Centre for Community Child Health

Supporting teachers, supporting children

Teacher professional development needs at the health-education interface

Centre for Community Child Health

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Acronyms

ADHD	Attention Deficit Hyperactivity Disorder
CCCH	Centre for Community Child Health
CEBU	Clinical Epidemiology and Biostatistics Unit
MCRI	Murdoch Childrens Research Institute
NESA	The NSW Education Standards Authority
OR	Odds ratio
RCH	The Royal Children's Hospital, Melbourne

Definitions of key terms*

Attitudes	Includes 'attitudes', 'values' and 'beliefs'
Dispositions	Tendencies to behave in certain ways
Knowledge	Includes 'knowledge' and 'understanding'
Skills	Self-reported ability to teach or respond to an issue, and the confidence to do so
Students	Refers to children in either early childhood services or primary schools

*Definition of health and wellbeing topics are available in Appendix B.

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Acknowledgments

In addition to the authors of this report, many people contributed to this project, most of whom are listed in Appendix A. Additional acknowledgements are due to Merise Bickley for her guidance, advice and assistance in preparing the survey, Luke Stevens for technical support with the survey, Monsurul Hoq for statistical support, Julie-Anne Scott for distribution and promotion of the survey, Susan Gazis for her input on the report, and Rebecca Collins for assistance in the presentation of the report.

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Executive Summary

Education and health are inextricably linked in the life course development from childhood to adulthood. If health is compromised, education is compromised. Research tells us that many common conditions and health and wellbeing concerns in children, adolescents and adults are preventable, and that we can create better outcomes if we recognise and manage these issues early (Moore & McDonald, 2013; Shonkoff et al., 2012; Shonkoff & Richter, 2013).

Education is the most powerful public health intervention available to children, and teachers are in a unique position to contribute to children's development and achievement of lifelong learning outcomes, as described by the Australian Professional Standards for Teachers (2011). Teachers need the skills to respond to children with additional learning needs arising from concerns in relation to their health and wellbeing. They also need the skills to work with families and communities to support students' learning outcomes. These skills align with the Personal Development, Health and Physical Education (PDHPE) curriculum for primary school teachers. The current skills, knowledge, and practices of NSW teachers in relation to teaching children with additional health and wellbeing needs are unknown.

In order to understand and plan a response to the professional development needs of teachers in relation to their students' health and wellbeing, The NSW Education Standards Authority (NESA) commissioned the Centre for Community Child Health (CCCH) to survey early childhood and primary school teachers in NSW.

This study asked: *What professional development would support early childhood and primary school teachers in NSW in relation to their students' health and wellbeing?* 1,777 valid responses to the survey were received from both primary and early childhood sectors, which were broadly representative of the demographics of teachers in NSW. The results were analysed for those in both the primary sector and the early childhood sector.

Across all topics about which respondents were questioned, interest in professional development was generally high. Three professional development topics emerged as priority areas of interest across respondents from both the primary and early childhood sectors. These issues were:
- behavioural or social-emotional difficulties
- learning, language or cognitive impairment
- problems in the home environment.

As well as asking about teachers' interest in professional development topics, the survey sought to understand teachers' current knowledge, values, attitudes, and skills. Encouragingly, across all areas, self-reported knowledge on health and wellbeing topics was high. Respondents also reported positive attitudes, values, beliefs and skills across most areas.

However, an exploration of the relationship between current levels of knowledge, attitudes and skills revealed differences between variables. This provided a more nuanced understanding of how to best design a professional development approach in relation to each health and wellbeing issue in order to further improve knowledge, attitudes and skills.

Not surprisingly, having the skills to identify areas where children may have additional learning or support needs emerged as a very strong predictor of teachers' ability to respond to these needs across all topics, as did knowledge of each topic area. Attitudes, values and beliefs also emerged as important drivers of skills, but to a lesser extent than knowledge. Further detail also emerged which informed the recommended focus of professional development for each professional development topic.

Recommendations

The following recommendations arise from the findings.

Professional development topics to be prioritised

1. The broad professional development topics outlined in Table 1 and Table 2 should be prioritised in relation to sourcing and accrediting professional development for primary school teachers (Table 1) and early childhood teachers (Table 2), with specific sub-topics as identified in the second column addressed as a priority.

Table 1: Recommended priority professional development topics for primary school teachers

Broad priority area	Specific topic within this area
Behavioural or social-emotional difficulties	Social or emotional difficulties
	Other behavioural difficulties
	Autism spectrum disorder (ASD)
Learning, language or cognitive impairment	Intellectual/cognitive impairment
	Learning disability
	Specific reading difficulty/dyslexia
Problems in the home environment	Adverse childhood events

Table 2: Recommended priority professional development topics for early childhood teachers

Broad priority area	Specific topic within this area
Behavioural or social-emotional difficulties	Social or emotional difficulties
	Other behavioural difficulties
	Autism spectrum disorder (ASD)
Learning, language or cognitive impairment	Intellectual/cognitive impairment
	Language impairment
Problems in the home environment	Adverse childhood events

Learning outcomes and content of professional development

2. The detailed findings of this study should be used to guide professional development content and focus within all topic areas.
3. The professional development in relation to child health and wellbeing should have a focus on supporting learning outcomes for teachers in relation to the following, in order of priority:
   3.1. improving the skills to identify health and wellbeing issues of concern for students and families
   3.2. improving knowledge in relation to each content area
   3.3. improving attitudes in relation to each content area.

Process issues and next steps

4. During the development of professional development offerings in each area:
   4.1. attention should be given to the specific learning objectives to be addressed (e.g., knowledge, attitudes, skills), and the implications these learning objectives have for format, delivery style and approaches
   4.2. the content of professional development should be developed to take into account the ages, stages and development of students
   4.3. a modular approach should be taken, in which some content is offered to both sectors, and some is intended for one sector only, in line with the ages, stages and development of students

4.4. both content expertise and input from teachers should be sought in order to determine the required knowledge, attitudes and skill-based learning objectives specific to each topic, and the most appropriate delivery style and approach for each topic.

Conclusion

The findings of this needs assessment identify a clear set of priority professional development topics for both primary and early childhood teachers in NSW in relation to child health and wellbeing. The findings also provide guidance about priorities for focus and content of professional development across all topics. These professional development priorities will support teachers to maximise outcomes for children by strengthening their skills in identifying, teaching and responding to children with health and wellbeing concerns.

Introduction

We know that we must intervene early to make a difference to the lives of children. Teachers are in a unique position to provide their students with learning experiences which contribute to their development and lifelong learning outcomes, as described by the Australian Professional Standards for Teachers (2011). This includes students with additional learning needs as a result of health or wellbeing concerns. Education and health are inextricably linked in the life course development from childhood to adulthood. If health is compromised, education is compromised. Research tells us that many conditions and common health or wellbeing concerns in children, adolescents and adults are preventable, and that we can create better outcomes if we recognise and manage these issues early (Moore & McDonald, 2013; Shonkoff et al., 2012; Shonkoff & Richter, 2013).

Education is the most powerful public health intervention available to children. Children spend much of their lives in school. Despite the potential of this platform, there is continuing evidence showing the widening gap in outcomes between children from disadvantaged families and children from more advantaged families (Bromfield et al., 2010; Social Exclusion Task Force, 2007). As such, it is essential that teachers develop and maintain the skills to teach children with intellectual and language abilities across the normal range. They must also develop and maintain the skills to teach children who have additional needs in relation to their health, mental health, developmental or learning, in line with the Australian Professional Standards for Teachers (2011). In addition, they must have strong skills in forming partnerships with families and communities to support students' learning outcomes.

Approximately 4 per cent of Australian children will arrive at school with an identified health need/diagnosis; another 15-20 per cent of children will be identified by primary school educators as having serious special health care needs that interfere with learning (Goldfeld et al., 2012). Students from disadvantaged backgrounds are three times more likely to experience these problems (Goldfeld et al., 2012), further perpetuating social inequities (Cohen & Syme, 2013). The high prevalence and cumulative negative impact of these problems are predicted to lead to a 20% reduction in GDP in high-income countries over the next 60 years (Anderson et al., 2009). Reducing these problems and their impact on student learning could lead to a positive legacy for both students and their families, but also the wider society (Spencer, 2008).

Even in settings where staff are eager to support children with additional developmental or learning needs, teachers often lack an understanding of a child's particular difficulties, or of specific strategies to assist that child (O'Keeffe & McDowell, 2004; Oberklaid, 2004). Academic failure can lead to discouragement, which may manifest as withdrawn behaviour or antisocial, disruptive behaviour, school refusal or (in older children) truancy. Academic success, on the other hand, is reliably associated with positive outcomes in later life in all domains — vocational, social, and emotional (Abbott-Chapman et al., 2014; Feinstein et al., 2008b).

This issue is of interest to the CCCH and NESA. The current skills, knowledge, and practices of NSW teachers in this area are unknown. In order to understand and plan a response to the professional development needs of teachers in relation to their students' health and wellbeing, NESA commissioned CCCH to survey early childhood and primary school teachers in NSW about these issues. The findings of the survey and recommendations arising from the results are presented in this report.

Background

To truly address the challenges facing the education system, we must be responsive to the professional development needs of educators in the landscape of their changing roles and in response to new evidence about what makes a difference. To establish current teacher knowledge and skills and confidence in key knowledge and skill areas, we need to better understand the relationship between children's health and wellbeing and their education.

To assist in doing so, NESA commissioned the CCCH to conduct a survey of NSW early childhood and primary school teachers. This survey sought to provide insights into teachers' experiences teaching children with health and/or wellbeing concerns, and their interest in learning more about this important aspect of teaching. It sought to identify their learning needs in specific areas, and complement findings from a previous survey about teachers' preferred delivery style and format of professional development.

The findings from this survey are presented in this report, along with recommendations. These recommendations are intended to assist NESA to make informed decisions on the content of professional development they endorse or commission in response to the identified needs.

About NESA

NESA seeks to advance student achievement and is responsible for school curriculum, assessment, and teaching and regulatory standards in NSW schools. NESA works with a wide range of stakeholders in the education sector and the broader community to sustain and improve educational standards in NSW schools.

The key responsibilities of NESA relate to the:
- development of the curriculum for Kindergarten to Year 12
- accreditation of teachers
- development and conduct of the Higher School Certificate and the Record of School Achievement programs
- registration and accreditation of schools
- approval of schools to deliver courses to overseas students
- administration of the NAPLAN tests
- administration of the home schooling program
- conduct of the Australian Music Examinations Board program in NSW.

The NSW Education Standards Authority (NESA) replaced the Board of Studies, Teaching and Educational Standards NSW (BOSTES) on 1 January 2017.

NESA has an increased focus on:
- developing evidence-based policy to improve student achievement and support teachers
- risk-based monitoring of Teacher Accreditation Authorities and schools.

NESA has responsibility for setting the state's K-12 curriculum; accreditation of teachers, registration of schools and home schooling; delivering the internationally regarded Higher School Certificate (HSC); and approving tertiary teaching degrees, including minimum entry standards and a pre-graduate literacy and numeracy test.

About the Centre for Community Child Health

CCCH is a department of The Royal Children's Hospital Melbourne (RCH), two research groups of the Murdoch Childrens Research Institute (MCRI), and an academic centre of the University of Melbourne. Our links to these

world-class institutions allow us to access and work closely with recognised leaders in paediatrics and child health.

