See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/348192268

Developing an evaluation framework for teachers' professional learning in Ireland: Phase 1 Desk-based research

Book · December 2020

iding: ne Rawdon itional Research Centre BLICATIONS 358 CITATIONS PROFILE	reads 105	Lorraine Gilleece St Patricks College Dublin 21 PUBLICATIONS 220 CITATIONS
ne Rawdon Itional Research Centre	105	St Patricks College Dublin
ne Rawdon Itional Research Centre	¢	St Patricks College Dublin
ntional Research Centre Sulcations 358 CITATIONS	F	St Patricks College Dublin
BLICATIONS 358 CITATIONS		
		21 PUBLICATIONS 220 CITATIONS
DDOCIU C		
		SEE PROFILE
Cosgrove		
BLICATIONS 141 CITATIONS		
PROEII F		
thors of this publication are also working on these related projects:		
E	Cosgrove BLICATIONS 141 CITATIONS E PROFILE uthors of this publication are also working on these related projects:	BLICATIONS 141 CITATIONS

International Civic and Citizenship Education Study 2009 View project

Programme for International Student Assessment View project

Educational Research Centre 2020

Foras Taighde ar Oideachas Educational Research Centre

> Developing an evaluation framework for teachers' professional learning in Ireland: Phase 1 Desk-based research

> > Caroline Rawdon Kara Sampson Lorraine Gilleece Jude Cosgrove

Developing an evaluation framework for teachers' professional learning in Ireland: Phase 1 Desk-based research

> Caroline Rawdon Kara Sampson Lorraine Gilleece Jude Cosgrove

> > Foras Taighde ar Oideachas Educational Research Centre

Educational Research Centre 2020

Copyright © 2020 Educational Research Centre, DCU St Patrick's Campus, Dublin 9, D09 AN2F www.erc.ie

Cataloguing-in-publication data:

Rawdon, Caroline

Developing an evaluation framework for teachers' professional learning in Ireland: Phase 1 Desk-based research /Caroline Rawdon, Kara Sampson, Lorraine Gilleece, Jude Cosgrove. Dublin: Educational Research Centre.

xii, 160 p.; illustrations, tables; 30cm. Includes bibliographical references.

ISBN10: 0-900440-87-2 (print) ISBN13: 978-0-900440-87-8 (print) EAN: 9780900440878 (print)

ISBN10: 0-900440-88-0 (pdf) ISBN13: 978-0-900440-88-5 (pdf) EAN: 9780900440885 (pdf)

- 1. Teachers Training of Ireland Evaluation
- 2. Teachers' Professional Learning (TPL)
- 3. Well-being Ireland
- 4. School children Ireland Psychological aspects
- 5. School children Ireland Services for
- 6. School children Ireland Social conditions

2020

I Title. II Rawdon, Caroline III Sampson, Kara IV Gilleece, Lorraine V Cosgrove, Jude. 370.711--dc23

Design: Cheryl Flood Designs. Printed in the Republic of Ireland by Naas Printing Ltd.

How to cite this report:

Rawdon, C., Sampson, K., Gilleece, L., & Cosgrove, J. (2020). *Developing an evaluation framework for teachers' professional learning in Ireland: Phase 1 Desk-based research.* Dublin: Educational Research Centre.

Contents

vii
viii
ix
X

CHAPTER 1

Key concepts and definitions

1.1	KEY DEFINITIONS	2
	Teachers	2
	Teachers' professional learning	2
	Wellbeing	2
	Descriptive part of the framework	3
	Evaluation part of the framework	3
	Impact	3
1.2	OVERALL SCOPE OF THE REVIEW	3

1

CHAPTER 2

Review of teachers' professional learning evaluation frameworks		5
2.1	MODELS OF TPL	6
2.2	REVIEW OF EXISTING TPL EVALUATION FRAMEWORKS	8
	Method	8
	Title and abstract screening	10
	Full text review	11
2.3	KEY FINDINGS REGARDING TPL EVALUATION FRAMEWORKS	11
	Commonalities and differences between TPL frameworks	21
2.4	CHALLENGES AND ENABLERS OF TPL	22
2.5	CONCLUSIONS	25

CHAPTER 3

Impag	Impact assessment and process evaluation of teachers' professional learning	
3.1	EVALUATION IN THE SOCIAL SCIENCES	27
3.2	KEY CONSIDERATIONS IN EVALUATING TPL	28
3.3	DESIGNING TPL TO FACILITATE EVALUATION	31
3.4	DEFINING THE TPL ACTIVITY: WHAT TO EVALUATE	32
3.5	HOW TO EVALUATE A TPL ACTIVITY	33
3.6	WHO WILL EVALUATE THE TPL?	37
3.7	CONCLUSIONS	38

CHA	PTER 4	
Teac	hers' professional learning frameworks in the Irish context	39
4.1	COSÁN FRAMEWORK FOR TEACHERS' LEARNING	39
	Key values and principles in Cosán	39
	Dimensions of teachers' learning	40
	Teachers' learning processes	40
	Learning areas	40
	Reflective practice	41
4.2	CSL MODEL OF PROFESSIONAL LEARNING FOR SCHOOL LEADERS	43
4.3	PDST CONCEPTUAL FRAMEWORK FOR PROFESSIONAL DEVELOPMENT	
	PROVISION	44
4.4	CONCLUSIONS	47

CHAPTER 5

Broader school context for wellbeing		49	
5.1	RELEVANT THEORETICAL APPROACHES	49	
	Ecological systems theory	49	
	Social learning theory	50	
5.2	THE ROLE OF WELLBEING IN EFFECTIVE LEARNING ENVIRONMENTS	50	
5.3	THE ROLE OF TEACHERS IN SOCIAL AND EMOTIONAL LEARNING	51	
5.4	TEACHER WELLBEING	52	
	Teacher wellbeing and student outcomes	53	
	Supporting teacher wellbeing	54	
5.5	CONCLUSIONS	56	

CHAPTER 6

A pr	ofile of the wellbeing of children and young people in Ireland	57
6.1	OVERVIEW OF NATIONAL AND INTERNATIONAL STUDIES ON THE WELLBEING OF	
	5 TO 18-YEAR-OLDS	57
	Growing Up in Ireland (GUI)	57
	My World Survey (MWS) and My World Survey 2 (MWS 2)	58
	Health Behaviour in School-aged Children (HBSC)	58
	Programme for International Student Assessment (PISA)	59
	Progress in International Reading Literacy Study (PIRLS)	59
	Trends in Mathematics and Science Study (TIMSS)	59
6.2	EXPANDING THE ROLE OF YOUNG PEOPLE IN RESEARCH ON THEIR WELLBEING	60
	Involvement of young people in HBSC survey design	60
	Involvement of young people in MWS and MWS 2 survey design	61
6.3	KEY FINDINGS ON CHILDREN'S AND YOUNG PEOPLE'S WELLBEING FROM	
	NATIONAL RESEARCH	61
	Growing Up in Ireland (GUI)	61
	My World Survey (MWS)	64

	My World Survey 2 (MWS 2)	65
6.4	KEY FINDINGS ON CHILDREN'S AND YOUNG PEOPLE'S WELLBEING	
	FROM INTERNATIONAL RESEARCH	67
	Health Behaviour in School-aged Children (HBSC)	67
	Programme for International Student Assessment (PISA)	69
	Progress in International Reading Literacy Study (PIRLS)	71
0.5	Trends in Mathematics and Science Study (TIMSS)	72
6.5	CONCLUSIONS	73
СНАІ	PTER 7	
Natio	onal policy context for student wellbeing	75
7.1	BETTER OUTCOMES, BRIGHTER FUTURES – THE NATIONAL POLICY FRAMEWORK	
	FOR CHILDREN AND YOUNG PEOPLE 2014 – 2020	76
7.2	ACTION PLAN FOR EDUCATION	77
7.3	WELLBEING POLICY STATEMENT AND FRAMEWORK FOR PRACTICE 2018–2023	78
	Wellbeing in primary schools	80
	Wellbeing in post-primary schools	81
7.4	LOOKING AT OUR SCHOOL: A QUALITY FRAMEWORK FOR POST-PRIMARY	
	SCHOOLS AND LOOKING AT OUR SCHOOL: A QUALITY FRAMEWORK FOR PRIMARY	
	SCHOOLS	81
7.5	SCHOOL SELF-EVALUATION (SSE) GUIDELINES 2016-2020 (PRIMARY AND POST-	
	PRIMARY VERSIONS)	83
7.6	PRIMARY CURRICULUM REVIEW AND REDEVELOPMENT	83
7.7	WELLBEING CURRICULUM IN POST-PRIMARY SCHOOLS	84
7.8	CONCLUSIONS	85
CHAI	PTER 8	
Teac	ners' professional learning in the area of student wellbeing in Ireland	87
8.1	THE TEACHING COUNCIL	88
8.2	THE NATIONAL INDUCTION PROGRAMME FOR TEACHERS (NIPT)	89

8.2	THE NATIONAL INDUCTION PROGRAMME FOR TEACHERS (NIPT)	89
8.3	PROFESSIONAL DEVELOPMENT SERVICE FOR TEACHERS (PDST)	90
8.4	JUNIOR CYCLE FOR TEACHERS (JCT)	93
8.5	NATIONAL EDUCATIONAL PSYCHOLOGICAL SERVICE (NEPS)	95
8.6	HEALTH SERVICE EXECUTIVE (HSE)	98
8.7	NATIONAL COUNCIL FOR SPECIAL EDUCATION (NCSE)	99
8.8	EDUCATION AND TRAINING BOARDS IRELAND (ETBI)	100
8.9	EDUCATION SUPPORT CENTRES IRELAND (ESCI)	102
8.10	SUMMARY AND CONCLUSIONS	103

CHA	NPTER 9	
Sum	imary and conclusions	107
9.1	KEY DEFINITIONS	107
9.2	EXISTING TPL FRAMEWORKS	108
9.3	METHODS OF IMPACT ASSESSMENT AND PROCESS EVALUATION	109
9.4	THE WELLBEING OF CHILDREN AND YOUNG PEOPLE IN IRELAND	111
9.5	POLICY CONTEXT AND TPL IN THE AREA OF STUDENT WELLBEING	112
9.6	TPL PROVIDED IN THE AREA OF STUDENT WELLBEING IN IRELAND	113
9.7	CONCLUSIONS	114
Refe	erences	115
APP	ENDIX 1	
Revi	iew/conceptual papers retrieved in the systematic review	131
APP	ENDIX 2	
Key	research findings on the wellbeing of children and young people in Ireland	135
APP	ENDIX 3	
Wel	lbeing measures used in GUI, MWS, and MWS 2	151

Preface

This literature review represents the output of the first strand of a 3-year project whose overall goal is to develop a framework for the evaluation of teachers' professional learning (TPL). This project consists of a detailed literature review; a large-scale survey of teachers and principals in primary, post-primary, and special schools; and, an in-depth research component (to be finalised on the basis of findings from the first two strands). These three strands of research will ultimately lead to the publication of a research-based framework for the evaluation of TPL. The resultant framework, designed to have broad applicability, will be applied initially to TPL in the area of student wellbeing, given the emergence of student wellbeing as a key focus across educational levels and settings.

