	(7)	2	16.67	(6)	3	33.33	(4)	6	26.09	(6)
B3	0	-	(-)	1	7.69	(6)	0	-	(-)	0	-	(-)	0	-	(-)	0	-	(-)
C1	11	100.00	(1)	11	84.62	(1)	19	100.00	(1)	11	91.67	(1=)	9	100.00	(1)	23	100.00	(1)
C2	0	-	(-)	3	23.07	(4=)	8	42.11	(4)	11	91.67	(1=)	2	22.22	(5=)	14	60.87	(2=)
D1	0	-	(-)	0	-	(-)	3	15.79	(6)	1	8.33	(7)	1	11.11	(8)	3	13.04	(7)
D2	0	-	(-)	0	-	(-)	1	5.26	(8)	0	-	(-)	2	22.22	(5=)	0	-	(-)

## Boys: What makes us not so healthy

Category	YEAR 3 (n=10)			YEAR 4 (n=15)			YEAR 5 (n=9)			YEAR 6 (n=15)			YEAR 7 (n=11)			YEAR 8 (n=14)		
	f	%	rank	f	%	rank	f	%	rank	f	%	rank	f	%	rank	f	%	rank
A1	2	20.00	(3=)	5	33.33	(3)	1	11.11	(6=)	4	26.67	(4=)	4	36.36	(2=)	8	57.14	(2=)
A2	2	20.00	(3=)	6	40.00	(2)	1	11.11	(6=)	4	26.67	(4=)	1	9.10	(6=)	5	35.71	(6)
B1	2	20.00	(3=)	3	20.00	(4=)	4	44.44	(2)	4	26.67	(4=)	4	36.36	(2=)	8	57.14	(2=)
B2	0	-	(-)	1	6.67	(6=)	3	33.33	(3=)	9	60.00	(3)	4	36.36	(2=)	6	42.86	(5)
B3	0	-	(-)	0	-	(-)	0	-	(-)	4	26.67	(4=)	1	9.10	(6=)	0	-	(-)
C1	10	100.00	(1)	14	93.33	(1)	7	77.78	(1)	15	100.00	(1)	11	100.00	(1)	12	85.71	(1)
C2	2	20.00	(3=)	3	20.00	(4=)	3	33.33	(3=)	11	73.33	(2)	4	36.36	(2=)	8	57.14	(2=)
D1	3	30.00	(2)	0	-	(-)	2	22.22	(5)	0	-	(-)	1	9.10	(6=)	0	-	(-)
D2	0	-	(-)	1	6.67	(6=)	0	-	(-)	0	-	(-)	0	-	(-)	0	-	(-)

## Combined Results: What makes us not so healthy

Category	YEAR 3 (n=21)			YEAR 4 (n=27)			YEAR 5 (n=28)			YEAR 6 (n=27)			YEAR 7 (n=20)			YEAR 8 (n=37)		
	f	%	rank	f	%	rank	f	%	rank	f	%	rank	f	%	rank	f	%	rank
A1	4	19.04	(2)	13	48.15	(2)	13	46.43	(3)	7	25.93	(5=)	9	45.00	(3)	22	59.46	(2=)
A2	3	14.29	(3=)	11	40.74	(3)	8	28.57	(5)	7	25.93	(5=)	3	15.00	(6)	12	32.43	(5=)
B1	3	14.29	(3=)	6	22.22	(4=)	20	71.43	(2)	10	37.04	(4)	11	55.00	(2)	20	54.05	(4)
B2	0	-	(-)	1	3.70	(6=)	5	17.86	(6=)	11	40.74	(3)	7	35.00	(4)	12	32.43	(5=)
B3	0	-	(-)	1	3.70	(6=)	0	-	(-)	4	14.81	(7)	1	5.00	(9)	0	-	(-)
C1	21	100.00	(1)	25	92.59	(1)	26	92.86	(1)	26	96.30	(1)	20	100.00	(1)	35	94.59	(1)
C2	2	9.52	(5)	6	22.22	(4=)	11	39.29	(4)	22	81.48	(2)	6	30.00	(5)	22	59.46	(2=)
D1	1	4.76	(6)	0	-	(-)	5	17.86	(6=)	1	3.70	(8)	2	10.00	(7=)	3	8.11	(7)
D2	0	-	(-)	1	3.70	(6=)	1	3.57	(8)	0	-	(-)	2	10.00	(7=)	0	-	(-)

Key: n = number of children engaged in task  
f = frequency of responses (1 recorded per multiple response)

Copyright of *Waikato Journal of Education* is the property of *Waikato Journal of Education* and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.