This enriches the Centre's own expertise in clinical practice, research, evaluation, training, and knowledge translation, enabling a focus on real-world application of knowledge to improve the health, development and wellbeing of children. The Centre's strength lies in its unique structure, with staff able to draw on expertise across three internal units – Community Health Services Research, Clinical Services, and Policy, Equity and Translation.

The Community Health Services Research unit conducts high-quality research leading to effective and sustainable interventions to support children facing difficulties in the areas of:
- development, behaviour and mental health
- sleep
- language, learning and literacy
- obesity
- hearing
- food allergy.

Our Clinical Services offer specialist paediatric consultancy for children with a range of developmental and behavioural concerns, including:
- Attention-Deficit Hyperactivity Disorder (ADHD) and other behavioural disorders
- Autism Spectrum Disorders (ASD) and other social and communication disorders
- early childhood developmental problems
- unsettled babies and sleep problems
- learning difficulties and school problems
- bowel and bladder dysfunction.

The Policy, Equity and Translation unit takes an ecological approach to improving outcomes for children and families, and has a particular focus on children's health and development inequalities. Our work involves:
- service delivery trials in health and education
- measurement and evaluation
- community engagement and service
- co-production
- evidence synthesis and translation
- policy and program design
- training and professional development.

Together, the three units work to promote optimal development for children, prevent common childhood conditions and problems, and transform service systems and methods of practice.

Methodology

The research question addressed by this study was: *What professional development would support early childhood and primary school teachers in NSW in relation to their students' health and wellbeing?*

In a population of accredited early childhood and primary school teachers, the primary aim of this study was to determine their professional developmental needs in relation to children with developmental, health or wellbeing difficulties. The secondary aims for this study were to determine their current (a) knowledge and understanding; (b) attitudes, values and beliefs; and (c) skills and dispositions[1] in relation to:

- supporting children with developmental, health or wellbeing difficulties in the classroom
- establishing partnerships with parents/carers and families
- establishing partnerships with health, family and community services.

Through analysis of the results in relation to each of these aims, this study explored relationships between these skills, knowledge, attitudes, values and dispositions.

Survey design

A survey instrument was developed by CCCH in consultation with NESA in order to elicit teachers' views in relation to a range of health and developmental difficulties. Internal expertise on the health and wellbeing issues included in the survey was provided by several experts within CCCH and other staff of the Melbourne Children's campus. A list of those consulted in the development of the survey is contained in Appendix A.

In developing the survey instrument, a previous survey about professional development conducted by NESA was used as a guide to support congruence of demographic information collected, and to avoid repetition of items between the surveys. A search of the peer-reviewed literature was undertaken to identify any similar surveys from which items could be drawn. In some cases, example surveys were also sourced from those consulted within CCCH. The language used in the survey questions was refined in consultation with subject matter experts and NESA, including the use of the word 'problem'. To assist in readability and adopting a strengths-based approach, some terminology has been changed slightly in the report.

Following initial development, the survey was piloted with 35 participants, including early childhood and primary school teachers in NSW. This ensured all items and terminology were acceptable and well understood. Informed by this pilot, minor adjustments to the instrument were made, after which further tests of functionality were undertaken by CCCH.

Questions in the survey were designed to specifically address the research questions and research aims. The survey asked teachers about:

- their current knowledge, skills and views in relation to student health and wellbeing (including about common conditions)
- their ability to communicate and work with families and communities to support students' learning outcomes
- their interest in undertaking professional development on a range of health and wellbeing topics.

The topics outlined in Table 3 relating to children's health and wellbeing were included in the survey.

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[1] Dispositions refer to tendencies to behave in certain ways. In this survey self-reported dispositions are grouped with self-reported skills for the purposes of analysis.

Social need is a multi-faceted concept, within which several types of 'need' can be described (Bradshaw, 1972). This needs assessment measured the 'felt need' of teachers; that is, the interest they expressed in professional development. In addition, the survey also measured 'normative need' (albeit via self-report); that is, respondents were asked about their current knowledge, understanding, values, attitudes and skills in relation to specific issues.

Table 3: Health and wellbeing topics

Health/wellbeing area	Broad topic area	Specific topic
Child	Physical impairment	Physical disability
		Sensory impairment, e.g., visual or hearing impairment
		Chronic illness, e.g., cancer, Crohn's disease, cystic fibrosis
		Nutritional issues, e.g. not eating well at home
	Learning, language or cognitive impairment	Learning disability
		Language impairment
		Intellectual/cognitive impairment
		Specific reading difficulty/dyslexia
	Behavioural or social-emotional problems	Autism Spectrum Disorder (ASD)
		Other neurodevelopmental disorder, e.g., Foetal Alcohol Spectrum Disorder (FASD), cerebral palsy, global developmental delay
		Attention Deficit Hyperactivity Disorder (ADHD)
		Other behavioural problem, e.g., oppositional behaviours, general externalising behaviours
		Social or emotional problem, e.g., anxiety, peer problems
	Other	Other special learning needs
Family	Problems in the home environment	Adverse childhood events, e.g., trauma, family violence
		Families experiencing disadvantage
		Problems sleeping at home
		Problems with sleep or rest at your service
		Other problems at home
	Relationships with families	n/a – no specific topics were included
Community	Community engagement	n/a – no specific topics were included
	Service partnerships	Partnerships with health services, e.g., medical services, allied health, specialists
		Partnerships with family support services, e.g., housing, family services, child wellbeing and child protection
		Partnerships with community services, e.g., local council, cultural groups, sporting groups, libraries.

A list of questions and possible responses can be found in Appendix E, and a short description of how each topic was defined can be found in Appendix B.

Survey distribution and data collection

This study was a cross-sectional study of all teachers currently accredited to work in early childhood services or primary schools in NSW (n=~36,000). NESA maintains a database of accredited teachers in NSW, including email contact details. All teachers accredited to teach in early childhood services or primary schools in NSW were eligible to participate in the study, and NESA invited them to participate. NESA emailed each eligible

teacher with a link to the Participant Information and Consent Form online. If teachers consented to participate, they continued to the online survey. The survey remained open for 15 days. NESA sent a reminder email to the same population 10 days after the survey opened, and social media channels were also used to promote the survey.

All data was collected via teacher self-report through an online survey developed in REDCap. REDCap is a secure web-based application hosted on the MCRI server used to build and manage online surveys and databases. Strict privacy controls were adhered to in accordance with usual MCRI procedures. All survey data was de-identified after data collection was completed, and the de-identified dataset was shared with NESA for future research purposes.

Once the data had been returned, but before data analysis, each available response to relevant survey questions was classified as to whether or not it represented a 'positive' response (e.g., a 'positive' attitude or 'good' skills). This was done in consultation with relevant experts in line with practical and professional expectations. Further detail about how positive responses were defined can be found in Appendix B.

Analysis plan

Statistical analysis of responses was undertaken by the Clinical Epidemiology and Biostatistics Unit (CEBU) at MCRI in accordance with the analysis plan developed by the researchers at CCCH in consultation with NESA. All our findings are presented separately for those in preschool and primary school settings, which takes into account the differences in professional development needs of these two sectors given the different developmental stages of the children they service.

Basic descriptive analysis (i.e., frequency distribution and percentage for categorical variables and mean (standard deviation) or median (interquartile range) for continuous variables) was undertaken for each of the variables/questions exploring teachers' understanding/knowledge, skills, attitudes/values in relation to different domains of children's health and wellbeing.

To test our hypotheses and draw inferences about the survey respondents, we performed logistic regressions and Chi–Square tests. These techniques were chosen as all the outcomes were categorical in nature. In particular, for analyses examining the teacher's skills in identifying and responding to children's health and wellbeing needs, we used multivariate logistic regressions. This enabled us to examine the concurrent and independent contribution of teacher's knowledge and attitudes in enabling them to have high skills in either identifying or responding to children's health and wellbeing needs each domain.

Findings

This section reports the number of responses received and the demographics of participants. Teachers' interest in professional development in relation to a range of topics is reported, and current levels of knowledge, attitudes and skills and relationships between these are presented.

In this section, the term 'knowledge' is used to refer to both knowledge and understanding, and the term 'attitudes' is used to refer to attitudes, values and beliefs, including the importance respondents place on any given issue.

Survey participants

The survey was received by around 35,283 staff of primary and early childhood services in NSW.[2] The survey was commenced 2,495 times, and 1,777 unique responses were received.[3] This equates to a response rate of 5 per cent.

Of those who responded:
- 59% were in the primary sector, and 37% in the early childhood sector[4]
- 74% were teachers, 17% were leaders, 3% were support workers[5]
- 52% worked in metropolitan areas, 30% in regional areas, and 18% in rural or remote areas
- 46% worked in schools or services with up to 600 students, 33% in schools or services with up to 100 children, 15% with more than 600 students and 7% in schools or services with up to 30 students
- 45% had 6-20 years of teaching experience, 37% had 5 years or less, and 18% had more than 26 years of teaching[6]
- 63% were employed full-time, and 37% on a part-time or casual basis
- 62% were accredited as proficient teachers, 31% as conditional/provisional, 7% as teachers in NSW prior to 2004, 8 as highly accomplished and 2 as lead teachers
- 91% were in their first maintenance period, 5% in their second, and 4% in their third
- 2% identified as Aboriginal, and none as Torres Strait Islander.

This was considered to be a good cross-section of teachers in NSW. The demographics of the respondents are presented in Table 4 according to sector.

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[2]NESA sent 35,766 emails inviting teachers to complete the survey, of which around 483 'bounced' and were not received. This does not include additional 'out-of-office' replies, which may have reduced the figure further.

[3] This figure was reached after cleaning of the data. In cleaning the data, duplicate responses were excluded (48 responses were excluded for this reason), where these could be identified. Responses were also excluded if they did not answer any questions relating to the research question; that is, they did not answer any questions that were not simply the collection of demographic information (670 were excluded for this reason).

[4] 4% were others.

[5] 6% were others.

[6] Percentages are rounded to the nearest integer, and as such, the total does not equal 100%. The option of 21-25 years of experience was not offered due to an error in survey construction.

Table 4: Participant demographics by sector (percentages)7

	Primary	Early childhood	Other	All sectors
Number of participants	59	37	4	100
Location				
Metropolitan	51	53	55	52
Regional	32	29	31	30
Rural or remote	18	19	15	18
Number of students				
Up to 30	4	8	24	7
Up to 100	9	71	35	33
Up to 600	63	20	33	46
Up to 900 or more	24	1	8	15
Role				
Leader	8	31	11	17
Teacher	83	64	44	74
Support	3	1	21	3
Other	6	4	24	6
Employment status				
Full-time	66	62	43	63
Part-time or casual	35	38	57	37
Years of teaching				
Less than 5	53	15	12	37
6 - 20	36	59	51	45
26+	11	26	37	18
Current maintenance period				
1st maintenance period	86	94	95	91
2nd maintenance period	10	2	0	5
3rd maintenance period	4	4	5	4
Accreditation level				
Teacher in NSW prior to 2004	10	3	3	7
Conditional/Provisional	45	10	23	31
Proficient teacher	45	87	75	62
Highly accomplished	1	0	0	0
Lead	0	0	0	0
Aboriginal or Torres Strait Islander				
Neither Aboriginal nor Torres Strait Islander	97	99	99	98
Aboriginal	3	1	1	2
Torres Strait Islander	0	0	0	0
Both Aboriginal & Torres Strait Islander	0	0	0	0

Initial analysis of the results was undertaken to identify if demographic differences could account for any key differences found in responses to the survey questions. This was only found to be the case in relation to the primary and early childhood sectors. As such, the results of the survey are presented according to the responses of all respondents, those working in the early childhood sector, and those working in the primary sector.