The current report is the first in a series of anticipated publications arising from the project. Subsequent reports will present findings from the large-scale survey of teachers and principals, and findings from further in-depth research on TPL in Ireland. The final expected output from the project is an evaluation framework for TPL in Ireland.

Acknowledgements

Sincere thanks to members of the Steering Committee (listed below), appointed to oversee the development of a framework for the evaluation of TPL. We appreciate the considerable help of members of the Steering Committee in reviewing chapters of the current report and in providing data for Chapter 8.

We gratefully acknowledge the administrative support provided by ERC colleagues Anne Comey, Patricia Gaffney, Lynn Jackson, and Imelda Pluck. We thank Lynsey O'Keeffe for help in reviewing an earlier draft of the report. We thank Marie Jennings for providing the final cataloguing information for this report. Finally, we sincerely thank Dublin City University (DCU) library staff for guidance on systematic searches and cataloguing issues. In particular, we appreciate the help of Sue Miller, Celine Campbell, Mary Kiely, and John McDonough.

Membership of the Steering Committee

Judith Lyons	Chairperson, APO, Teacher Education, ITE & Professional Development, DE
Brian Geraghty	Secretary, EO, Teacher Education, ITE & Professional Development, DE
Jude Cosgrove	CEO, Educational Research Centre (ERC)
Brendan Doody	Assistant Chief Inspector, DE Inspectorate
Mary Dunne	Inspector, Primary, Teacher Education, ITE & Professional Development, DE
Margaret Dunning	Primary Divisional Inspector, DE Inspectorate
Gráinne Egan	APO, Social Inclusion Unit, DE
Noreen Fitzpatrick	Manager, National Innovation Unit, SOLAS
Lorraine Gilleece	Research Fellow, Educational Research Centre (ERC)
Gabrielle Greene	Regional Director, National Educational Psychological Service (NEPS)
Madeline Hickey	Specialist Lead in Policy and Practice, National Council for Special Education (NCSE)
Carmel Kearns	Head of Teachers' Learning and Research, Teaching Council
Pádraig Kirk	Director, Junior Cycle for Teachers (JCT)
Seamus Knox	Senior Inspector, Post-Primary, Teacher Education, ITE & Professional Development, DE
Julie Lynch	Inspector, Post-Primary, Teacher Education, ITE & Professional Development, DE
Éadaoin McGovern	Secretary, Education Support Centres Ireland (ESCI)
Meabh McGuinness	Education Project Manager, Health Service Executive (HSE)
Eamonn Moran	PO, Post-Primary, Curriculum and Assessment Policy Unit (CAP), DE
Jim Mulkerrins	PO, Teacher Education, ITE & Professional Development, DE (until retirement in December 2019)
Mary Nihill	National Director, Centre for School Leadership (CSL)
Éadaoin O'Brien	Psychologist, National Educational Psychological Service (NEPS)
Mary O'Callaghan	National Coordinator, The National Induction Programme for Teachers (NIPT)
Evelyn O'Connor	PO, Primary, Curriculum and Assessment Policy Unit (CAP), DE
Ciara O'Donnell	National Director, Professional Development Service for Teachers (PDST)
Caroline Rawdon	Research Associate, Educational Research Centre (ERC)
Joan Russell	Education Research Officer, Education and Training Boards Ireland (ETBI) (joined in July 2020)

Glossary of Acronyms/Abbreviations

ACCS ASD CAP CASEL CBAM CBT CFE CHO	Association of Community and Comprehensive Schools Autism Spectrum Disorder/Autistic Spectrum Disorder Curriculum and Assessment Policy Unit Collaborative for Academic, Social, and Emotional Learning Concerns Based Adoption Model Cognitive Behavioural Therapy Colleges of Further Education
CPD	Community Health Organisations Continuing Professional Development
CSL	Centre for School Leadership
CSO	Central Statistics Office
CSPE	Civic, Social, and Political Education
DCYA	Department of Children and Youth Affairs
DDLP	Deputy Designated Liaison Person
DE	Department of Education
DEIS	Delivering Equality of Opportunity in Schools
DES	Department of Education and Skills
DLP	Designated Liaison Person
DOH	Department of Health
EFL	English as a Foreign Language
ERC	Educational Research Centre
ERIC	Education Resources Information Center
ESCI	Education Support Centres Ireland
ESRI	Economics and Social Research Institute
ETB	Education and Training Board
ETBI	Education and Training Boards Ireland
FET	Further Education and Training
GP	General Practitioner
GUI	Growing Up in Ireland
HBSC	Health Behaviour in School-aged Children
HSCL	Home School Community Liaison
HSE	Health Service Executive
IEA	International Association for the Evaluation of Educational Achievement
IGC	Institute of Guidance Counsellors
ILP	Instructional Leadership Programme
	Irish Primary Principals' Network
IRT ISSDA	Item Response Theory Irish Social Science Data Archive
ITE	Initial Teacher Education
JCT	Junior Cycle for Teachers
JMB	Joint Managerial Body for Voluntary Secondary School
L1LP	Level 1 Learning Programme
L2LP	Level 2 Learning Programme
MOOC	Massive Open Online Courses
MWS	My World Survey
NAPD	National Association of Principals and Deputy Principals
NBSS	National Behaviour Support Service
NCCA	National Council for Curriculum and Assessment
NCGE	National Centre for Guidance in Education

NCSE NEPS NIPT	National Council for Special Education National Educational Psychological Service National Induction Programme for Teachers
NPC-P	National Parents' Council - Primary
NQT	Newly Qualified Teacher
OECD	Organisation for Economic Co-operation and Development
PDI	Professional Development Initiative
PDST	Professional Development Service for Teachers
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
PLC	Professional Learning Communities
PLU	Priority Learning Units
PST	Professional Support Team
RCT	Randomised-Controlled Trial
RP	Restorative Practice
RSE	Relationships and Sexuality Education
SAT	Statutory Assessment Tests (UK)
SCO	School Completion Officer
SDG	Sustainable Development Goals
SEC	State Examinations Commission
SEL	Social and Emotional Learning
SEN	Special Education Need(s)
SENO	Special Educational Needs Organiser
SIM	School Inclusion Model
SIP	School Improvement Plan
SLCN	Speech, Language, and Communication Needs
SNA	Special Needs Assistant
SOLAS	State agency for the FET sector
SPHE	Social, Personal, and Health Education
SSE	School Self-Evaluation
SST	Student Support Team
TALIS	Teaching and Learning International Survey
TES	Teacher Education (ITE and Professional Development) Section
TIMSS	Trends in International Mathematics and Science Study
TPL	Teachers' Professional Learning
TUI	Teachers' Union of Ireland
UN	United Nations
VT	Visiting Teacher
WHO	World Health Organization

CHAPTER 1 Key concepts and definitions

There is currently a wide range of professional learning opportunities for teachers in Ireland provided by the Department of Education (DE, formerly the Department of Education and Skills or DES)¹, through teacher support services, Education Centres, Department agencies, and other initiatives. A number of recent policy developments have had a significant impact on the domain of teachers' professional learning (TPL²), most notably the development of the *Cosán Framework for Teachers' Learning* by the Teaching Council (2016a) and an increased focus on the evaluation of learning activities (e.g., as outlined in *Action Plan for Education 2018*; DES, 2018a). This chapter outlines some of the commitments made in the *Action Plan for Education 2018* in relation to the evaluation of continuing professional development (CPD) as these underpin the establishment of the current research project (note that wellbeing elements of the Action Plans are outlined in Chapter 7). The broader context of TPL, including the development of *Cosán*, is examined in Chapters 2 and 4. This chapter also sets out definitions of key terms used in the current study.

The Action Plan for Education 2018 is one of the annual Action Plans that sits within the Action Plan for Education 2016-2019 (DES, 2016a). In the 2018 Action Plan (p. 43), a commitment was made to evaluate the impacts of CPD activities. A specific commitment was made in the 2018 plan regarding the evaluation of CPD related to student wellbeing³. According to Action 46.1 of the Action Plan, a research-based framework will be developed for the purposes of evaluating CPD in the area of student wellbeing. Note that, it is intended that the provision of CPD meets the needs of teachers, schools, pupils/students, and the Department.

Arising from the actions in the 2018 Action Plan, a Steering Committee was established to oversee the development of a research-based framework for the evaluation of CPD (or TPL for the purpose of the current literature review). Membership of the group comprises representatives from the Department, CSL⁴, NIPT, PDST, JCT, NEPS, HSE, NCSE, the Education Centres, ETBI, SOLAS, and the Teaching Council (names of individuals are listed in the front matter of this report). The Educational Research Centre (ERC), guided by the Steering Committee, was tasked with implementing the study. While the project aims to develop a general framework for the evaluation of TPL that can be applied to TPL in any area, the focus of the current study is on developing the framework to evaluate TPL related to student wellbeing.

¹ The Department of Education and Skills (DES) was formally renamed the Department of Education (DE) in late 2020. As this report was completed prior to the renaming, Department of Education and Skills (DES) is used throughout.

² The term 'teachers' professional learning' (TPL) is used throughout the current report. This term is intended to acknowledge the full range of learning activities undertaken by teachers and is considered to better reflect the various dimensions of teachers' learning than a narrower term such as 'continuing professional development' (CPD). While the term TPL is preferred throughout the report, CPD or other analogous terms are used in direct quotations or if the original term is required to conserve the intended meaning. An example of this is the usage of CPD in references to the DES *Action Plans for Education*.

In the current report, the term 'pupil' is used when referring to those studying at primary level and 'student' is used for those at post-primary level. Where reference is made to 'student wellbeing' or 'student learning outcomes', these may include material relating to primary and post-primary levels.

⁴ These acronyms are explained in the Glossary of Acronyms/Abbreviations at the beginning of this report.

The Terms of Reference for the current study emphasise the linkages between the development of this framework and complementary work undertaken as part of Action 45.2 of the *Action Plan for Education 2018*. Occurring in parallel, work related to Action 45.2 aims to develop a new evidence-based strategic policy framework for the provision of a continuum of quality professional learning and supports for teachers and schools and it is intended that work will include consideration of the future structure of support services engaged in CPD.

1.1 KEY DEFINITIONS

A wide variety of terms related to teachers' learning appear in policy documents, research literature, and applied contexts. For the purposes of the current research, it was necessary to define and operationalise the meaning of various key concepts in order to have a shared understanding of terms. This section outlines definitions of the key concepts, agreed by the Steering Committee and the ERC for the purposes of the current research. Draft definitions of some of the terms were provided in the Terms of Reference for the research. Following the development of the Terms of Reference for the research, one of the first activities of the Steering Committee was to agree definitions of some of the key concepts relevant to this research.

Teachers

The Terms of Reference for the current research study defines 'teachers' as those registered with the Teaching Council. Professional learning for support staff such as special needs assistants (SNAs) is not within the scope of this study.

Teachers' professional learning

According to the Terms of Reference, the focus of this research is the various types of continuing professional learning and development activities for teachers and school leaders which are funded, facilitated, accredited, or otherwise supported by the Department, its support services, or its agencies (including but not limited to CSL, NIPT, PDST, JCT, NEPS, NCSE, and the Education Centres). Activities of the Teaching Council, ETBI, and relevant HSE activities are also within scope. Professional learning activities provided by private organisations and funded by teachers themselves are not within the scope of this project.

Also, for the purposes of the current research, TPL does not include initial teacher education (ITE). However, the definition used in this study is intended to reinforce the continuous and ongoing nature of the professional development process. It is recognised that TPL ranges from highly informal to structured and formal. For the purposes of the present study, it is not possible to include all forms of TPL, particularly those which are highly informal and self-directed. In selecting TPL for examination in the current study, preference is given to TPL activities with objectives that may be linked to measurable outcomes.

Wellbeing

For the purposes of the present research, the definition of wellbeing is taken from the *Wellbeing Policy Statement and Framework for Practice 2018-2023* (DES, 2018b). According to this definition which was originally proposed by the World Health Organization (WHO, 2001, cited in DES, 2018b, p. 10), wellbeing is present when:

"...a person realises their potential, is resilient in dealing with the normal stresses of their life, takes care of their physical wellbeing and has a sense of purpose, connection and belonging to a wider community. It is a fluid way of being and needs nurturing throughout life." Although the definition of wellbeing is based on individuals, the present study recognises that wellbeing is in part determined by the person's environments and interpersonal relationships within those environments. This is in line with a number of policy and curriculum documents published in recent years including the *Wellbeing Policy Statement and Framework for Practice 2018-2023* (DES, 2018b) and *Junior Cycle Wellbeing Guidelines* (NCCA, 2017a) which acknowledge the importance of relationships in maintaining wellbeing. Indeed, both documents list four aspects of wellbeing in schools: culture, curriculum, relationships, and, policy & planning, which underscore the importance of a whole-school approach to wellbeing and the consideration of the school environment as well as relationships between pupils/students, teachers, families, and community organisations. For the purpose of the current research, wellbeing is viewed as a teachable and learnable set of skills that include self-awareness, self-management, social awareness, relationship skills, and responsible decision-making.

Descriptive part of the framework

The descriptive component of the framework is defined as a unified, coherent, interlinked, and flexible structure capable of describing and classifying all relevant features of TPL.

Evaluation part of the framework

The evaluation component of the framework is defined as a multi-layered structure capable of supporting both qualitative and quantitative evaluation of TPL to include design, development, facilitation, implementation, and improvement. Taken together, the descriptive and evaluative components of the framework aim:

- 1. To facilitate the building of an evidence base to support ongoing planning and policy development in relation to TPL at local, regional, and national levels;
- 2. To promote understanding and enable improvements on the efficiency, effectiveness, inclusivity, and impact of TPL;
- 3. To be useful at all stages of TPL at multiple levels, e.g., as a tool for TPL design; for decisionmaking; for categorising, recording, and revising TPL; and, for evaluating the impact and effectiveness of TPL.

Impact

The Terms of Reference recognise that 'impact' is complex and acknowledge that is it particularly challenging in the present study where both the framework and the area of student wellbeing are quite broad and layered.

The five levels of professional development evaluation identified by Guskey (2000, 2002a) provide an initial structure for measuring impact and evaluating TPL. The five levels outlined by Guskey (2000, 2002a) are: participants' reactions; participants' learning; organisation support and change; participants' use of new knowledge and skills; and, student learning outcomes. For the purposes of later empirical research phases of the project, the assessment of impact will involve a multi-method approach that includes cross-validation of measures, with the overall goal of identifying which forms of assessment may be best suited to understanding impact at various levels.

1.2 OVERALL SCOPE OF THE REVIEW

This review (Phase 1 of the overall project) addresses the following:

a. Existing TPL evaluation frameworks: A systematic review is presented in Chapter 2 which describes existing TPL evaluation frameworks reported in both national and international

publications over the last 5 years. Chapter 2 also presents some of the challenges and enablers of TPL at different levels (e.g., system, school, teacher, and pupil/student levels), which have been identified in the literature to date.

- **b.** Impact assessment and process evaluation of TPL: Chapter 3 aims to examine best practice for both process evaluation and impact assessment of TPL.
- **c. TPL frameworks in the Irish context:** Chapter 4 describes the Teaching Council's *Cosán Framework for Teachers' Learning* (The Teaching Council, 2016a), a descriptive framework developed recently for the Irish context. In addition, examples of TPL frameworks from the CSL and PDST are presented.
- d. Broader school context for wellbeing: A description of the wider school context and wellbeing is presented in Chapter 5. An outline of relevant psychological theories such as Bronfenbrenner's (1979) ecological systems theory and Vygotsky's (1962) social learning theory is also presented.
- e. A profile of wellbeing of school-aged children and young people in Ireland: Key findings from large-scale national and international studies which involved nationally representative samples of Irish school-aged children and/or adolescents (5- to 18-year-olds) is presented in Chapter 6. Findings from studies conducted over the last 10 years are included.
- **f.** National policy context for wellbeing of children and young people in Ireland: Chapter 7 includes information on key policy documents which have been published over the past decade which relate to TPL, student wellbeing, and school evaluation.
- **g. TPL** in the area of student wellbeing in Ireland: A summary of the TPL provided by the Teaching Council, NIPT, PDST, JCT, NEPS, HSE, NCSE, ETBI, and the Education Centres over the past 5 years is presented in Chapter 8.

CHAPTER 2 Review of teachers' professional learning evaluation frameworks

The current study aims to develop a framework for the evaluation of teachers' professional learning (TPL⁵). As outlined in Chapter 1, for the purpose of the current study, TPL is defined as:

all of the various types of continuing professional learning and development activities for teachers and school leaders which are funded, facilitated, accredited, or otherwise supported by the Department, its support services, or its agencies (including but not limited to CSL, NIPT, PDST, JCT, NEPS, NCSE, and the Education Centres).

TPL does not include initial teacher education; however, the definition used in this study is intended to reinforce the continuous and ongoing nature of the professional development process. TPL ranges from highly informal to structured and formal. For the purposes of the present study, it will not be possible to include all forms of TPL, particular highly informal, self-directed forms. TPL will be included in this study where its objectives may be linked to measurable outcomes.

It is relevant to note that the scope of the current project does not extend to formal programmes of study undertaken by teachers, such as postgraduate study or research. Such programmes are expected to meet the standards of the relevant awarding bodies and directly evaluating their quality or impact is not within the remit of the DES, its support services, or agencies. As discussed in Chapter 1, the development of the current framework arose through commitments made by the DES in the *Action Plan for Education 2018* (DES, 2018a) related to the evaluation of CPD. Therefore, only activities which are funded, facilitated, accredited, or supported by the DES, its support services, or agencies are in scope for the current project.

At the other end of the formal to informal continuum, highly informal activities are also outside the scope of the current project. This represents an important difference between this work and the *Cosán Framework for Teachers' Learning* (The Teaching Council, 2016a, see Chapter 4 for details). As the design of highly informal activities is likely to be less structured and their impact is likely more difficult to assess, they are outside of the scope of the present review.

The term continuing professional development (CPD, rather than TPL) was used in the *Policy on the Continuum of Teacher Education* (The Teaching Council, 2011, p. 19) where it was defined as:

"life-long learning and comprises the full range of educational experiences designed to enrich teachers' professional knowledge, understanding, and capabilities throughout their careers".

5 In this report, the term TPL is preferred and usually replaces CPD or other analogous terms used in the literature. Exceptions to this are direct quotations or if the original term is required to conserve the intended meaning.

The current study defines two aspects or components of a TPL framework. The descriptive component is defined as:

a unified, coherent, interlinked, and flexible structure capable of describing and classifying all relevant features of TPL.

The evaluation component is defined as:

a multi-layered structure capable of supporting both qualitative and quantitative evaluation of TPL to include design, development, facilitation, implementation, and improvement.

Taken together, the descriptive and evaluative components of the framework aim:

- 1. To facilitate the building of an evidence base to support ongoing planning and policy development in relation to TPL at local, regional, and national levels;
- 2. To promote understanding and enable improvements on the efficiency, effectiveness, inclusivity, and impact of TPL;
- 3. To be useful at all stages of TPL at multiple levels, e.g., as a tool for TPL design; for decisionmaking; for categorising, recording, and revising TPL; and, for evaluating the impact and effectiveness of TPL.

The first section of this chapter presents a summary of the different types of TPL undertaken by teachers. The evaluation of TPL is highly challenging and complex and for this reason, a systematic review was carried out for the current report. Sections 2.2 and 2.3 describe the method, process, and findings of this systematic review which aimed to identify existing TPL evaluation frameworks in the literature. Section 2.4 identifies some of the key challenges and enablers of TPL outlined in the literature.

2.1 MODELS OF TPL

Prior to a review of TPL evaluation frameworks, it is useful to first consider how the various components of TPL may be organised conceptually. Professional learning and development activities are offered in many different forms for teachers and school leaders. In the Republic of Ireland, TPL is offered by a number of different organisations both at national and regional levels (see Chapter 8 for further details of the organisations that provide TPL in Ireland). Kennedy (2014) proposes a spectrum of CPD models which range in their purpose from transmissive to malleable to transformative, with teachers' autonomy and agency increasing along the spectrum of models. The spectrum of models proposed by Kennedy (2014) is presented in Table 2.1.

Kennedy (2014) categorises the purpose of three models as *transmissive* (the training model, the deficit model, and the cascade model). The purpose of all of these models is the transmission of knowledge or information from the trainer to the teacher participant. Although the training model for example, suggests that the teacher is typically in a passive role as the recipient of information from an expert trainer, Kennedy recognises that a transmissive approach to learning may be appropriate for the purposes of learning or refreshing particular skills. The deficit model may address individual teacher performance and the cascade model involves some teachers completing a professional learning activity or training event and then passing this learning on to other colleagues.

Model of TPL	Brief description of model	Purpose of model	
The training model	Skills-based and generally delivered by an expert to teachers		
The deficit model	Can be used for performance review and is generally individualised where a skills or performance deficit is addressed	Transmissive	
The cascade model	Some teachers complete a professional learning activity and disseminate learning to colleagues	_	
The award-bearing model	Usually associated with an award from a higher education institute		
The standards-based model	Usually linked to meeting standards or competencies		
The coaching/mentoring model	Collegial one-to-one relationship which is often hierarchical	Malleable	
The community of practice model	Similar to mutually supportive peer mentoring/coaching but with more than two people		
Collaborative professional inquiry models	Not a model in itself but any model or experience that support transformative practice	Transformative	

Table 2.1: Spectrum of TPL models outlined by Kennedy (2014)

Arrow denotes direction of increase in teachers' capacity for professional autonomy and agency along the spectrum of models.