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7 Percentages in this table are rounded to the nearest integer, and as such, totals do not always equal 100%. The option of 21-25 years of experience was not offered due to an error in survey construction.

Teachers' interest in professional development

Across all topics about which respondents were questioned,[8] interest in professional development was consistently high. As outlined in Figure 1, for each broad professional development topic, between 49% and 79% of respondents reported a high interest in professional development on these topics. Only between 4% and 17% reported a low interest in professional development on the range of topics. The remainder expressed moderate interest.

In relation to broad professional development needs, the highest interest was expressed in relation to topics relating to the following, as presented in Figure 1:
- behavioural or social-emotional difficulties
- learning, language or cognitive impairment
- problems in the home environment.

This was consistent across primary and early childhood sectors, as detailed in Table 11 (Appendix D). Each of these topics is explored further in the discussion section of this report.
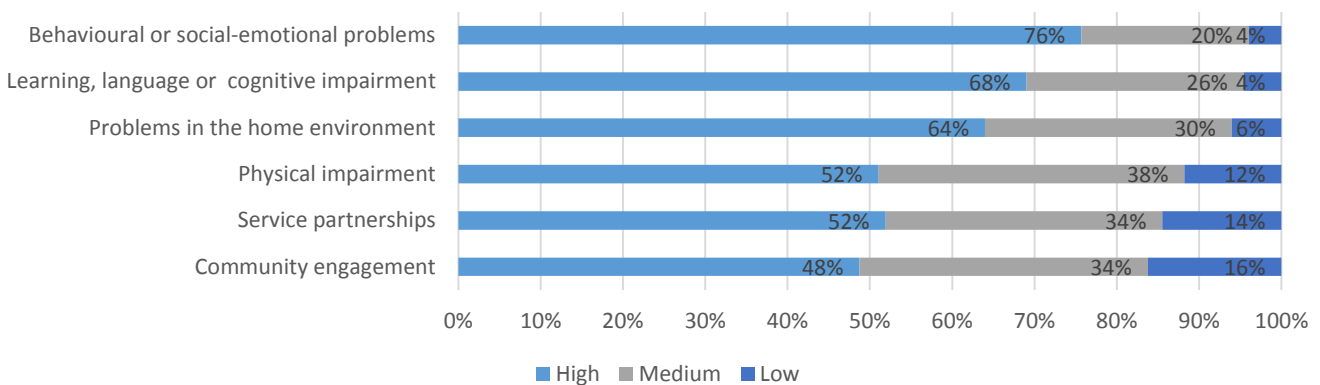
Figure 1: All respondents' interest in broad professional development areas

In relation to specific professional development interest, topics with the highest interest for those in the primary school sector were:
- social or emotional difficulties
- reading difficulties/dyslexia
- other behavioural difficulties
- adverse childhood events
- intellectual/cognitive impairment
- Autism Spectrum Disorder (ASD)
- learning disability.

For those in the early childhood sector, specific topics of interest were:
- social or emotional difficulties
- other behavioural difficulties
- Autism Spectrum Disorder (ASD).

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[8] Questions about interest in professional development on the topic of relationships with families were not asked due to an error in survey administration. However, this topic was raised unprompted under 'other' areas of interest on several occasions, as well as emerging from other findings from the survey, outlined below. Other issues that arose frequently in the 'other' category were issues of cultural diversity and trauma.

- adverse childhood events
- intellectual/cognitive impairment
- language impairment
- sensory impairment.

Levels of interest in all specific professional development topics for the early childhood and primary sectors are noted in Table 12 (Appendix D).

Current knowledge, attitudes and skills

Across all areas, self-reported knowledge on health and wellbeing topics was high. Respondents also reported positive attitudes, values, beliefs and skills across most areas. However, analysis of the lowest of these scored identified the following:

For those in the primary sector:
- the lowest reported levels of current understanding were found in relation to community engagement, followed by service partnerships
- the lowest reported levels of positive attitudes were found in relation to service partnerships, followed by community engagement
- the lowest skill levels in identifying issues of concern were found in relation to problems in the home environment, followed by physical impairment
- the lowest skill levels in teaching or responding to issues of concern were service partnerships, followed by physical impairment.

For those in the early childhood sector:
- the lowest reported levels of current understanding were found in relation to community engagement and physical impairment
- the lowest reported levels of positive attitudes were found in relation to physical impairment, followed by both community engagement and service partnerships
- the lowest skill levels in relation to identification were found in relation to problems in the home environment, followed by physical impairment
- the lowest skill levels in relation to teaching or responding were service partnerships, followed by problems in the home environment.

Details of current knowledge, attitudes/values and skills can be found in Table 13 (Appendix D).

Topics of high interest and lower knowledge

Analysis was also undertaken to identify differences between skills, knowledge and attitudes in relation to health and wellbeing topics. Among all respondents to the survey, differences were found in relation to several topics between levels of interest and knowledge, as noted in Figure 2 and Table 14 (Appendix D). For these topics, high levels of interest coincided with low levels of understanding. The three topics for which the difference between levels of interest and current knowledge were greatest were:
- chronic illness
- other neurodevelopmental disorders
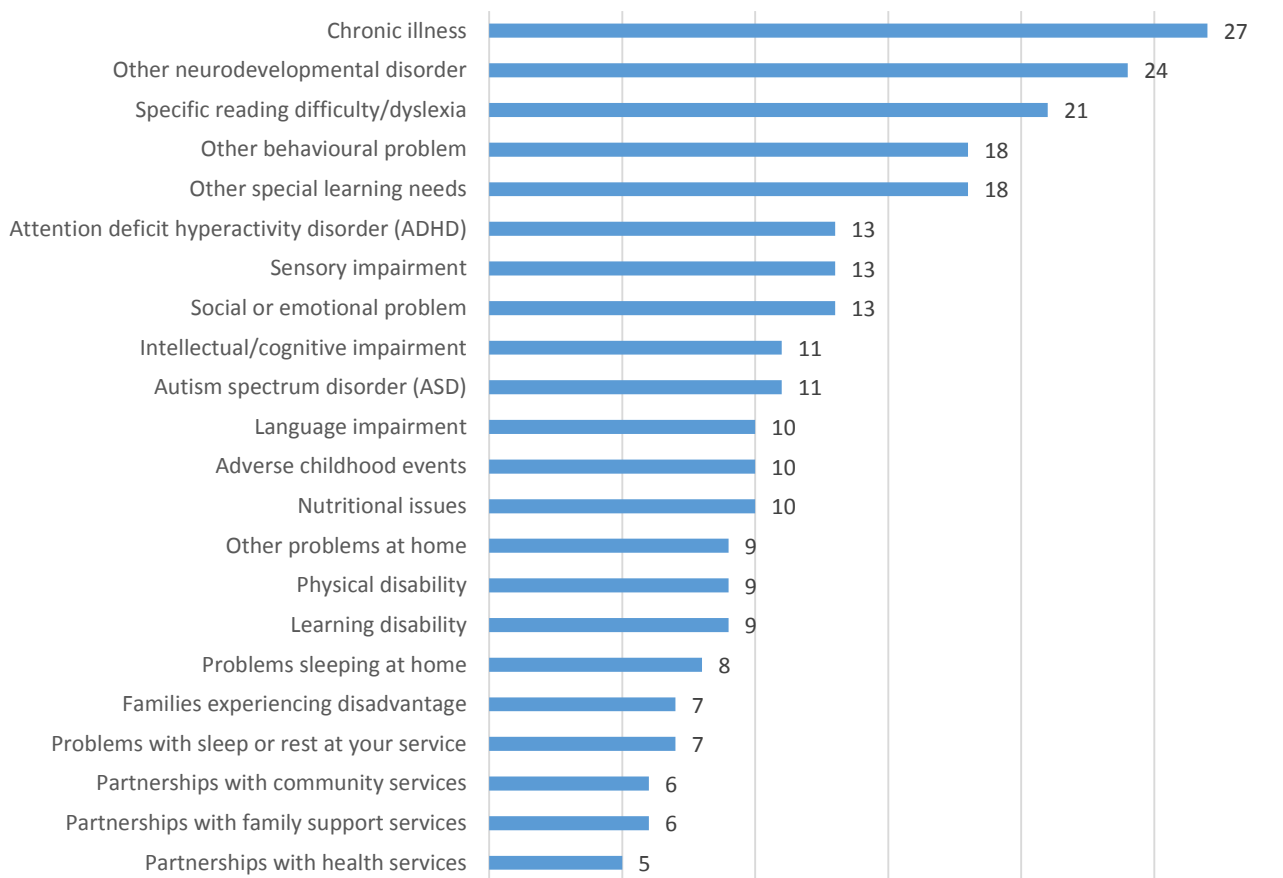- specific reading difficulties/dyslexia.

Topic	Value
Chronic illness	27
Other neurodevelopmental disorder	24
Specific reading difficulty/dyslexia	21
Other behavioural problem	18
Other special learning needs	18
Attention deficit hyperactivity disorder (ADHD)	13
Sensory impairment	13
Social or emotional problem	13
Intellectual/cognitive impairment	11
Autism spectrum disorder (ASD)	11
Language impairment	10
Adverse childhood events	10
Nutritional issues	10
Other problems at home	9
Physical disability	9
Learning disability	9
Problems sleeping at home	8
Families experiencing disadvantage	7
Problems with sleep or rest at your service	7
Partnerships with community services	6
Partnerships with family support services	6
Partnerships with health services	5

Figure 2: Percentage of respondents reporting high interest in topics for which they report low knowledge

Lower skills in relation to topics valued highly

The analysis in relation to differences between skills, knowledge and also found differences between values and skills in relation to some topics. Teachers were asked how well they identify, assess or respond to the learning needs of children who may be in need of further support due to the following issues. In some cases, they were also asked how often they use these skills. In addition, they were asked how important they think it is to understand these issues. In relation to several topics, differences were found between the importance, or value, placed on the issue, and the self-reported skills in identifying or responding to the issue. These are presented in Figure 3 and Table 15 in (Appendix D), in relation to both identifying and responding to issues of concern.