Four models are categorised as *malleable* by Kennedy (2014): the award-bearing model, the standardsbased model, the coaching/mentoring model, and the community of practice model. The award-bearing model emphasises the completion of a course or programme of study, usually at a higher education institute. The coaching/mentoring model involves a one-to-one relationship between two teachers with the more experienced teacher acting as a coach or mentor to the other teacher; although, in some cases the relationship may be collegiate rather than hierarchical (differentiated by level of experience). The community of practice model is similar to the peer support form of coaching/mentoring but involves a group of more than two teachers.

Kennedy (2014) categorises collaborative professional inquiry models as *transformative*. In Kennedy's (2005) framework, two models were categorised as transformative: the action research model and the transformative model. The action research model involves teachers engaging as researchers to reflect on and improve their own practice, formulating research questions and gathering data to address their research concerns. Kennedy (2005) referred to the final model as the 'transformative model' and described the central characteristic of the model as "*a combination of practices and conditions that support a transformative agenda*" (p. 246). Kennedy (2014) replaced the action research model and the transformative model (from her 2005 framework) with collaborative professional inquiry models which she defines as "*all models and experiences that include an element of collaborative problem identification and subsequent activity, where the subsequent activity involves inquiring into one's own practice and understanding more about other practice, perhaps through engagement with existing research" (p. 693). Kennedy (2014) lists Timperley et al.'s (2007) 'teacher inquiry and knowledge-building cycle', Elmore's 'instructional rounds' (City et al., 2009), and Stoll et al.'s (2006) 'professional learning communities' as examples of collaborative professional inquiry models.*

Lloyd and Davis (2018) propose a pragmatic model of TPL which comprises three pairs of characteristics and is organised along three continua (domain of influence; sphere of action; and, autonomy-transformation). The authors highlight similarities between their work and categories used by Fraser et al. (2007) and their work describes some of the features of TPL activities. The first continuum described by Lloyd and Davis (2018) – the domain of influence – refers to whether professional learning activities are directed, i.e., mandated, or teacher identified. The second continuum – the sphere of action – has formal and informal learning at each end of the continuum – autonomy-transformation – refers to whether TPL is individual or guided, i.e., whether the professional learning is guided by an instructor or facilitator or whether it is self-directed. Lloyd and Davis (2018, p. 99) suggest that TPL is a "*complex entity*" but that TPL activities or events can be placed at an appropriate point on each of their proposed continua. Lloyd and Davis' approach complements the work of Kennedy (2014), as the models in Kennedy's spectrum of TPL models can be considered along each of the three continua proposed by Lloyd and Davis.

Boylan and Demack (2018) propose an analytical distinction between three forms of professional learning: *pedagogical* professional learning, *technical* professional learning, and *curriculum* professional learning. In pedagogical professional learning, professional learning is the focus for innovation. When teachers take part in professional development of this type, it is hoped that it will lead to changes in their professional practice. This will take place through experimentation by the teacher themselves as opposed to the implementation of a pre-designed technique. In technical professional learning, professional learning is seen as a means and mediator by which changes in professional practice can occur. These changes can take many forms including the use of new teaching tools. An example of this would be a teacher using a new teaching pedagogical practice or a method to creatively deliver new curricular material. Curriculum professional learning is a hybrid form of professional development. Here professional learning occurs through, but also occurs to support, curriculum innovation. This is illustrated by the fact that sometimes the use of a novel method to creatively deliver new curricular material is an opportunity for professional learning in itself.

2.2 REVIEW OF EXISTING TPL EVALUATION FRAMEWORKS

The overarching aim of the current study is to develop a framework for the evaluation of TPL, which is flexible enough to guide the evaluation of the many different forms of TPL undertaken by teachers in Ireland. As noted in the introduction to this chapter, the resultant framework should include a comprehensive evaluation component capable of supporting both qualitative and quantitative evaluation of TPL including all phases of TPL design, development, facilitation, implementation, and improvement. The Terms of Reference note that the current study is guided, in part, by the work of Thomas Guskey (e.g., 2000, 2002a, 2003, 2014, 2016), a highly cited contributor to the TPL evaluation literature, who developed a five-level model for the evaluation of TPL. The current section examines in detail the work of Guskey and other evaluation frameworks identified in the TPL literature.

Method

As the evaluation of TPL may be considered to be more complex and challenging than its description, a decision was taken to conduct a systematic review of the relevant literature. This search was carried out in three databases: Education Research Complete, British Education Index, and ERIC (including Australian Education Index). The search terms employed to search the three databases were: "Teacher professional learning" OR ("continuing professional development" OR CPD) OR "teacher development" OR "in-service training of teachers" AND Framework OR model. The search was limited to articles published between 2015 and 2019. The search was run in November 2019. Table 2.2 outlines the number of references returned. Figure 2.1 presents a PRISMA flow diagram for the review. A total of 1,133 references remained following the removal of cross-database duplicates. In addition, the reference list from Merchie, Tuytens, Devos, and Vanderlinde (2018) was also reviewed and references

containing relevant TPL evaluation frameworks were incorporated into the full text review phase (N = 5); these references predate the search timeframe for the current review. A small number of additional TPL evaluation frameworks (N = 2) were identified by the project Steering Committee which also predate the search timeframe for the current review. This gives a total of 1,140 references for review (Figure 2.1).

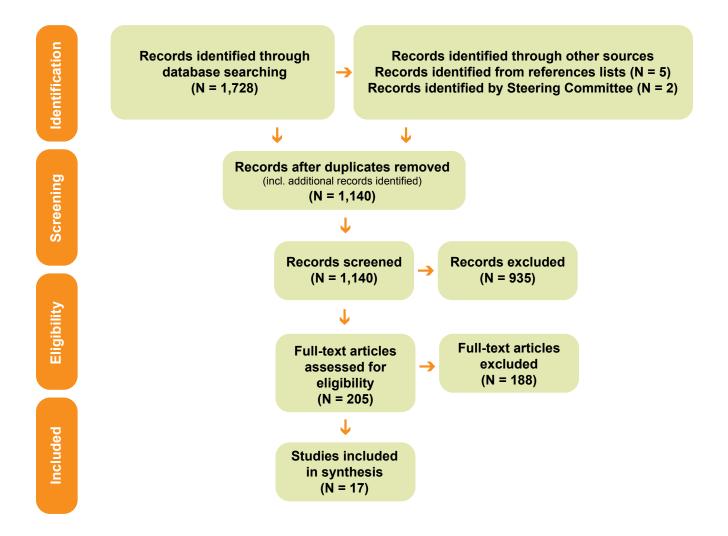
Table 2.2: Number of references returned from the systematic search

Database	Number of references	
Education Research Complete	1,014	
British Education Index	406	
ERIC (incl. Australian Educational Index)	308	

Searches were run in Education Research Complete and British Education Index with select a field as optional. The search of ERIC (incl. Australian Educational Index) was run with all fields and text.

A two-stage review process was employed. At the first stage, titles and abstracts were screened. Only those which were deemed eligible according to the inclusion and exclusion criteria were reviewed in the second stage. The following sections outline these stages in more detail.

Figure 2.1: PRISMA flow diagram



Title and abstract screening

Title and abstract screening was carried out by three reviewers (CR, LG, and KS). The reviewers held two consensus meetings which involved the three reviewers individually reviewing a single batch of 50 titles and abstracts and then meeting to discuss. There were two such meetings. Following the first consensus meeting, an agreement rate of 78% was achieved between reviewers and a number of alterations were made to the inclusion and exclusion criteria for the review. A second consensus meeting was held after all reviewers screened a second batch of 50 titles and abstracts. An agreement rate of 74% was achieved and some further adjustments were made to the list of inclusion and exclusion criteria for the review. It was agreed that reviewers would screen cautiously during title and abstract screening and include publications for the full text review phase, if in doubt of their suitability for the current review.

The final inclusion and exclusion criteria employed in the current review are outlined below. For the title and abstract screening phase of the review, the final list of references (minus duplicates) was divided into three lists and each reviewer decided whether each reference on their list met the criteria for the review or not. Reviewers categorised some references as 'discuss' items and these references were reviewed by a second member of the review team before a decision was reached on their inclusion or exclusion for full text review.

Inclusion criteria

Publications were included if:

- The publication related to a framework for TPL for registered teachers and/or school leaders who were in-service, i.e., teachers who have completed initial teacher education (ITE) and induction or international equivalent
- The publication contained a framework relating to TPL at primary and/or post-primary level (including special schools) or international equivalent and the framework contained an evaluation component
- The publication was available in English
- The publication was a peer-reviewed journal article (including review papers) or a report/policy document from a government/statutory/regulatory body.

Exclusion criteria

Publications were included if:

- The publication related to a profession other than teaching
- The publication referred to novice teachers or teachers with little formal education
- The publication related to a framework for TPL at third-level or early years/preschool setting or international equivalent, i.e., the education setting was out of scope
- The publication related to a framework for ITE or teacher induction
- The publication related to a framework for English as a Foreign Language (EFL) teachers in the wrong education setting
- The publication did not contain a TPL evaluation framework
- The publication related to a relevant school setting but out-of-scope population, e.g., special needs assistants (SNAs) or international equivalent or any staff that did not meet the criteria of being a registered teacher
- The publication referred to highly informal TPL, i.e., a TPL activity in which engagement and outcomes are difficult to measure
- The TPL was unlikely to benefit students in a measurable way, e.g., mindfulness for teachers
- The publication was a magazine article, book, book chapter, conference paper or proceedings,

thesis/dissertation, editorial, letter, commentary, or interview.

References were not excluded on the basis of 'publication type' at title and abstract screening unless this was clearly indicated, e.g., the reference was clearly identified as a 'conference paper', 'dissertation', or 'thesis'. References were not excluded on the basis of 'not published in English' at title and abstract screening as an English translation may have been available in the full text. References which related to school leaders were included if they contained a TPL framework and all other inclusion criteria were met.

The main reasons for exclusion at title and abstract screening were categorised based on the following hierarchy of reasons for exclusion:

- Relates to a profession other than teaching
- Relates to wrong education setting (i.e., not a primary, post-primary, or special school setting or their international equivalent)
- Relates to ITE or teacher induction
- Relates to EFL teachers in wrong education setting
- Does not contain details of a TPL framework.

The following reasons for exclusion were coded as 'other reason':

- Publication referred to novice teachers or teachers with little formal education
- Publication related to the correct school setting but wrong population, e.g., SNAs or international equivalent
- Publication referred to highly informal TPL, i.e., a TPL activity in which engagement and outcomes are difficult to measure
- TPL was unlikely to benefit students in a measurable way, e.g., mindfulness for teachers.

Full text review

A total of 205 publications were reviewed during the full text phase of this review (see Figure 2.1). These included publications identified through the systematic search, plus five publications identified through the reference list of an included journal article and two publications identified by the Steering Committee. Publications were reviewed by one of three reviewers (CR, LG, or KS) who decided if the publication met the inclusion criteria for the current review (for a small number [N = 25] of papers, the full text was not available so the paper was excluded at full text review stage for this reason). The inclusion and exclusion criteria outlined above were applied at full text review.

Included publications were subsequently categorised as review/conceptual papers or applied papers. Review/conceptual papers were defined as papers with a primary focus on a TPL evaluation framework. They could include the presentation of existing models and often involved an extension of existing TPL evaluation models or frameworks. Applied papers were those publications which referred to a framework but where the primary focus was on evaluating a particular TPL. The focus of this chapter is on papers classified as review/conceptual papers as these were deemed most relevant to the development of a TPL evaluation framework. Follow-up work could usefully examine in more detail the papers classified as applied and give further consideration to how TPL frameworks have been applied to particular TPL activities in the literature.

2.3 KEY FINDINGS REGARDING TPL EVALUATION FRAMEWORKS

The 10 review/conceptual papers retrieved in the systematic search are presented in Appendix 1. For the purposes of the current study, one of the key papers returned in the systematic search was a recent narrative review by Merchie et al. (2018). This article reviews and builds on seminal work in the field of TPL evaluation including Desimone (2009) and Guskey (2000). As the work of Merchie et al. (2018) is

the most comprehensive and one of the most recent papers found in our systematic search, we focus on their extended evaluative framework first in this section and then turn to the earlier work which laid the foundations for their model. We then highlight some of the findings from other review/conceptual papers that were examined as part of the current review.

Figure 2.2 presents an overview of the extended evaluative framework of Merchie et al. (2018) which builds on the work of Desimone (2009). This extended evaluative framework takes into account features relating to the design, development, facilitation, implementation, and impact of TPL by considering the importance of critically evaluating TPL activities before, during, and after their implementation. Regarding the steps that should be taken before a TPL activity, Merchie et al. suggest that it is advisable to:

- set expectations,
- define clear and measurable objectives (and note expected and unexpected outcomes), and
- identify suitable qualitative and quantitative instruments to measure the impact of each subcomponent.

During the TPL activity, they recommend conducting data collection on the outcomes which had been specified prior to the TPL and to conduct a feasibility study. After the TPL activity, they advise:

- continuing data collection with post-intervention and follow-up data,
- analysing data and interpreting results, and
- conducting a general evaluation considering the overall impact and how impact was measured.

Features of the **Teacher Quality** Teacher **Student Results** Intervention **Behaviour** Intervention Cognitive goals Instructional Domain-specific Core features (knowledge) strategies / knowledge and skills Structural features practices Skills Trainer Domain general Interaction patterns Affective goals knowledge and (attitudes / beliefs) skills **Contextual Factors Teachers' Personal Characteristics Students' Personal Characteristics**

Figure 2.2: Merchie et al.'s (2018, p. 152) Extended Evaluative Framework

Looking in detail at the model of Merchie et al. (2018), the first component of their extended evaluative model refers to features of the intervention. As with earlier models, these are subdivided into core and structural features while trainer⁶ quality is a new addition by Merchie et al. *Core features* refer to the substance of the TPL; *structural features* refer to characteristics of the structure or design (e.g., duration and location of TPL); and, *trainer quality* concerns the trainer's knowledge and skills.

6

While the term 'trainer' is used by Merchie et al. (2018), it is often eschewed in the literature because of perceived technicalrational connotations that are not fully compatible with contemporary understandings of good practice in TPL.

The second component of the evaluative framework relates to examining changes in *teacher quality* as a consequence of participation in TPL. Merchie et al. consider how teacher quality across three outcome areas (cognitive knowledge; skills; and, attitudes and beliefs) feature in the evaluative frameworks they reviewed. Some TPL activities have cognitive goals; i.e., they aim to impact on teachers' content knowledge, pedagogical content knowledge, or curricular knowledge (Shulman, 1986⁷). Merchie et al. report that curricular knowledge appears to be less frequently evaluated as part of TPL evaluations than either content knowledge or pedagogical content knowledge. Evaluating the skills that teachers have learned during TPL involves considering what they are able to do with what they have learned. Affective goals including attitudes or beliefs about teaching and learning were examined in a number of papers reviewed by Merchie et al.

Teacher behaviour is the third component of the Merchie et al. model. In the research they reviewed, about three-quarters of 54 studies examined change in teacher instruction after a TPL activity. It was much less common for studies to examine improvement in student outcomes (the fourth component of Merchie et al.'s model). Just 40% of studies they reviewed examined improvements in *student results* as an outcome of TPL.

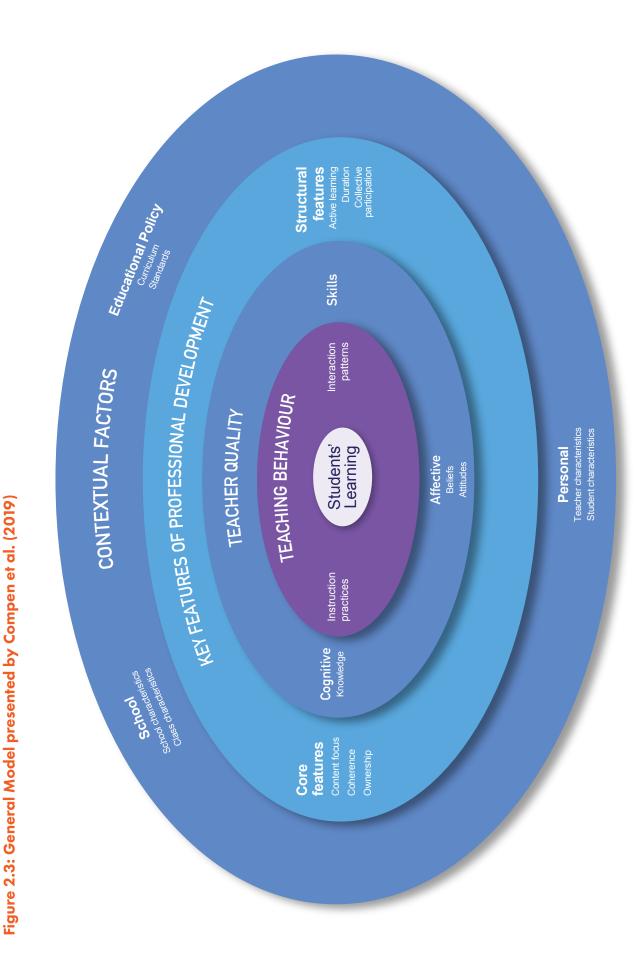
In looking at the role of *contextual factors*, Merchie et al. distinguish between the role of macrosocietal conditions (e.g., policy environment, curriculum/standards) and the micro-content or school culture (e.g., administration, organisation and school management practices, school leadership and support, resources, and socioeconomic status). The final component of this evaluative model refers to the *personal characteristics of teachers and students*. Relevant teacher characteristics include gender, age, and qualification level. Self-concept is an important student characteristic. Merchie et al. argue that such personal characteristics can affect the effectiveness of a TPL activity and may influence the likelihood of teacher participation in TPL. They note however that very few studies take into account these characteristics when examining the effect of TPL.

A limitation of the Merchie et al. model is that it represents the various components of the TPL framework in a linear fashion and may not adequately account for interdependencies, interactions, and the likely circularity found in the factors influencing TPL (Compen, De Witte, & Schelfhout, 2019). In their review of effective TPL for financial literacy, Compen et al. (2019) build on the work of Merchie et al. (2018). Compen et al. note that despite Merchie et al.'s addition of a number of valuable characteristics, the linear presentation of the model fails to capture the interdependencies between the components and they argue the need for a cyclical model. Therefore, in their review, Compen et al. build on the work of Timperley and Alton-Lee (2008) and present a TPL framework using concentric circles (see Figure 2.3). The inner circle shows that the ultimate goal of TPL is *student learning*. The second circle represents *teaching behaviour* as they argue that this has the most direct impact on student learning. *Teacher quality* is represented in the third circle while the fourth circle represents key features of professional development. The outer circle captures *contextual factors* in three areas (educational policy; school; and, personal [teacher and student]).

In order to fully understand the model of Merchie et al. (2018) and the Compen et al. (2019) modification, it is useful to examine in detail the research on which their work was built. Therefore, Table 2.3 presents the full list of evaluation frameworks referenced by Merchie et al. For each of the authors listed, Table 2.3 presents the theoretical basis underpinning the work and outlines the components of each of their frameworks. Given the importance of each of these authors to the field, we examine each in detail in the sections which follow, beginning with the earliest (Guskey, 2000).

⁷

Shulman (1986) distinguishes between 'content knowledge' (the amount that the teacher knows about a subject) and 'pedagogical content knowledge' (a teachers' collection/range of instructional strategies, understanding of what makes learning easy or difficult, and how students learn specific subject matter). 'Curricular knowledge' refers to knowledge of curriculum and instructions for teaching particular subjects.



14 Developing an evaluation framework for teachers' professional learning in Ireland: Phase 1 Desk-based research

Author(s)	Year	Theoretical basis	Components of the framework/What is evaluated
Guskey	2000	Kirkpatrick (1994)	 Participants' reactions Participants' learning Organisational support and change Participants' use of new knowledge and skills Student learning outcomes
Borko	2004		 The professional development programme Facilitators who guide the teachers as they learn Teachers who are the learners Context of professional development
Muijs & Lindsay	2008	Knight (2002) Guskey (2000) Stufflebeam (1983) Stake (1967)	 Participant satisfaction Participant learning Organisational change Participants use of new knowledge and skills Student learning outcomes Value for money
Desimone	2009	Borko (2004)	 Core features: content focus, active learning, coherence, duration, collective participation. Knowledge, practice, and student achievement, i.e., teachers undergo a TPL activity and the experience of this enhances their skills and knowledge and/or alters their attitudes and beliefs. The content of lessons and approach to pedagogy is improved by these new skills and knowledge. These improvements in teacher instruction lead to enhanced student outcomes. Context (teacher and student characteristics, curriculum, school leadership, policy environment).
King	2014	Bubb & Earley (2010) Guskey (2002a) Hall & Hord (1987)	 Experience of TPL, i.e., initial satisfaction TPL. Learning, i.e., knowledge, skills, and attitudes enhanced or acquired. Systemic factors, i.e., support, initiative design and impact, teacher agency. Degree and quality of change: process, product, and staff outcomes (personal, professional, and cultural). Pupil outcomes: cognitive, affective, and psychomotor. Diffusion (previously cascading).

Table 2.3: Previous TPL evaluation frameworks referenced by Merchie et al. (2018)

Guskey (2000)

According to Guskey's (2000, 2002a, 2002b, 2003, 2014, 2016) work, there are five critical stages or levels of information that need to be considered in order to effectively evaluate professional learning. These are: participants' reactions; participants' learning; organisational support and change; participants' use of new knowledge and skills; and, student learning outcomes. These five levels are organised hierarchically, from the simplest to the most complex and each level builds on the ones that came before it. Therefore, success at one level is usually a prerequisite for success at a higher level.