Based on this analysis, the difference between values and skills was most evident in relation to the following three topics:

- problems in the home environment
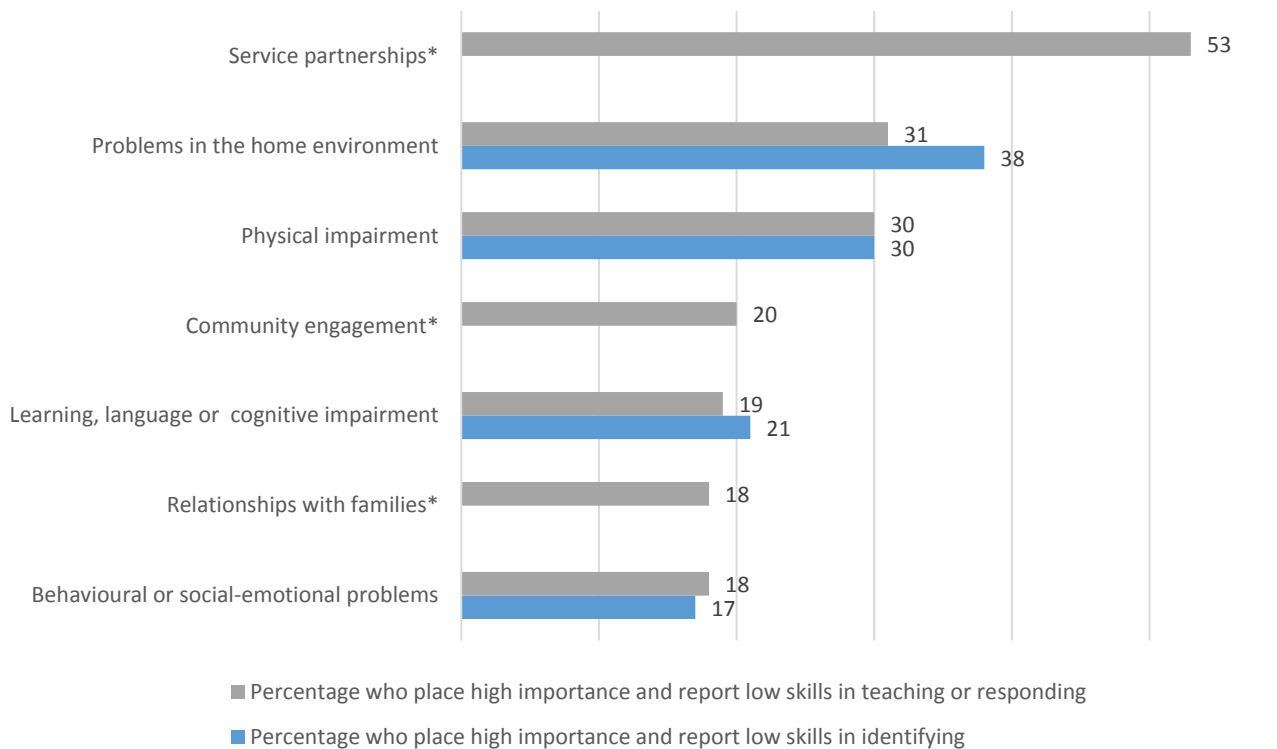- service partnerships
- physical impairment.

Figure 3: Percentage of teachers with low skills in identifying or responding to children in relation to issues they believe to be important

Skills in identifying children's health and wellbeing needs

When examining the relationship between knowledge and attitudes and the skills of identifying children's health and wellbeing needs, we consistently found that those in the primary sector with high knowledge were more likely to have high levels of ability to identify children's health and wellbeing needs (Table 5). For example, if teachers had a high level of knowledge about physical impairment, then they were 4.4 times more likely to have high levels of skill in identifying children who need additional support in relation to physical impairment. Attitudes and values were also found to increase the likelihood of having strong skills in identification in some cases, but the odds ratios were not as high.

Table 5: Associations between teacher knowledge and attitudes and their ability to identify children's health and wellbeing needs (odds ratios (OR))[9]

	Primary sector		Early childhood sector	
Broad topic area	Knowledge (OR)	Attitude (OR)	Knowledge (OR)	Attitude (OR)
Physical impairment	4.4	1.3	2.3	1.2
Learning, language or cognitive impairment	2.0	1.0	2.7	1.3
Behavioural or social-emotional difficulties	5.2	1.3	1.7	0.7
Problems in the home environment	4.1	1.2	28.7	0.7

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[9] 1,586 responses were included in this analysis. Of these, 608 were from the early childhood sector and 908 were from the primary sector.

*Respondents were not asked how they identify these issues, as it was not seen as applicable. The graph here thus represents only how teachers respond to these issues.

This pattern was also generally found among those in the early childhood sector, with a few noticeable differences. In particular, it was found that those in the early childhood sector who had high knowledge about problems in the home environment were very much more likely to have a high levels of skill in identifying children form whom these concerns apply. In addition, the relationship between skills and attitudes was not present in two cases (problems in the home environment and behavioural or social-emotional difficulties).

This overall pattern suggests that improving teacher knowledge will be a priority for ensuring that teachers are better able to identify children's health and wellbeing needs.

Skills in responding to children's health and wellbeing needs

When examining the skills of teachers to teach students with health and wellbeing concerns, or respond in other ways to support their learning, we consistently found that those with good skills in identifying issues of concern were more likely to have good skills in responding to those concerns (Table 6).

Table 6: Associations between teacher knowledge and attitudes and their ability to respond to children's health and wellbeing needs (odds ratios (OR)) [10]

Broad topic area	Primary sector			Early childhood sector		
	Skills in identification (OR)	Knowledge (OR)	Attitude (OR)	Skills in identification (OR)	Knowledge (OR)	Attitude (OR)
Physical impairment	11.5	3.2	1.3	20.0	4.7	1.3
Learning, language or cognitive impairment	4.1	7.0	1.7	7.3	5.8	0.5
Behavioural or social-emotional difficulties	11.1	2.8	1.2	26.0	8.0	1.7
Problems in the home environment	14.1	7.8	1.6	22.6	1.8	2.3
Relationships with families	n/a	5.6	1.3	n/a	7.8	6.5
Community engagement	n/a	3.3	3.5	n/a	1.7	1.3
Service partnerships	n/a	11.2	2.0	n/a	5.3	7.2

This was true for both those in the early childhood sector and those in the primary sector. Similarly, when examining the relationship between the knowledge and attitudes towards each of the topic areas, we consistently found that those in the primary sector with high knowledge were more likely to have a high ability to respond to children's health and wellbeing needs.

Attitudes were also important, but the odds ratios were not as high. The only domain where this was not the case was attitudes towards service partnerships and relationships with families. In both cases, the odds ratios were high. This pattern was also found in responses from those in the early childhood sector and suggests that improving teacher knowledge will be a priority for ensuring an improved ability for teachers to teach students with health and wellbeing concerns, or respond in other ways to support their learning.

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[10] 1,586-1,599 responses were included in this analysis. The number of valid survey responses varied slightly from question to question. Of these, 608-610 were from the early childhood sector and 908-919 were from the primary sector.

Discussion and implications

This survey sought to identify professional development needs of early childhood and primary school teachers in NSW. Not only were respondents' felt needs identified – that is, the professional development they expressed interest in – but a more nuanced understanding of teachers' professional development needs was also drawn out through questioning about their knowledge, understanding, values, attitudes and skills, and a detailed analysis of the relationships among these. This understanding may help to inform the priority sub-topics and the focus of the learning objectives in relation to each professional development area.

Topics emerging as priority areas for professional development

Asking teachers what they are interested in learning more about is a key component of any needs assessment, and it is clear that a great number of this cross-section of teachers are interested in the full range of health and wellbeing issues covered by this survey. However, three professional development topic areas emerged most strongly from asking both primary school and early childhood teachers about their interest in professional development. They were additional learning or support needs in relation to:

- behavioural or social-emotional difficulties
- learning, language or cognitive impairment
- problems in the home environment.

Respondents from both the early childhood and primary sectors also identified sub-topics of particular interest within these broader topic areas. These were:

For primary school teachers:
- social or emotional difficulties
- specific reading difficulties/dyslexia
- other behavioural difficulties
- adverse childhood events
- intellectual/cognitive impairment
- Autism Spectrum Disorder (ASD)
- learning disability.

For early childhood teachers:
- social or emotional difficulties
- other behavioural difficulties
- Autism Spectrum Disorder (ASD)
- adverse childhood events
- intellectual/cognitive impairment
- language impairment
- sensory impairment.

Findings in relation to the focus of professional development within health and wellbeing areas

As well as asking about teachers' interest in professional development topics, the survey sought to understand teachers' current knowledge, values, attitudes, and skills. Analysing the relationships and differences between knowledge, values/attitudes, skills, and interests elicited a more detailed understanding about the recommended focus of professional development within each topic area.

Encouragingly, across all areas, self-reported knowledge on health and wellbeing topics was high. Respondents also reported positive attitudes, values, beliefs and skills across most areas. While responses were generally positive, an exploration of the lowest levels of knowledge, attitudes and skills for each area identified particular potential focus areas for professional development. For example, the findings suggest that professional development in relation to children who may have additional learning needs relating to their home environment or physical impairment should focus on developing the skills to identify issues of concern. Addressing attitudes may be important in professional development on service partnerships and community engagement. These suggested areas of focus for professional development are discussed below in relation to each health and wellbeing topic area.

In addition, analysing the relationships between current knowledge, attitudes and skills informed a more nuanced understanding about what underlying factors may influence teachers' skills and confidence in each area. This analysis informed suggestions about learning objectives for professional development on each health and wellbeing topic area. We found that across all topics and respondents, those with high levels of knowledge were much more likely to have better skills in relation to both identifying and responding to health and wellbeing concerns. As such, knowledge development should be a focus of any professional development. We also found that attitudes and values are generally important in supporting strong skills, and should also be included in professional development. Finally, teachers who have strong skills in identifying students in need of additional support were found to be more likely to have strong skills in responding to or teaching students with those support needs, so a focus on the skills of identification should be a focus of professional development.

The findings in relation to each health and wellbeing topic area are outlined below, and explored in relation to evidence around the importance of each issue.

Behavioural or social-emotional difficulties

Behavioural or social-emotional difficulties are closely linked to learning and cognitive development. Students with better health and wellbeing are likely to achieve better academically, and conversely, effective social and emotional competencies are associated with greater health and wellbeing, and better achievement (Brooks, 2014; Suhrcke & Nieves, 2011). Academic achievement and long-term socioeconomic success are affected by both cognitive and non-cognitive skills, including self-regulation and executive function (Center on the Developing Child at Harvard University, 2016; Heckman, 2008, 2013). The foundations of executive function and self-regulation are built in early childhood, and affected by a range of behavioural or social-emotional conditions (Center on the Developing Child, 2012; Mischel, 2014; National Scientific Council on the Developing Child, 2011).

The range of behavioural or social-emotional difficulties included in this topic area in this study included Autism Spectrum Disorder (ASD), other neurodevelopmental disorders (e.g., foetal alcohol spectrum disorder), cerebral palsy, global developmental delays, ADHD, behavioural difficulties (e.g., oppositional and other externalising behaviours), and social or emotional difficulties (e.g., anxiety, peer problems).

In professional development on these issues, it is important to support teachers to improve their knowledge, as 10% of those in the early childhood sector and 14% of those in the primary sector indicated that they have low knowledge about behavioural or social-emotional difficulties. For all teachers, and those in the primary sector in particular, the findings indicate that knowledge in this area is a particularly strong driver of skills. Further, teachers with good skills in identifying behavioural or social-emotional difficulties were much more likely to have strong skills in responding to these issues, particularly for those in the early childhood sector. As such, increasing teachers' knowledge and understanding about how to recognise if a student may have additional needs in relation to their behavioural or social-emotional wellbeing would be an important area to address in professional development.

The skills to both identify children with behavioural or social-emotional difficulties and to teach them well would also be important to address in professional development on this issue, since 14-15% of those in the early childhood sector and 20% of those in the primary sector reported low skills in this area. In particular, teachers may need to increase their skills in responding to children with internalising behaviours, as up to half the survey respondents (50% of those in the primary sector and 44% of those in the early childhood sector) indicated that responding to these children may not be a priority for them.

Several sub-topics within this area were also of high interest, including issues of anxiety or peer problems, oppositional behaviours and general externalising behaviours. In addition, one of the biggest differences

between interest and knowledge was found in relation to other neurodevelopmental disorders, such as foetal alcohol spectrum disorder, cerebral palsy and global developmental delay. All these topics should be considered as a focus of professional development in the area of behavioural or social-emotional difficulties.

Children's brain growth and the emotional regulation that enhances learning are fostered by secure relationships with adults (Cozolino, 2012). Children develop within an environment of relationships, and responsive relationships and positive experiences build strong brain architecture (Center on the Developing Child at Harvard University, 2016). In the educational context, learning occurs through the relationships between teachers and students. This means that supporting teachers to build attachments in the classroom would be important order to optimise learning, especially for those who are most vulnerable and at risk of becoming disengaged (Cozolino, 2012).