Level 1 (*participants' reactions*): The first level of evaluation involves consideration of the participants' reactions to their professional learning experience. Data related to this level are considered to be the easiest to gather and analyse. Questions at this level can focus on what the participants thought about their learning experience. For example, did they enjoy it? Did they feel like the TPL activity was worthwhile? Were the training materials and the content of the TPL activity appropriate, i.e., did they make sense to the participants? At this level, it is also important to ask questions related to the context of the professional learning experience. Such questions might ask about whether or not participants felt comfortable during the TPL activity, and whether or not the venue was appropriate (Guskey, 2016).

Level 2 (*participants' learning*): While it is important that participants enjoy their professional learning experiences, it is necessary that they also learn from their experiences. The second level of evaluation aims to measure the new skills, knowledge, and dispositions that participants can gain from professional learning (Guskey, 2002a).

Level 3 (organisational support and change): At this level, the focus is on the organisational dimensions which may impact on the outcomes of the professional learning experience. Guskey argues that even when the individual elements of a TPL run smoothly and effectively, organisational elements can limit the subsequent impact of the TPL. The evaluation questions at this level focus on the characteristics and attributes of an organisation that contribute to a TPL having the desired impact. Evaluating a TPL at this level involves asking questions such as: Were the individual level changes supported and encouraged at the organisational level? Were enough resources, like time for reflection and sharing, made available to the individuals participating in professional learning? (Guskey, 2016).

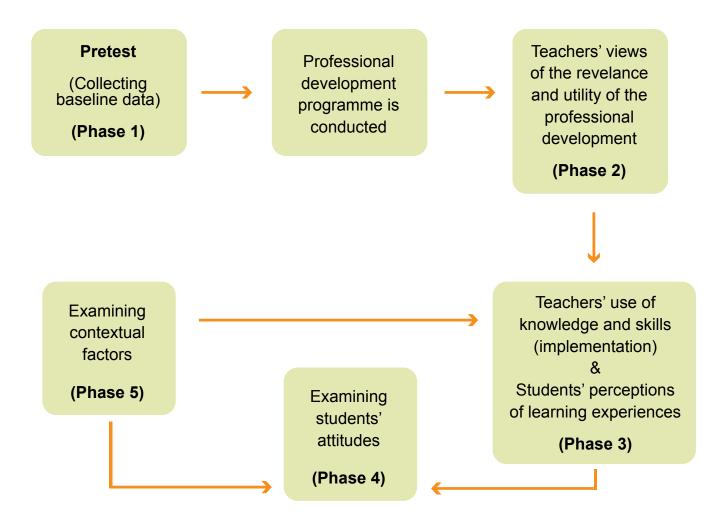
Level 4 (*participants' use of new knowledge and skills*): The focus of this level is on whether or not the knowledge and skills gained through the TPL activity made a difference to teachers' professional practice. It is important to specify in advance clear indicators of the degree and quality of the implementation of new knowledge and skills. It is recommended that a period of time should elapse between the TPL experience and data collection examining whether or not participants implement the new ideas and practices in their work. It is argued that evaluators may need to gather data at multiple time intervals, as implementation tends to be a "gradual and uneven process" (Guskey, 2016, p. 35).

Level 5 (*student learning outcomes*): Level 5 is concerned with the impact of a TPL on student outcomes and whether or not students benefited in a measurable way from teacher involvement in the TPL. The student outcomes that are measured will vary depending on the goals of the specific TPL activity and Guskey (2016) emphasises the need to consider unintended consequences (e.g., student average achievement may drop as a consequence of improved retention rates of lower achieving students).

Guskey (2016) emphasises the importance of evaluating at each of these five levels and argues that no level should be left out of the evaluation process. He notes that although success at each earlier level is a prerequisite for success at a subsequent level, success at only one level is not sufficient to create change. He argues that policymakers frequently underestimate the challenges and complexities in moving from Level 1 (experiences of TPL) to Level 5 (improvements in student outcomes). Guskey (2003, 2014, 2016) suggests that when planning TPL activities, the order of the levels should be reversed; i.e., planning should begin at Level 5, focusing on the changes to student outcomes that are required. Then planners should work backwards to Level 1 (the TPL experience).

An interesting extension to the work of Guskey (2000) is put forward by Soebari and Aldridge (2015). Drawing on Fishman et al. (2003), Guskey (2000), and Mathison (1992), they propose a five-phase model to evaluate the effectiveness of TPL activities and (unusually amongst the research reviewed for the current study) propose the inclusion of student perceptions of the learning environment as a measure of the effectiveness of TPL. The five phases of the Soebari and Aldridge (2015) model are depicted in Figure 2.4.





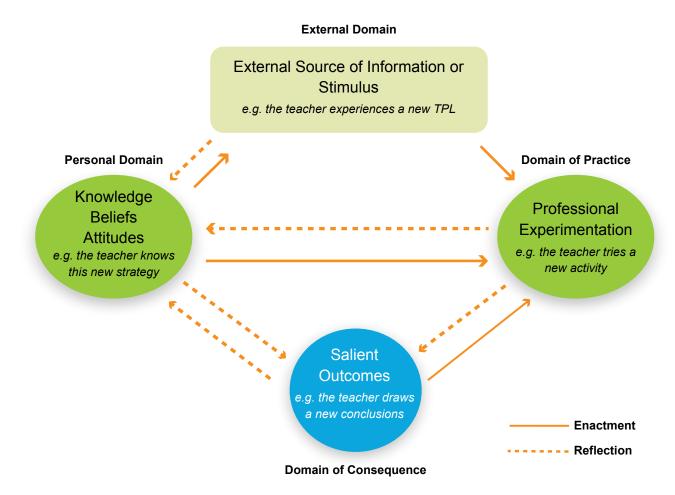
Phase 1 involves the collection of baseline data. Phase 2 is carried out after each TPL activity. The third phase examines how knowledge gained in the TPL is translated into practice. Phase 4 examines changes in student outcomes and phase 5 considers contextual factors. Soebari and Aldridge (2015) describe an application of the model to TPL undertaken by 33 teachers with data gathered from students in two classes for each teacher (N = 2,417). *The What is Happening in this Class?* (WIHIC; Fraser et al., 1996) was used to assess student perceptions. Soebari and Aldridge (2015) report statistically significant changes on six of the seven WIHIC scales but note that the effect sizes were too small to be considered educationally important. They argue that this points to the limited effectiveness of the TPL examined and note that observational data also provided corroborating evidence. This study is noteworthy as it is one of a very small number reviewed that incorporated student perceptions (rather than student achievement outcomes) in the process of evaluating TPL.

Clarke and Hollingsworth (2002) present a model of professional development which links closely to the levels within Guskey's (1986) model of TPL evaluation. Figure 2.5 presents their model of professional growth which takes two key mediating factors that influence change in teaching practice into account, *reflection* and *enactment*, along with four domains of change: the external domain, the personal domain, the domain of practice, and the domain of consequence. The domains presented within this model are inter-connected and the mediating factors of *reflection* and *enactment* are important across all domains.

Clarke and Hollingsworth (2002) also stress the importance of the school context in facilitating or impeding professional growth. They suggest that the school's contextual factors can affect access to,

and participation in, professional development activities, implementation of new teaching practices (professional experimentation), and support for the long-term application of new ideas and practices. Opfer and Pedder (2011) for their part, emphasise the importance of *meso* (e.g., institutional) and *macro* (e.g., school system) influences on teachers' learning and state that a lot of evaluation work focuses solely on the micro context of teachers' learning (e.g., individual teachers or individual TPL activities). They emphasise the need for evaluation of TPL to take place across all three sub-systems (micro, meso, and macro).





Borko (2004)

Using a situative perspective to examine TPL, Borko (2004) considers individuals' use of knowledge to be an aspect of their participation in social practices and notes that learning has both individual and socio-cultural features. She suggests that the use of this theoretical approach allows for multiple perspectives and multiple units of analysis. Borko (2004) proposes that the key components of a professional development system are: the professional development programme or activity; the facilitator; the teacher; and, the context in which the professional development activity takes place.

Turning to the evaluation of TPL, Borko suggests that research to investigate the impact of professional development should progress along three phases. In Phase 1, it is suggested that researchers should focus on the TPL activity at a single site, the teachers as learners, and the relationship between the two. In Phase 2, the research should expand to study a single professional development programme but delivered by more than one facilitator and at more than one site. At this phase, the relationships among the facilitators, the professional development programme and the teachers as learners are explored.

Phase 3 expands further to consider the impact of multiple professional development activities across a number of different settings, studying all four components of the professional development system: the professional development program or activity, the facilitator, the teacher, and the context.

The goal of Phase 1 is to investigate if the professional development program has had a positive impact on teachers' learning. Changes in teachers' knowledge or instructional practices may be measured. Phase 2 explores whether a particular TPL activity can be reliably implemented across a number of different settings with different facilitators. Borko (2004) cites work by Cohen, Raudenbush, and Ball (2003) who identified the importance of well-defined instructions for TPL activities such as academic tasks and instructional materials, descriptions of teaching, and student outcome measures. In Phase 3, fidelity of the TPL programme or intervention should be explored and assessed in relation to the benefits of adapting the programme for use across a variety of settings.

Muijs and Lindsay (2008)

Muijs and Lindsay (2008) present a hierarchical model for evaluating the effects of TPL based on questionnaire data from CPD coordinators and teachers from a randomly selected sample of schools in England. This model is based on previous work by Guskey (2000, 2002a) and is an extension of Guskey's existing five levels rather than a new framework for TPL evaluation. Muijs and Lindsay (2008) present Guskey's five levels and add *value for money* as an additional level of evaluation.

Desimone (2009)

Desimone (2009) presents an argument for the use of a critical features approach to the measurement of the impact of TPL activities. She suggests that findings from empirical research have led to the identification of a core set of features of effective professional development and a core conceptual framework for studying the effects of TPL. The critical features of an activity are defined as the characteristics that *"make it effective for increasing teacher learning and changing practice, and ultimately for improving student learning"* (Desimone, 2009, p. 183). Desimone suggests that evaluation needs to focus on these critical characteristics, rather than on the type of activity or the mode of delivery (e.g., workshop or seminar), as it has shown that it is these specific features of professional development that matter when it comes to changing teachers' skills, knowledge, and classroom practice (Desimone, Porter, Garet, Yoon, & Birman, 2002; Garet, Porter, Desimone, Birman, & Yoon, 2001).

Desimone (2009) outlines the core features of effective TPL as:

- 1. **Content focus:** Desimone suggests that the most important and influential feature is that the TPL focuses on subject matter content and how students learn that content.
- 2. Active learning: Desimone cites a number of studies which show that the effectiveness of TPL is linked to opportunities for teachers to experience active learning (e.g., Garet et al., 2001). This active learning could be carried out in a variety of ways including interactive feedback discussions, observing or being observed, and leading discussions.
- **3. Coherence:** This is the extent to which the material that the teacher is learning during a TPL activity is consistent with their knowledge and beliefs. Coherence between TPL and wider policy (e.g., school, district, and state) is also important.
- **4. Duration:** Although Desimone does not explicitly identify a particular *"tipping point"*, she suggests that TPL needs to be of a *"sufficient"* duration (p. 184). This refers to both the span of time over which the activity is spread and the number of hours spent in the activity. She suggests that there is support in the literature for activities that are spread over a semester and include at least 20 hours of contact time.
- **5.** Collective participation: This refers to the participation of multiple teachers from the same class, school, or department as this allows for greater potential interaction and discourse between teachers.

In addition to the critical features just outlined, Desimone (2009) argues that it is necessary to have an operational theory of how professional development can influence both teacher practice and student outcomes. She presents a core theory of action for TPL, according to which:

- 1. Teachers experience effective TPL activities
- 2. The TPL increases the teachers' skills and knowledge and/or alters their attitudes and beliefs
- 3. The content of teachers' lessons and/or their approach to pedagogy is improved by these new skills and knowledge
- 4. These improvements in instruction lead to enhanced student outcomes.

This model allows not only for a theory of teacher change, i.e., that the professional development experience has changed the teachers' knowledge, beliefs, and/or practice, but also a theory of instruction, i.e., that student achievement is influenced by subsequent change in teacher instruction. Desimone's (2009) evaluation model is premised on the assumption that TPL is focused on subject content matter. It is this model that Merchie et al. (2018) use as a starting point for their extended evaluative framework.

King (2014)

King (2014) references the work of Bubb and Earley (2010) who in turn extended Guskey's (2002a) earlier model for evaluating the impact of TPL. King (2014) uses both frameworks as a starting point on which to build a revised professional development evaluation framework.

Bubb and Earley's (2010) framework contains a total of 12 levels. The first three levels in this model are: *baseline picture, goals,* and *planning.* It is emphasised that student and teacher outcomes are likely to be improved if planning is adequate. This is in line with Guskey's proposal (discussed earlier) whereby planning for TPL should begin by considering student outcomes.

The next five levels of Bubb and Earley's (2010) model are: the TPL *experience; learning; organisational support; into practice* – degree and quality of change (process, product, or staff outcomes); and, *students' learning outcomes*. These levels can each be mapped onto Guskey's five levels as they each concern the same factors (participants' reactions to the TPL; participants' learning; organisational support and change; participants' use of their new skills; and, students' learning outcomes). One difference between these two models is that Bubb and Earley (2010) have explicitly included attitudes, whereas Guskey (2002a) does not explicitly refer to attitudes in his model. It is also relevant that Bubb and Earley account for TPL resulting in new products such as policies, new processes such as new or improved systems, and staff outcomes.

Levels 9 to 12 of Bubb and Earley's (2010) model are: *other adults in the school; other students in the school; adults in other schools;* and, *students in other schools*. These levels focus on what happens after the teacher has taken part in a TPL activity and how their actions can influence both their colleagues and their students. This is an area of evaluation which is not featured in Guskey's framework.

King (2014) presents a revised professional development impact evaluation framework which builds on Guskey (2002a) and Bubb and Earley (2010) and draws on Hall and Hord (1987). Her model adds a number of additional components which should be considered when evaluating professional development, such as systemic factors and diffusion, and expands staff outcomes to include personal, professional, and cultural impact. Teacher attitudes and beliefs are highlighted under staff personal impact. The framework also highlights the importance of collaborative practice under staff cultural impact and this includes both the impact of professional dialogue and professional learning communities (PLCs).

An important contribution of this framework is the addition of the concept of *diffusion*. In developing and testing this framework, King (2014) changed the name from cascading to diffusion to highlight the impact

of "organic unplanned rippling of practices" rather than a "deliberate planned, downward movement" of learning (p. 106).

Other evaluative frameworks examined

In addition to those outlined in detail above, a small number of additional evaluative frameworks were reviewed as part of the current work (see Appendix 1). In general, the remaining papers reviewed provided little additional value over those previously discussed and are therefore not described in detail here. In summary, the remaining papers classified as review/conceptual in the current review:

- combined the Technology Acceptance Model with Guskey's model (Pozzi, Persico, & Sarti, 2018);
- suggested that effective professional learning is determined by: a focus on content and practices that is informed by an awareness of student thinking; learning components that feature experiential and active learning; feedback that includes group review and individual reflection; collaborative practices; sustained TPL of at least one semester; and, coherence between teachers' knowledge and beliefs and the broader school system (Labone & Long, 2016);
- draw on the Concerns Based Adoption Model (CBAM), which includes seven stages and types of concern. According to CBAM (Anderson, 1997), change is a process accomplished by individuals and it is a personal experience involving developmental growth. It may be facilitated by interventions (Loh & Tam, 2017);
- add innovation and leadership to Desimone's (2009) model and argue that these are particularly important when the model is used in a country such as the United Arab Emirates where private schools have particular needs (El Afi, 2019);
- examine the addition of emotionality to Guskey's (1986) model (Loh & Tam, 2017);
- draw on Driskell et al. (2016) to develop the PrimeD framework for professional development (Professional Development: Research, IMplementation and Evaluation). The evaluation phase of the framework draws on Desimone (2009) and focuses on formative and summative assessment of Phases 1 (Design and development) and 2 (Implementation) (Saderholm, Ronau, Rakes, Bush, & Mohr-Schroeder, 2017); and,
- suggest three inter-dependent aspects of PLCs which constitute a PLC research theoretical framework: construct of PLCs; conditions-contexts of PLCs; and, causalities of PLCs, and six research design characteristics for research on PLCs: mixed-method; longitudinal; large-scale; ethnographic, experimental, and multi-level designs; Item Response Theory (IRT) models; and, intervention (Hairon, Goh, Chua, & Wang, 2017).

Commonalities and differences between TPL frameworks

As previously noted, the Terms of Reference for the current project recommended using the work of Thomas Guskey (2000, 2002a) as a starting point to explore the literature relating to TPL evaluation frameworks. Guskey's work proposes evaluating TPL across five levels (participants' reactions; participants' learning; organisational support and change; participants' use of new knowledge and skills; and, student learning outcomes). This work is highly cited in the evaluation literature and a number of researchers have used Guskey's five-level model as a starting point to develop further evaluation frameworks, with various commonalities and differences between these models/frameworks. These frameworks vary in the extent to which they view the impact of TPL in a hierarchical or cyclical manner and the consideration they give to contextual factors and individual factors that may mediate the level of impact of TPL activities.

One key difference between Guskey's (2000, 2002a) five-level model, and the work of Merchie et al. (2018), King (2016), and Desimone (2009) is the absence of consideration of the features of the TPL under evaluation in Guskey's model. Merchie et al.'s (2018) extended evaluative framework builds on previous work by Desimone (2009) and includes a list of core and structural features of the intervention

which need to be considered in TPL evaluation. Along with the core and structural features of the TPL, Merchie et al. explicitly identify trainer quality as a key factor to take into account when considering the features of the intervention.

Merchie et al. (2018) set out a roadmap for evaluating TPL, signposting key steps which should be taken before, during, and after the TPL. King (2014, 2016) also highlights the importance of considering TPL outcomes in the design phase. King's (2014, p. 106) framework for evaluating professional learning, adds the concept of diffusion which King suggests is the "*rippling*" effect of professional learning, i.e., the effect on other staff which is not deliberately planned. The importance of considering unintended outcomes is highlighted by a number of evaluation researchers.

Opfer and Pedder (2011) critique the focus on the micro-context (the individual teacher or specific TPL activity) in evaluation of TPL and state that the *meso* (institutional/school) and *macro* systems (education system) that influence learning also need consideration. Merchie et al. (2018) address this concern by considering two levels of contextual factors: macro-societal conditions (e.g., policy, curriculum) and the micro-context (e.g., school management, school leadership, resources). Merchie et al. also highlight the need for more research on the contextual, teacher, and student factors that may influence the impact of TPL. A recent article by Compen et al. (2019) criticises the linear presentation of the model proposed by Merchie et al. for its failure to capture the interdependencies between the components and they argue the need for a cyclical model.

Muijs and Lindsay (2008) add value for money to Guskey's five-level model; a key consideration for any TPL activity is whether or not it is worth the investment. Finally, an important addition by Soebari and Aldridge (2015) is the inclusion of student perspectives of the learning environment to the evaluation agenda. While students' personal characteristics are included in other models, their perspectives on the learning environment are absent from other frameworks.

2.4 CHALLENGES AND ENABLERS OF TPL

The previous section of this chapter focused on frameworks for the evaluation of TPL although it was mentioned in passing that participation in TPL has been shown to vary in association with certain teacher characteristics such as gender, teaching experience, and qualifications (e.g., OECD, 2009). This section outlines challenges and enablers of TPL that have been identified in the literature.

There are undoubtedly many factors which can hinder or facilitate a teacher in participating in TPL and implementing their new knowledge and skills in the classroom. In general, this section draws on findings from international research literature but where possible, reference is made to the Irish context. Knowledge of the Irish context will be further developed through the survey of teachers and principals taking place as part of the current research.

The **school context** (including location, enrolment size, and socioeconomic status) is likely to influence needs in terms of TPL, capacity to participate in TPL, and ability to implement learning from TPL. For example, the needs of teachers in a small rural school in a less well-off area are likely to differ from those of teachers in a larger more affluent urban school. Guskey and Yoon (2009) highlight how school context influences TPL participation while Buczynyski and Hansen (2010) discuss how school context may give rise to barriers in implementing knowledge gained in TPL activities. School context issues such as ability to find substitute cover and financial resources for TPL are all examples of how school context can influence TPL participation and impact (Bucznyski & Hansen, 2010).

For their part, Darling-Hammond, Hyler, and Gardner (2017) discuss how certain barriers may be within teacher control but very difficult to overcome, given the challenges of a particular school context. Examples of this would include a rural school location, far from any Education Centres offering TPL courses, or a lack of time due to either an overloaded school curriculum or a classroom which contains

students with many additional needs. Guskey and Yoon (2009) argue that even the most effective TPL tools are likely to fail if used in a context to which they are poorly suited. Similarly, even the most informative content is likely to have limited impact if presented to an audience who is unprepared to receive and use it. Therefore, it is important that a TPL initiative is suitable and relevant in a particular school context. Research also links the influence of external mandates and reform efforts, on teachers' roles and practices (see e.g., Bailey, 2000; Kennedy, 2005).