Learning, language and cognitive impairment

This topic covers a variety of learning, language or cognitive impairments, including learning disabilities, language impairments, intellectual/cognitive impairments, and reading difficulties. Learning disabilities arise from neurological differences in brain structure and function and affect the brain's ability to store, process or communicate information (Cortiella, 2009). These neurological differences can result in difficulties such as in learning to read (Aaron, 1994; Dehaene, 2009; Wolf, 2008). Children from impoverished backgrounds are more likely to manifest these impairments (Cortiella, 2009). In Australia, children with an intellectual disability are also significantly more likely to be exposed to socioeconomic disadvantage (Emerson et al, 2010).

Rather than viewing learning disabilities as difficulties contained within the child, they are best understood as a function of the developmental interaction between the child and the environment; between genetic, neurological and environmental factors (Waber, 2011). Unless such children are given appropriate support, both their academic and social learning will suffer. Teachers need the ability to both identify children who have language, learning and cognitive impairments, and the ability to design learning environments to support them. This may include drawing from approaches such as Universal Design for Learning (Rose & Gravel, 2011), or (in early childhood) approaches such as Response to Intervention (Buysse & Peisner-Feinberg, 2013).

70% of respondents from the primary sector and 68% of respondents from the early childhood sector identified this issue as a priority area of professional development. However, 19-21% reported that while they think the issue is important, they do not have high skills in relation to identifying or teaching children with learning, language and cognitive impairment. Knowledge was found to be an important driver of skills in this area, with teachers who reported high levels of knowledge being 2 - 2.7 times more likely to report high levels of skills in identifying issues of concern. As such, increasing knowledge or understanding should be a key focus in relation to learning, language and cognitive impairment.

Intellectual/cognitive impairment was a sub-topic of interest in this area for all respondents, and should be addressed as a priority in any professional development in this area. For those in the primary sector, issues of learning disability and reading difficulties were also priority sub-topics; reading impairment had one of the biggest gaps between interest and knowledge. For those in the early childhood sector, language impairment was a sub-topic of interest.

Problems in the home environment

Research indicates that non-school factors have a lot to do with whether children and adolescents are successful in school (Boccanfuso et al., 2010). This topic includes a range of challenges that children might face in their home environments, including adverse childhood events (e.g., trauma, family violence), families experiencing disadvantage (e.g., housing or financial insecurity), problems sleeping at home (and problems with sleep or rest in early childhood or school settings.

The prime relational and learning environments are those provided by the family (Hertzman, 2010; Pianta, 2013; Reeves & Howard, 2013). Children's early experience within their family and aspects of family structure are consistently strong predictors of pre-academic skills, as well as later academic achievement and cognitive functioning (Feinstein et al., 2008a; Pianta, 2013). The early family environment makes a stronger contribution to children's development than other early childhood environments (Pianta, 2013).

Any child who experiences prolonged adversity at home or in the community is at risk for physical and mental health issues, and children who are more vulnerable to stress are even more likely to experience long-term impacts (Center on the Developing Child at Harvard University, 2016). Chronic exposure to adverse experiences such as child abuse and neglect can cause physiological disruptions that affect the developing brain (as well as other biological systems) in ways that can lead to long-term impairments in learning, behaviour, emotional reactivity, and health (Cashmore & Shakel, 2013; Evans et al., 2013; Miller et al., 2011; Norman et al., 2012; Pechtel & Pizzagalli, 2011; Shonkoff, 2012; Zielinski, 2009). Outcomes that have been linked to chronic exposure to adverse experiences in childhood include global cognitive difficulties, (including decreased intellectual performance, academic success, language abilities, and executive functioning) and emotional regulation (Pechtel & Pizzagalli, 2011).

Analysis of findings revealed a number of important points to be considered when planning professional development on these issues. Despite believing this issue was of high importance, respondents across both sectors reported the lowest levels of skill of any topic in relation to identifying if problems at home may be a concern for their students, with 60% of those the primary sector and 62% of those in the early childhood sector reporting low skills in this area. Further, 31% reported low skills in responding to problems in the home environment once they have been identified.

For both sectors – and for those in the early childhood sector in particular – knowledge was a particularly strong driver of skills in this area. For example, those in the early childhood sector with high knowledge about problems in the home reported being 28 times more likely to have high levels of skills in identifying issues of concern. In turn, teachers with good skills in identifying problems at home were much more likely to have strong skills in responding to these issues. As such, increasing teachers' knowledge and understanding about how to recognise if a student is having problems at home is an important professional development area.

The sub-topics respondents identified as areas of interest included adverse childhood events, with 66% of respondents from the primary sector and 64% from the early childhood sector identifying this as an issue of importance. 10% of respondents who were interested in this issue also reported low knowledge. Further, more than half of respondents (56% from both sectors) also identified a high interest in learning more about families experiencing disadvantage.

Physical impairment

Physical and sensory impairments can have a major impact on children's educational attainments by limiting their access to mainstream educational experiences (World Health Organisation & UNICEF, 2012). It is now recognised that the nature and severity of children's disabilities are not only a product of underlying medical conditions but also a function of the demands, expectations, and social roles that children assume in their daily lives (Halfon et al., 2012). Health and nutrition also play a role in shaping children and young people's learning. Key physical health and nutrition issues known to affecting children and young people's learning adversely are being overweight and obese, food insecurity and access to affordable healthy food, dental health, and eye and ear problems (Williams, 2011). Research evidence shows that these problems are closely linked to educational outcomes (Bradley & Greene, 2013; Brooks, 2014; Suhrcke and de Paz Nieves, 2011). In this survey, examples given respondents in relation to physical and health impairments included physical disabilities, sensory impairments and nutritional issues.

Children with disabilities are vulnerable in a variety of ways (World Health Organisation & UNICEF, 2012). In their first year of full-time schooling, 58% of Australian children with additional health and developmental needs are developmentally vulnerable in at least one domain of child development, compared to 20% in the Australian average (Goldfeld & West, 2014). Many children with disabilities have multiple co-occurring impairments, diseases, and functional limitations (e.g., Novak et al., 2012). Children with disabilities are also more likely to be subject to abuse and neglect (Robinson, 2012; World Health Organisation & UNICEF, 2012).

Respondents in this study were generally interested in professional development in this area (48% of those in the primary sector and 56% of those in early childhood). Chronic illness was a sub-topic of interest for 54% of those in the primary sector and 56% of those in early childhood. Sensory impairment was another sub-topic of high interest among those in the early childhood sector.

When designing professional development in this area, several issues should be considered. First, teachers have relatively low levels of skills and knowledge in this area; some of the lowest levels of knowledge about the range of health and wellbeing issues were found in relation to this topic area. Relatively low levels of skills were also found across both groups, and particularly among those in the primary sector in relation to identifying issues of concern. Teachers with strong skills in identifying issues of physical impairment were also more likely to be able to teach affected children well. Finally, the findings indicate that some attitudes in relation to physical wellbeing should be addressed in professional development, particularly in relation to the need to continually support a child's learning through times physical impairment might be causing them to struggle with school attendance or be absent for long periods.

Relationships with families

Children learn everywhere — not just in school. As recognition of this grows, new educational investments are needed to expand the out-of-school learning opportunities that are key to children's learning, development, and school success (Weiss et al., 2009; Weiss & Lopez, 2015). This includes a recognition of the importance of teachers and schools engaging families to support children's learning. Children benefit from family-school collaborations when their parents are provided with opportunities to shape their children's learning (Weiss, 2000; Epstein, 1995).

Family involvement in education is a powerful but neglected tool to support children's learning and development (Weiss et al., 2009). There is strong evidence that positive parental engagement can and does significantly influence student academic attainment (Emerson et al., 2012; Weiss & Lopez, 2015). Parental engagement has a positive impact on many indicators of student achievement, including higher grades and test scores, enrolment in higher level programs and advanced classes, higher successful completion of classes, lower drop-out rates, higher graduation rates, and a greater likelihood of commencing postsecondary education (Emerson et al., 2012). Beyond educational achievement, parental engagement is associated with various indicators of student development. These include more regular school attendance, better social skills, improved behaviour, better adaptation to school, increased social capital, a greater sense of personal competence and efficacy for learning, greater engagement in school work, and a stronger belief in the importance of education (Emerson et al., 2012).

Supporting teachers to develop and improve their relationships with families is thus important. Ways of engaging families effectively have been described by the Early Learning Partnership Parental Engagement Group (2010), Emerson et al. (2012), and Rosenberg (2012).

Sixty-seven percent of those in the primary sector and 87% of those in the early childhood sector identified they lack strong skills in this area. Further, eighteen percent of respondents identified that while this is an important issue, they lack the skills they need, or do not use these skills often. As such, professional

development on this topic may be essential to support teachers to improve the way they work in partnership with families to address any of the other priority health and wellbeing topics.

As with other topics, knowledge was found to be a key driver of skills. In relation to this topic, particular skills should be addressed in professional development, such as the skills to be confident in discussing health or wellbeing concerns with a child's family; 18% of respondents identified that they were less than comfortable discussing health or wellbeing issues with a child's family, and 40% did not often do so, even when a concern was identified.

Service partnerships

This topic covers partnerships between early childhood and primary school staff and various external services, including health services (e.g., medical services, allied health, specialists), family support services (e.g., housing, family services, child wellbeing and child protection), and community services (e.g., local council, cultural groups, sporting groups, libraries). A significant proportion of young people have complex social, health, emotional and cultural needs associated with social exclusion and disadvantage, and these needs must be met before schooling can be effective (Black et al., 2010; Grossman & Vang, 2009).

These needs cannot be met in isolation or by institutions or agencies or schools acting alone. Instead, it requires the involvement of multiple sectors and levels of government, as well as non-government services (Centre for Community Child Health, 2007, 2009; Moore & McDonald, 2013; Moore & Skinner, 2010; Trickett et al., 2011). Schools cannot ensure a quality education for young people without specialist service delivery and support, and therefore need to build close links with services that are able to address the non-school factors that compromising children's development, parental care, and family functioning (Moore & McDonald, Moore & Skinner, 2010; Moore et al, 2016). Building such links will be particularly important for school counsellors and others who perform support roles in schools, so that they know when and where to refer children or families experiencing difficulties, as well as facilitating cross-sectoral participation in planning for and supporting children and families. Place-based approaches are seen as one way of achieving this (Moore & Fry, 2011; Moore et al., 2014), and schools need to be an integral part of these initiatives.

Half of those from the primary sector and 54% of respondents from the early childhood sector expressed high interest in professional development on this topic. In planning professional development in this area, it should be noted that the while this was not an area of very high interest, the lowest level of skills were reported in relation to this issue, particularly among those in the primary sector, and the greatest difference between values and skills was found in this area. These respondents also had some of the lowest levels of knowledge on this issue. As in other areas, knowledge in this area was found to be a strong driver of skills, particularly for those in the primary sector. As such, knowledge of the range of services available and the skills to work with and refer students to health, family and community services should be a priority in professional development on this topic.

Community engagement

There is increasing recognition that children's learning is maximised when it takes place in multiple contexts both within and outside of the formal school setting (Grossman & Vang, 2009). This topic covers why community engagement is important for schools, what it involves, and how schools can engage community partners.

There is evidence that in order to be highly effective, schools need to have high levels of parent and community engagement, and that schools need to change the way this engagement occurs (Grossman & Vang, 2009; Lonsdale & Anderson, 2012). Support from those beyond the school gates is an essential part of preparing learners for the twenty-first century. Rather than being set apart from the rest of the community, the school is

now often seen as its hub (Moore et al, 2012). The community, in turn, is seen as an important source of resources and expertise for the school (Lonsdale & Anderson, 2012). There is strong empirical evidence internationally and locally that school-community partnerships support a range of enhanced outcomes for young people and their parents, and their schools and communities (Harris & Wilkes, 2013; Simons, 2011).

While all topics asked about in this study were generally of high interest to respondents, this issue did not emerge as a priority in this study. Nonetheless, 46% of respondents from the primary sector and 52% from the early childhood sector identified this as a topic of high interest, and 90% of those from the primary sector and 94% of those from early childhood believe that it is important to engage with the community.

In addition, professional development in this area could draw from existing guidelines to support effective community engagement (Harris & Wilkes, 2013; Moore et al., 2016; Weiss & Stephen 2009). Results of the survey indicate that increasing teachers' knowledge about this issues should be a focus of professional development in this area, as some of the lowest levels of knowledge could be found in relation to this issue, particularly among those in the primary sector.

Final notes and comments

While the findings have been explored separately for each topic area, it is important to note that each topic area should not be considered in isolation when developing professional development, as there are links between them. Cognitive development and learning do not occur independently of other aspects of development and functioning, but are intimately connected to other areas of health and wellbeing, such as social and emotional development (especially the capacity to regulate one's emotions and attention), and physical health (including appropriate nutrition, and adequate exercise and sleep) (Heckman, 2008, 2013; Moore & Oberklaid, 2013; Suhrcke & Nieves, 2011).

Professional development is most successful when it is well matched to the needs and contexts of its participants. Thus, a study of this kind is important to inform the planning and design of professional development of teachers, and offers insight into the interest and needs of teachers in both the early childhood and primary sectors in NSW. However, questions in a survey of this type and length are necessary broad in nature and scope. As such, consultation with content experts in each area would be needed in order to provide clear guidance on the specific content which should be covered by high quality professional development on each topic area. It would also be important to gain a deeper and more nuanced understanding of the specific contextualised needs of teachers in relation to each priority professional development topic. Ideally, this would involve a period of consultation and co-production with teachers for whom the professional developed is designed.

Respondents expressed high interest in professional developmental across all areas examined. This strong positive response may be a result of response bias, in that those most interested in these issues were more likely to take the survey. This is reflected in the relatively low response rate from those approached to complete the survey. However, given attendance or participation in professional development is optional, the findings still offer useful information about what types of professional development should be developed for interested respondents. Further, given the profession's standards and quality frameworks, it is expected more teachers will be required to undertake professional development. In addition, the consultation process used to design professional development could also aim to determine whether there is certain content which will make it more appealing for those who did not respond to this survey to be interested in attending.

Recommendations

The following recommendations arise from the findings.

Professional development topics to be prioritised

1. The broad professional development topics outlined in Table 7 and Table 8 should be prioritised in relation to sourcing and accrediting professional development for primary school teachers (Table 7) and early childhood teachers (Table 8), with specific sub-topics as identified in the second column addressed as a priority.

Table 7 (duplicate of Table 1): Recommended priority professional development topics for primary school teachers

Broad priority area	Specific topic within this area
Behavioural or social-emotional difficulties	Social or emotional difficulties
	Other behavioural difficulties
	Autism spectrum disorder (ASD)
Learning, language or cognitive impairment	Intellectual/cognitive impairment
	Learning disability
	Specific reading difficulty/dyslexia
Problems in the home environment	Adverse childhood events

Table 8 (duplicate of Table 2): Recommended priority professional development topics for early childhood teachers

Broad priority area	Specific topic within this area
Behavioural or social-emotional difficulties	Social or emotional difficulties
	Other behavioural difficulties
	Autism spectrum disorder (ASD)
Learning, language or cognitive impairment	Intellectual/cognitive impairment
	Language impairment
Problems in the home environment	Adverse childhood events

Learning outcomes and content of professional development

2. The detailed findings of this study should be used to guide professional development content and focus within all topic areas.
3. The professional development in relation to child health and wellbeing should have a focus on supporting learning outcomes for teachers in relation to the following, in order of priority:
   3.1. improving the skills to identify health and wellbeing issues of concern for students and families
   3.2. improving knowledge in relation to each content area
   3.3. improving attitudes in relation to each content area.

Process issues and next steps

4. During the development of professional development offerings in each area:
   4.1. attention should be given to the specific learning objectives to be addressed (e.g., knowledge, attitudes, skills), and the implications these learning objectives have for format, delivery style and approaches
   4.2. the content of professional development should be developed to take into account the ages, stages and development of students
   4.3. a modular approach should be taken, in which some content is offered to both sectors, and some is intended for one sector only, in line with the ages, stages and development of students

4.4. both content expertise and input from teachers should be sought in order to determine the required knowledge, attitudes and skill-based learning objectives specific to each topic, and the most appropriate delivery style and approach for each topic.

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Appendices

Appendix A: Consultations

Those listed in Table 9 were consulted during the design and/or analysis of the survey, listed alphabetically by surname.

Table 9: Consultations

Name	Title
Merise Bickley	Policy Officer (Early Childhood)| Professional Learning, Board of Studies, Teaching and Educational Standards NSW
Monica Byrne	The Royal Children's Hospital Education Institute
Susan Gazis	Senior Policy Officer, Professional Learning, Board of Studies, Teaching and Educational Standards NSW
Professor Sharon Goldfeld	Paediatrician, Centre for Community Child Health, Royal Children's Hospital Co-Group Leader, Policy Equity and Translation, Murdoch Childrens Research Institute Professor, Department of Paediatrics, Faculty of Medicine Dentistry and Health Sciences, University of Melbourne
Andrew Gregg	Andrew Gregg, Policy Officer, Initial Teacher Education & Professional Learning, Board of Studies, Teaching and Educational Standards NSW
Professor Harriet Hiscock	Co-Group Leader/Senior Principal Research Fellow, Population Health Community Health Services Research
Bridie Mackay	Director, The Royal Children's Hospital Education Institute
Dr. Tim Moore	Senior Research Fellow, Murdoch Childrens Research Institute Manager, Research and Policy Team, Centre for Community Child Health Honorary Senior Fellow, Department of Pediatrics, University of Melbourne
Professor Frank Oberklaid	Director, Centre for Community Child Health, OAM, MD, FRACP, DCH Co-Group Leader of Child Health Policy, Equity and Translation at the Murdoch Childrens Research Institute Honorary Professor of Paediatrics at the University of Melbourne.
Dr. Jon Quach	Research Fellow, Centre for Community Child Health (CCCH) and Melbourne Graduate School of Education, University of Melbourne.
Dr. Emma Sciberras	Honorary Fellow Manager, Population Health, Community Health Services Research Senior Lecturer, Clinical Psychologist, School of Psychology, Deakin University
Hannah Stark	PhD Candidate, Classroom Promotion of Oral Language Melbourne Graduate School of Education
Leonie Symes	Manager, Training and Development, Centre for Community Child Health
Sue West	Associate Director, Centre for Community Child Health, The Royal Children's Hospital Senior Manager (Policy and Service Development) and Group Leader (Policy, Equity and Translation) Murdoch Childrens Research Institute

Appendix B: Definition of health and wellbeing topics

The following areas were defined as the relevant areas of knowledge, attitudes, values, beliefs and skills in relation to each broad health and wellbeing topic area. Detail on the classification of survey items/questions can be found in Table 10 (Appendix C). The terms used in the survey were refined in consultation with NESA, subject matter experts and teachers in NSW.

Physical impairment

This topic covers a range of physical and health impairments, including physical disabilities, sensory impairments (e.g., visual or hearing impairment), chronic illnesses (e.g., cancer, Crohn's disease, cystic fibrosis), as well as nutritional issues (e.g. not eating well at home). In this survey, knowledge in relation to physical impairment included self-reported good understanding of the issues. Attitudes defined as 'positive' in relation to physical impairment included believing that it is important to understand how physical impairment affects learning, and beliefs about continuing to attend to and teach children when they are unwell or absent from school for significant periods.

Learning, language or cognitive impairment

This topic covers a variety of learning, language or cognitive impairments, including learning disabilities, language impairments, intellectual/cognitive impairments, and reading difficulties, including dyslexia. In this survey, knowledge in relation to learning, language or cognitive impairment included self-reported good understanding of the issues. Attitudes defined as 'positive' in relation to physical impairment included believing that it is important to understand how learning, language or cognitive impairment affects learning.

Behavioural or social-emotional difficulties

This topic covers a range of behavioural or social-emotional difficulties, including Autism spectrum disorders (ASDs), other neurodevelopmental disorders (e.g., foetal alcohol spectrum disorder), cerebral palsy, global developmental delays, ADHD, behavioural difficulties (e.g., oppositional and other externalising behaviours), and social or emotional difficulties (e.g., anxiety, peer problems). In this survey, knowledge in relation to behavioural or social-emotional difficulties included self-reported good understanding of the issues. Attitudes defined as positive in relation to physical impairment included believing that it is important to understand how behavioural or social-emotional difficulties affect learning, and beliefs about behaviour management in the classroom.

Problems in the home environment

This topic includes a range of problems that children might face in their home environments, including adverse childhood events (e.g., trauma, family violence), families experiencing disadvantage (eg. housing or financial insecurity), problems sleeping at home (and problems with sleep or rest in early childhood services or at school. In this survey, knowledge in relation problems in the home environment included self-reported good understanding of the issues. Attitudes defined as positive in relation to physical impairment included believing that it is important to understand how problems in the home environment affect learning, including how specific children are affected by their home environments.

Relationships with families

This topic covers the relevance of home environments for children's academic achievements and the importance of engaging families in supporting children's learning. In this survey, knowledge in relation to relationships with families included self-reported good understanding of how this issue affects learning. Attitudes defined as positive in relation to relationships with families included believing that it is important to

have a good relationship with each parent or carer. Responses to this issue included discussing health and wellbeing issues with parents/carers.

Community engagement

This topic covers why community engagement is important for schools, what it involves, and how schools can engage community partners. In this survey, knowledge in relation to community engagement included self-reported good understanding of how this issue affects learning. Attitudes defined as positive in relation to community engagement included believing that it is important to engage with the community. Responses included strong community connections.

Service partnerships

This topic covers partnerships between early childhood / school staff and various external services, including health services (e.g., medical services, allied health, specialists), family support services (e.g., housing, family services, child wellbeing and child protection), and community services (e.g., local council, cultural groups, sporting groups, libraries). In this survey, knowledge in relation to service partnerships included self-reported good understanding of how this issue affects learning. Attitudes defined as positive in relation to service partnerships included valuing partnerships with services. Responses included strong service partnerships and making referrals.

Appendix C: Analysis plan

Table 10 presents survey items and questions in relation to professional learning objectives and interest. This classification informed the analysis plan.

Table 10: Survey items by knowledge, attitudes and skills[11]

Health wellbeing area/Learning outcome domain	Physical impairment	Learning, language or cognitive impairment	Behavioural or social-emotional problems	Problems in the home environment	Relationships with families	Community engagement	Service relationships
Knowledge	*Good understanding of/about how the following affect learning…*						
	physical impairment	learning, language or cognitive impairment	behavioural or social-emotional problems	problems in the home environment	relationship with a child's parents/carers.	engagement with the local community	partnerships with health, family and community services
	Physical disability	learning disability	autism spectrum disorder (ASD)	adverse childhood events, e.g., trauma, family violence			
	sensory impairment, e.g. visual or hearing impairment	language impairment	other neurodevelopmental disorder, e.g., foetal alcohol spectrum disorder (FASD), cerebral palsy, global developmental delay	families experiencing disadvantage			
	chronic illness, e.g. cancer, Crohn's disease, cystic fibrosis	intellectual/cognitive impairment	Attention Deficit Hyperactivity Disorder (ADHD)	A child's sleep problems at home			
	nutritional issues, e.g. not eating well at home	specific reading difficulty/dyslexia	other behavioural problem, e.g., oppositional behaviours, general externalising behaviours	A child's problems with sleep or rest at your service			
			Social or emotional problem, e.g., anxiety, peer problems	Other problems at home			
	Other special learning needs						
Attitudes	*It is important to understand how the following affect learning*				*It is important to…*		

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[11] Shaded topics were included in regression analysis.

Health wellbeing area/Learning outcome domain	Physical impairment	Learning, language or cognitive impairment	Behavioural or social-emotional problems	Problems in the home environment	Relationships with families	Community engagement	Service relationships
	physical impairment	learning, language or cognitive impairment	behavioural or social-emotional problems	the home environment	have a good relationship with each parent/carer	engage with the community	have partnerships with local health, family and community services
	If a child is experiencing health issues, it is best to wait until they are well to focus on their learning needs		It's important to manage children whose behaviour is disruptive, before working with children who are withdrawn.	Teachers should not become involved in a child's health and wellbeing issues, because they are private matters.			
	I am responsible for the learning of a child who, due to chronic health issues, is regularly absent from my class			Problems at home are none of a teacher's business			
Identify	*How well do you identify and assess the learning needs of children who may be in need of further support due to the following issues?*						
	Physical impairment	Learning, language or cognitive impairment	Behavioural or social-emotional problems	Problems in the home environment			
Respond	*How well do you work with / teach children who need greater support due to the following issues?*						
	Physical impairment	Learning, language or cognitive impairment	Behavioural or social-emotional problems	Problems in the home environment	How often do you discuss parents/carers how their child's health or wellbeing is affecting their learning?	My school or service has strong connections to the local community.	I have good relationships with local health, family and community services.
					How often do you discuss with parents/carers how the home environment fosters or hinders learning?		How often do you refer or discuss a child's needs with a health service? (e.g., medical, allied health, specialist)
					If a child's health or wellbeing is impacting on their learning, I feel comfortable discussing this with their family.		How often do you refer or discuss a child's needs with a family support service? (e.g., housing, family services, child wellbeing and child protection)
Interest	*How interested would you be in professional development to increase your knowledge or skills in relation to the following issues / specific health or wellbeing issues?*						

Health wellbeing area/Learning outcome domain	Physical impairment	Learning, language or cognitive impairment	Behavioural or social-emotional problems	Problems in the home environment	Relationships with families	Community engagement	Service relationships
	physical impairment	learning, language or cognitive impairment	behavioural or social-emotional problems	problems in the home environment		Community engagement	Partnerships with health, family or community services
	Physical disability	learning disability	autism spectrum disorder (ASD)	adverse childhood events, e.g., trauma, family violence			Partnerships with health services, e.g., medical services, allied health, specialists
	sensory impairment, e.g. visual or hearing impairment	language impairment	other neurodevelopmental disorder, e.g., foetal alcohol spectrum disorder (FASD), cerebral palsy, global developmental delay	families experiencing disadvantage			Partnerships with family support services, e.g., housing, family services, child wellbeing and child protection
	chronic illness, e.g. cancer, Crohn's disease, cystic fibrosis	intellectual/cognitive impairment	Attention Deficit Hyperactivity Disorder (ADHD)	Child sleep problems			Partnership with community services, e.g., local council, cultural groups, sporting groups, libraries
	nutritional issues, e.g. not eating well at home	specific reading difficulty/dyslexia	other behavioural problem, e.g., oppositional behaviours, general externalising behaviours	A child's problems with sleep or rest at your service			
			Social or emotional problem, e.g., anxiety, peer problems	Other problems at home			
	Other special learning needs						
	Other						

Appendix D: Results tables

Table 11: Interest in broad areas of professional development topics by sector (%)[12]

Professional development area	Primary	Early childhood	Other	All sectors
Physical impairment				
High	48	56	48	52
Medium	38	36	42	38
Low	14	8	10	12
Learning, language or cognitive impairment				
High	70	68	62	68
Medium	26	28	32	26
Low	4	4	6	4
Behavioural or social-emotional problems				
High	74	76	78	76
Medium	20	20	18	20
Low	4	2	6	4
Problems in the home environment				
High	62	64	70	64
Medium	30	30	22	30
Low	8	6	8	6
Relationships with families[13]				
High	n/a	n/a	n/a	n/a
Medium	n/a	n/a	n/a	n/a
Low	n/a	n/a	n/a	n/a
Community engagement				
High	46	52	52	48
Medium	36	34	32	34
Low	18	14	18	16
Service partnerships				
High	50	54	58	52
Medium	34	34	28	34
Low	16	12	14	14

Table 12: High interest in specific professional development topics by sector (%)[14]

Professional development topic	Primary	Early childhood	Other	All sectors
Social or emotional problem, e.g. anxiety, peer problems	72	70	74	72
Other behavioural problem, e.g. oppositional behaviours, general externalising behaviours	68	68	68	68

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[12] Figures are rounded to the nearest integer thus totals do not always equal 100%.

[13] Respondents were not asked about interest in this area.

[14] Other sub-groups of respondents reported similar interests, with the following exceptions:

- Those in support roles expressed equal or greater interest in a wider range of other professional development topics, including 'other' problems at home, chronic illness, learning disability, intellectual and cognitive impairment, disadvantage, and other neurodevelopmental disorders
- Those in smaller services and those with less than 5 years of experience were also highly interested in learning disability and were more interested in learning about disadvantage than those in larger services or with more experience.

Professional development topic	Primary	Early childhood	Other	All sectors
Adverse childhood events, e.g. trauma, family violence	66	64	78	66
Intellectual/cognitive impairment	66	64	56	66
Autism spectrum disorder (ASD)	66	66	62	66
Learning disability	66	62	56	64
Language impairment	64	64	54	64
Attention Deficit Hyperactivity Disorder (ADHD)	64	62	62	64
Sensory impairment, e.g. visual or hearing impairment	60	64	58	62
Specific reading difficulty/dyslexia	70	52	62	62
Other neurodevelopmental disorder, e.g. foetal alcohol spectrum disorder (FASD), cerebral palsy, global developmental delay	60	62	60	60
Families experiencing disadvantage	56	56	68	56
Problems sleeping at home	54	56	58	54
Chronic illness, e.g. cancer, Crohn's disease, cystic fibrosis	54	56	52	54
Nutritional issues, e.g. not eating well at home	50	52	52	52
Other special learning needs	54	50	48	52
Other problems at home	50	48	50	50
Partnerships with family support services, e.g. housing, family services, child wellbeing and child protection	48	54	62	50
Physical disability	48	54	44	50
Partnerships with health services, e.g. medical services, allied health, specialists	46	50	52	48
Partnerships with community services, e.g. local council, cultural groups, sporting groups, libraries.	46	50	56	48
Problems with sleep or rest at your service	42	44	48	44

Table 13: Percentage of respondents with positive knowledge, values and skills in relation to each broad topic area

Professional development topic	% Positive knowledge		% Positive values		% Positive skills in identification		% Positive skills in responding	
	Primary	Early childhood	Primary	Early childhood	Primary	Early childhood	Primary	Early childhood
Physical impairment	80	84	96	92	62	76	64	72
Learning, language or cognitive impairment	84	90	98	96	72	88	76	86
Behavioural or social-emotional problems	86	90	98	98	80	86	80	84
Problems in the home environment	94	96	98	98	60	62	68	66
Relationships with families	92	98	94	98	n/a*	n/a*	69[15]	87[16]

[15] There were three skill variables related to this area. This figure is the percentage of respondents who responded positively to two or more of these variables.

[16] There were three skill variables related to this area. This figure is the percentage of respondents who responded positively to two or more of these variables.

Professional development topic	% Positive knowledge		% Positive values		% Positive skills in identification		% Positive skills in responding	
	Primary	Early childhood	Primary	Early childhood	Primary	Early childhood	Primary	Early childhood
Community engagement	76	84	90	94	n/a*	n/a*	76	80
Service partnerships	77	90	84	94	n/a*	n/a*	26[17]	45[18]

Table 14: Respondents with high interest and low knowledge on specific topics

Professional development topic	% high interest / low knowledge
Chronic illness, e.g. cancer, Crohn's disease, cystic fibrosis	27
Other neurodevelopmental disorder, e.g. foetal alcohol spectrum disorder (FASD), cerebral palsy, global developmental delay	24
Specific reading difficulty/dyslexia	21
Other behavioural problem, e.g. oppositional behaviours, general externalising behaviours	18
Other special learning needs	18
Attention deficit hyperactivity disorder (ADHD)	13
Sensory impairment, e.g. visual or hearing impairment	13
Social or emotional problem, e.g. anxiety, peer problems	13
Intellectual/cognitive impairment	11
Autism spectrum disorder (ASD)	11
Language impairment	10
Adverse childhood events, e.g. trauma, family violence	10
Nutritional issues, e.g. not eating well at home	10
Other problems at home	9
Physical disability	9
Learning disability	9
Problems sleeping at home	8
Families experiencing disadvantage	7
Problems with sleep or rest at your service	7
Partnerships with family support services, e.g. housing, family services, child wellbeing and child protection	6
Partnerships with community services, e.g. local council, cultural groups, sporting groups, libraries.	6
Partnerships with health services, e.g. medical services, allied health, specialists	5

Table 15: Percentage of respondents who believe an issue is important, but report low skills in relation to identifying or responding to that issue

Professional development topic	% rate issue of high importance, but report low skills in:	
	Identifying	Responding
Physical impairment	30	30
Learning, language or cognitive impairment	21	19
Behavioural or social-emotional problems	17	18

[17] There were three skill variables related to this area. This figure is the percentage of respondents who responded positively to two or more of these variables.

[18] There were three skill variables related to this area. This figure is the percentage of respondents who responded positively to two or more of these variables.

* Identification was not relevant to this area.

Professional development topic	% rate issue of high importance, but report low skills in:	
	Identifying	Responding
Problems in the home environment	38	31
Relationships with families	n/a*	18[19]
Community engagement	n/a*	20
Service partnerships	n/a*	53[20]

[19] There were three skill variables related to this area. This figure relates to those who reported *low* skill in two or more of these areas.

* Identification was not relevant to this area

[20] There were three skill variables related to this area. This figure relates to those who reported *low* skill in two or more of these areas.

Appendix E: Needs assessment survey

Child health and wellbeing professional development survey

As an accredited early childhood or primary teacher, we invite you to complete this confidential and anonymous survey.

The survey takes around 15 minutes to complete. The last questions are just as important as the first questions, so if possible, please make sure you have time to complete the survey before getting started.

If need be, you can save your responses, leave the survey and return any time before the close of business, Friday, 21st of October. If you do this, you will be provided with a return code that will allow you to pick up where you left off when you return. Make sure you write the code down in full and keep it somewhere safe. When returning to the survey, follow the survey link again, and select the "returning?" button in the top right-hand corner of the page, where you can enter the code. Note that you will not get a return code if you leave the survey by just closing the window or tab.

If you encounter any technical difficulties, please press refresh/reload on your browser. If you have filled in part of your survey already, you will be asked if you want to resend the data. If you click 'yes', you will progress through the survey.

We look forward to your feedback.

Before completing this survey, please read the attached Information Statement for details about the research.

You can also save a copy of the information statement for your records.

[Attachment: "Information Statement and Consent Form.pdf"]

To consent to take part in the research please tick here:

☐ I have received information regarding this research and had an opportunity to ask questions. I believe I understand the purpose, extent and possible risks of my involvement in this project and I voluntarily consent to take part.

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Confidential

The following questions ask for your name and email address. This information will only be used by the researchers to follow up incomplete survey responses if needed.

First name ....

Last name ....

Preferred email address ....

The following questions ask about your teaching role and experience.

In which sector do you work?
- ○ Government school
- ○ Systemic school, e.g. Catholic, Christian, Seventh Day Adventist
- ○ Independent school
- ○ Preschool - government
- ○ Preschool - community
- ○ Preschool - not for profit
- ○ Preschool - private
- ○ Long day care - community
- ○ Long day care - not for profit
- ○ Long day care - private
- ○ Other

If 'other', please specify: ....

Which of the following best describes your current school or early childhood service?
- ○ Metropolitan
- ○ Regional
- ○ Rural
- ○ Remote

How many students or children are enrolled at your school or early childhood service?
- ○ Up to 10
- ○ Up to 30
- ○ Up to 50
- ○ Up to 100
- ○ Up to 150
- ○ Up to 350
- ○ Up to 600
- ○ Up to 800
- ○ Up to 900
- ○ More than 900

What is your current role?
- ☐ Teacher
- ☐ Principal
- ☐ Deputy Principal
- ☐ Assistant Principal
- ☐ Director
- ☐ Inclusion Support
- ☐ Early Intervention
- ☐ Learning and Support
- ☐ Other non-teaching role
- ☐ Other role

If 'other', please specify: ....

What stage of learning do you currently teach or take responsibility for?
- ○ Early childhood
- ○ Primary - K - 2
- ○ Primary - K - 6
- ○ K - 12
- ○ Other

If 'other', please specify. ....

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Within that range, which of the following year levels do you currently teach? (please select all that apply)

☐ K - 2
☐ 3 - 6

Which year levels have you taught in the past? (please select all that apply)

☐ Early childhood
☐ Primary - K - 2
☐ Primary - 3 - 6
☐ Secondary
☐ Other

If 'other', please specify.

How many years have you been in the teaching profession?

○ less than 1 year
○ 1 - 5 years
○ 6 - 10 years
○ 11 - 15 years
○ 16 - 20 years
○ 26 - 30 years
○ 30+ years

What qualifications do you currently hold?

○ Undergraduate/Bachelor qualification
○ Postgraduate Diploma
○ Masters
○ PhD

What is your current employment status?

○ Permanent - full time
○ Permanent - part time
○ Temporary - full time
○ Temporary - part time / casual

What are your teaching areas? (please select all that apply)

☐ Early childhood
☐ Primary education
☐ Special education
☐ Specialist area or other

If 'Specialist area or other', please specify.

Are you currently working in your teaching area?

○ Yes
○ No

What is your teacher accreditation level?

○ Teacher in NSW prior to 2004 (not yet accredited)
○ Conditional
○ Provisional
○ Proficient Teacher
○ Highly Accomplished
○ Lead

What is your current maintenance period?

○ 1st maintenance period
○ 2nd maintenance period
○ 3rd maintenance period

Do you identify as Aboriginal or Torres Strait Islander? (optional)

○ No
○ Yes, Aboriginal
○ Yes, Torres Strait Islander
○ Yes, both Aboriginal and Torres Strait Islander

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The following questions ask you about your views in relation to a range of issues.

How important do you believe professional development is for enhancing your teaching practice?

○ Very important
○ Important
○ Not very important
○ Unimportant

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To what extent do you agree with the following statements?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Teachers should not become involved in a child's health and wellbeing issues, because they are private matters.	○	○	○	○	○
I am responsible for the learning of a child who, due to chronic health issues, is regularly absent from my class.	○	○	○	○	○
If a child is experiencing health issues, it is best to wait until they are well to focus on their learning needs.	○	○	○	○	○
It's important to manage children whose behaviour is disruptive, before working with children who are withdrawn.	○	○	○	○	○
Problems at home are none of a teacher's business.	○	○	○	○	○
If a child's health or wellbeing is impacting on their learning, I feel comfortable discussing this with their family.	○	○	○	○	○
My school or service has strong connections to the local community.	○	○	○	○	○
I have good relationships with local health, family and community services.	○	○	○	○	○

How often do you...

	Never	Rarely	Sometimes	Often	Always
Discuss with parents/carers how the home environment fosters or hinders learning?	○	○	○	○	○

For children you have concerns about, how often do you do each of the following?

	Never	Rarely	Sometimes	Often	Always
Discuss with parents/carers how their child's health or wellbeing is affecting their learning?	○	○	○	○	○
Refer or discuss a child's needs with a health service? (e.g., medical, allied health, specialist)	○	○	○	○	○
Refer or discuss a child's needs with a family support service? (e.g., housing, family services, child wellbeing and child protection)	○	○	○	○	○

The following questions relate to the health and wellbeing of children.

To what extent do you agree with each of these statements?

It is important that teachers have a good understanding about...

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
How physical impairment affects learning.	○	○	○	○	○
How learning, language or cognitive impairment affects learning.	○	○	○	○	○
How behavioural or social-emotional problems affect learning.	○	○	○	○	○

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To what extent do you agree with each of these statements?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I have a good understanding about how physical impairment affects learning.	○	○	○	○	○
I have a good understanding about how learning, language or cognitive impairment affects learning.	○	○	○	○	○
I have a good understanding about how behavioural or social-emotional problems affect learning.	○	○	○	○	○

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To what extent do you agree with each of the following statements?

I have a good understanding of how the following specific issues affect children's learning:

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Physical disability	○	○	○	○	○
Sensory impairment, e.g. visual or hearing impairment	○	○	○	○	○
Chronic illness, e.g. cancer, Crohn's disease, cystic fibrosis	○	○	○	○	○
Nutritional issues, e.g. not eating well at home	○	○	○	○	○
Learning disability	○	○	○	○	○
Language impairment	○	○	○	○	○
Intellectual/cognitive impairment	○	○	○	○	○

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Specific reading difficulty/dyslexia	○	○	○	○	○
Autism spectrum disorder (ASD)	○	○	○	○	○
Other neurodevelopmental disorder, e.g., foetal alcohol spectrum disorder (FASD), cerebral palsy, global developmental delay	○	○	○	○	○
Attention deficit hyperactivity disorder (ADHD)	○	○	○	○	○
Other behavioural problem, e.g., oppositional behaviours, general externalising behaviours	○	○	○	○	○
Social or emotional problem, e.g., anxiety, peer problems	○	○	○	○	○
Other special learning needs	○	○	○	○	○

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The following questions relate to working with parents/carers and communities.

To what extent do you agree with each of these statements?

It is important that teachers...

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Have a good understanding about how the home environment affects learning.	○	○	○	○	○
Have a good relationship with each parent/carer.	○	○	○	○	○
Engage with the community.	○	○	○	○	○
Have partnerships with local health, family and community services.	○	○	○	○	○

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To what extent do you agree with each of these statements?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I have a good understanding about how my relationship with a child's parents/carers affects their learning.	○	○	○	○	○
I have a good understanding about how my engagement with the local community affects children's learning.	○	○	○	○	○
I have a good understanding of how my partnerships with health and community services can support children and their learning.	○	○	○	○	○
I have a good understanding about how problems in the home environment affect learning.	○	○	○	○	○

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To what extent do you agree with each of the following statements?

I have a good understanding of how the following affect children's learning:

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Adverse childhood events, e.g., trauma, family violence	○	○	○	○	○
Families experiencing disadvantage	○	○	○	○	○
A child's sleep problems at home	○	○	○	○	○
A child's problems with sleep or rest at your service	○	○	○	○	○
Other problems at home	○	○	○	○	○

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The following questions ask about your teaching practice across a range of issues.

How well do you identify and assess the learning needs of children who may be in need of further support due to the following issues?

	I don't do this very well at all	I don't do this well	Neutral	I do this well	I do this very well
Physical impairment	○	○	○	○	○
Learning, language or cognitive impairment	○	○	○	○	○
Behavioural or social-emotional problems	○	○	○	○	○
Problems in the home environment	○	○	○	○	○

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How well do you work with / teach children who need greater support due to the following issues?

	I don't do this very well at all	I don't do this well	Neutral	I do this well	I do this very well
Physical impairment	○	○	○	○	○
Learning, language or cognitive impairment	○	○	○	○	○
Behavioural or social-emotional problems	○	○	○	○	○
Problems in the home environment	○	○	○	○	○

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The following questions ask about your interest in professional development.

How interested would you be in professional development to increase your knowledge or skills in relation to the following issues?

	Not at all interested	Not very interested	Neutral	Somewhat interested	Very interested
Physical impairment	○	○	○	○	○
Learning, language or cognitive impairment	○	○	○	○	○
Behavioural or social-emotional problems	○	○	○	○	○
Problems in the home environment	○	○	○	○	○
Child sleep problems	○	○	○	○	○
Community engagement	○	○	○	○	○
Partnerships with health, family or community services	○	○	○	○	○

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This is the last question! Your feedback on each of these items is of great interest.

How interested would you be in professional development on the following specific health or wellbeing issues?

	Not at all interested	Not very interested	Neutral	Somewhat interested	Very interested
Adverse childhood events, e.g., trauma, family violence	○	○	○	○	○
Families experiencing disadvantage	○	○	○	○	○
Children's problems with sleep or rest at your service	○	○	○	○	○
Other problems at home	○	○	○	○	○
Partnerships with health services, e.g., medical services, allied health, specialists	○	○	○	○	○
Partnerships with family support services, e.g., housing, family services, child wellbeing and child protection	○	○	○	○	○
Partnership with community services, e.g., local council, cultural groups, sporting groups, libraries	○	○	○	○	○

	Not at all interested	Not very interested	Neutral	Somewhat interested	Very interested
Physical disability	○	○	○	○	○
Sensory impairment, e.g., visual or hearing impairment	○	○	○	○	○
Chronic illness, e.g., cancer, Crohn's disease, cystic fibrosis	○	○	○	○	○
Nutritional issues, e.g., not eating well at home	○	○	○	○	○
Learning disability	○	○	○	○	○
Language impairment	○	○	○	○	○
Intellectual/cognitive impairment	○	○	○	○	○

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	Not at all interested	Not very interested	Neutral	Somewhat interested	Very interested
Specific reading difficulty/dyslexia	○	○	○	○	○
Autism spectrum disorder (ASD)	○	○	○	○	○
Other neurodevelopmental disorder, e.g. foetal alcohol spectrum disorder (FASD), cerebral palsy, global developmental delay	○	○	○	○	○
Attention deficit hyperactivity disorder (ADHD)	○	○	○	○	○
Other behavioural problem, e.g., oppositional behaviours, general externalising behaviours	○	○	○	○	○
Social or emotional problem, e.g., anxiety, peer problems	○	○	○	○	○
Other special learning needs	○	○	○	○	○
Other	○	○	○	○	○

If 'other', please specify what topic you would be interested in professional development on:

_____

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The Centre for Community Child Health is a department of The Royal Children's Hospital
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