The **school culture** is an important barrier or enabler of TPL. School culture has also been recognised as a key area of wellbeing promotion in the *Wellbeing Policy Statement and Framework for Practice 2018-2023* (DES, 2018b). While school culture may have a specific role to play in TPL relating to student wellbeing, it also has a role to play in TPL more generally. Moir (2018) states that individuals within an organisation (school) "*should feel committed and confident in their collective ability to change practices*" (p. 2). Kwakman (2003) highlights the importance of a school environment which intentionally stimulates participation in professional learning activities through appreciation and encouragement.

School leadership has been identified as an important enabler of TPL. Research supports the significant influence of school leaders on teacher professional development (Tschannen-Moran, 2009). School leaders play a significant role in establishing the norms and structures that allow for schools to develop and operate as professional learning communities. School leaders have a central role to play in supporting and monitoring professional development and pivotal to this is the promotion of a moral purpose among staff members towards intrinsically motivating them to adopt change and to embrace new learning. Like communities of practice models mentioned in this chapter (in relation to Kennedy's (2014) work), distributed/shared leadership models are also spotlighted in the literature promoting personal and professional development in teachers (Halverson, 2003; Spillane, 2006; Spillane, Halverson, & Diamond, 2001).

Time is another important factor, necessary for engagement in TPL. A lack of time has often been identified as a barrier to both participation and effective implementation of TPL initiatives (Desimone, 2002). Educators need time not only to participate in TPL, but also to reflect on what they have learned, analyse their students' work, and develop new and improved approaches to their teaching. With many educators already dealing with an overloaded curriculum and extremely busy school days, it can be hard for them to find time to dedicate specifically to these TPL initiatives and to carry out the necessary planning and reflection needed to effectively implement what they have learned in the classroom. Sustained support from support organisations for TPL is also important and is the premise upon which some of the organisations represented on the Steering Committee for the current research offer support to schools and teachers, e.g., PDST's sustained support. In a paper relating to primary level science education in Ireland, Broderick (2018) recently highlighted that support for TPL should be sustained during implementation.

It is also important to note that even when teachers have time to spend on professional development activities, this does not always result in improved student outcomes (Kennedy, 1998). Simply doing ineffective things for a longer period of time does not make them any more effective. So, while adequate time is vital to effective implementation of TPL, simply giving teachers more time for professional development activities does not always lead to an increase in the effectiveness of the implementation of these activities. This extra time will only be effective under certain conditions - it needs to be well organised, clearly focused, carefully structured, and purposefully directed (Birman, Desimone, Porter, & Garet, 2000; Garet et al., 2001; Guskey, 1999).

Lack of resources was noted by Bucznyski and Hansen (2010) as the largest barrier to effective professional development implementation. It has been shown that teachers may struggle to locate or purchase items needed to implement the learning from the TPL in their classroom (Darling-Hammond et al., 2017). A lack of resources can present a very major challenge for schools which have financial constraints or are located in areas with a high level of poverty.

Identifying professional development needs can often prove to be an obstacle to the implementation of effective professional development. TPL activities for teachers are often provided without an understanding of what it is that these teachers actually need (Tooley & Connally, 2016). Unless systems are in place to ensure that school leaders are able to effectively and efficiently identify teachers' needs and subsequently provide them with the necessary TPL to meet these needs, the TPL that teachers are partaking in will not be as effective as it should be.

Collaborative problem solving can be an enabler of TPL under certain conditions. The use of collaborative problem solving during professional development activities has been argued to foster a sense of shared purpose and community amongst those taking part (Supovitz, 2002). However, the literature has also highlighted how collaborative problem solving can sometimes act as a barrier to TPL. This can happen when educators collaborate to inhibit change or restrict advancement. It has been found that educators will often choose the easiest route which is most closely aligned with their current practice, rather than the route that will offer their students the greatest benefits, even when presented with evidence of the effectiveness of particular strategies (Corcoran, Fuhrman, & Belcher, 2001).

Implementation science is another key issue to consider in relation to TPL. Moir (2018, p. 1) cautions that *"many interventions are implemented without acknowledging the role of implementation science"*. She argues that **implementation** should be considered in intervention design and that programme fidelity is important to ensure that the intervention is sustainable over time. Moir refers to Bronfenbrenner's (1979) *ecological systems theory* (which will be discussed in more detail in Chapter 5), and the importance of acknowledging the various systems which may influence the implementation of an intervention (e.g., political, social, cultural influences). She notes that it is best if the intervention aligns with the external influences that may impact on its success. Moir also notes the pressure on schools to implement positive changes quickly; however, she argues that it is better to invest time to ensure that interventions are implemented correctly.

Specific challenges relating to collaborative professional learning for inclusive education were recently highlighted. With a focus on inclusive education for those with special educational needs (SEN) in Ireland, Ní Bhroin (2017) highlighted how collaboration between classroom teachers and special education teachers within a school led to more coherent teaching-learning experiences, which facilitated the intentional learning of the special needs student. Challenges to inclusive education in the Irish context include a lack of collaborative practice which could support teaching, curriculum planning, and individual learning (King, Ní Bhroin, & Prunty, 2018) and insufficient access to ITE in the area of special education (O'Gorman & Drudy, 2010).

Further challenges to collaboration in the Irish context were outlined by Ní Bhroin and King (2020). During the course of their research, it was found that many educators felt that collaboration was challenging due to insufficient time, a shortage of other professionals with whom to collaborate, and problems with communication. Educators felt that they needed dedicated time to both plan for and review collaborative practices, with one teacher emphasising that they found it hard to keep up with their regular day-to-day responsibilities in the classroom and therefore did not feel they had time to also worry about collaborating with their colleagues. Another issue raised was the long wait times that children with additional needs must often endure to access required professional services such as speech and language therapists or occupational therapists. If a child with additional needs does not have access to relevant support services, it is impossible for their classroom teacher to collaborate with these professionals. Ní Bhroin and King's (2020) analysis also revealed that the lack of communication between classroom teachers and special education teachers regarding class plans was a challenge, as it is often helpful for the special education teacher to pre-teach a lesson to the child before they encounter it in the classroom. Other barriers to TPL noted in the Irish context were a lack of suitable opportunities, family responsibilities, and conflict with teachers' work schedules (Gilleece, Shiel, Perkins, & Proctor, 2009). These barriers were identified over a decade ago in the OECD's Teaching and Learning International Survey (TALIS; OECD, 2009) when it was also noted that around 50% of teachers in Ireland reported that they would

have liked to have participated in more professional development than they had done in the previous 18 months (Gilleece et al., 2009).

Aside from the barriers and enablers to TPL identified in the literature, it is relevant also to consider the relevance of 'buy-in' from the teachers and schools leaders who participate in TPL programmes. This issue is particularly important at the pre-design stage (i.e., when the needs and motivations of the participants need to be considered) and also in evaluation (whereby participants' own investment and engagement in the process would appear critical). The issue of 'buy-in' (and how it interacts with barriers and enablers of TPL) is one of the themes emerging in the ERC's ongoing evaluation of the Digital Learning Framework (Cosgrove, Moran, Feerick, & Duggan, 2019).

A wide variety of factors have been identified in the international research literature which influence both TPL participation and implementation. As noted in the introduction, comparatively less is known about specific barriers and enablers in the Irish context and the extent to which these may differ from factors identified internationally. As part of the current research, a survey will be carried out with both principals and teachers in Irish primary, post-primary, and special schools. This survey aims to collect more information about the challenges that school leaders and teachers face when trying to participate in and implement TPL, specifically in the Irish school context. It is hoped that the survey results will help determine if the barriers identified in TALIS remain relevant or have since been addressed.

2.5 CONCLUSIONS

The purpose of the current research is to develop a framework for TPL capable of describing and evaluating TPL provided by the Department and its support agencies and services. This chapter describes a number of seminal papers pertaining to the evaluation of TPL (including Desimone, 2009 and Guskey, 1986, 2000, 2002a) and outlines how these have been extended in various ways, including in an Irish context by King (2014). We focus in particular on a number of recent extensions to these earlier papers and give detail of Compen et al. (2019) and Merchie et al. (2018). These papers, as well as work by Soebari and Aldridge (2015) which incorporates student perspectives of the learning environment, are of particular relevance for the development of a TPL evaluation framework in Ireland. Findings from the review highlight that what is of key importance in TPL evaluation are the core features of effective TPL, rather than the mode of delivery or type of activity. This is in line with the Teaching Council's (2016a) *Cosán Framework for Teachers' Learning* (discussed in detail in Chapter 4) which recognises the various different learning processes that impact on teachers' learning and practice, but does not suggest any hierarchical order of such activities.

The final section of the chapter outlines barriers and enablers to TPL, with most of the evidence drawn from international research. The survey of teachers and principals conducted for the current research will identify barriers and enablers in the Irish context as currently, comparatively little is known about specific issues in the Irish context. The final chapter of this report will make some conclusions and recommendations on a preferred conceptual model of TPL, and desirable features of both the descriptive and evaluative components of a TPL framework.

CHAPTER 3 Impact assessment and process evaluation of teachers' professional learning

This chapter presents some of the key considerations which need to be taken into account when evaluating and measuring the impact of teachers' professional learning (TPL). It also outlines methods of evaluating TPL identified in the key TPL evaluation framework papers cited in Chapter 2 and discusses various methods of process evaluation. There is necessarily some overlap between Chapters 2 and 3: the focus of Chapter 3 is an exploration of the *applications* of features of the models described in Chapter 2.

The Terms of Reference for the current study recognise that measuring 'impact' is complex generally and particularly so in the current research. One reason for this is that both the TPL evaluation framework which will be developed and the area of TPL to which the evaluation framework will be applied (student wellbeing) are quite broad and layered. The Terms of Reference also indicate that Guskey's (2000, 2002a) framework is used as a starting point for the evaluation of impact in the current study.

For the purposes of this review, the assessment of impact will involve a multimethod approach that includes cross-validation of measures, with the overall goal of identifying which forms of assessment may be best suited to understanding impact at various levels. It is noted that the five levels of professional development evaluation identified by Guskey (participants' reactions; participants' learning; organisation support and change; participants' use of new knowledge and skills; and, student learning outcomes) provides an initial structure.

The first section of this chapter briefly summarises some key points from the literature on evaluation in the social sciences and mentions some of the general points which need to be considered in the assessment of impact, regardless of the domain in which the evaluation is taking place. The second section focuses on evaluating TPL specifically (including *why* evaluation should be conducted). In the third section, we consider how TPL should be designed to facilitate evaluation. The third and fourth sections describe respectively *what* should be evaluated and *how* an evaluation might be conducted. In the fifth section, consideration is given to *who* evaluates TPL. Finally, a concluding section is presented.

3.1 EVALUATION IN THE SOCIAL SCIENCES

For the purposes of the current study, a useful definition of programme evaluation comes from Weiss (1998, p. 4) who asserts that programme evaluation can be defined as "*the systematic assessment of the operations and/or outcomes of a program, compared to a set of explicit or implicit standards, as a means of contributing to the improvement of the program*". In considering the key elements of this definition, Guyadeen and Seasons (2018) emphasise the need for acceptable social science research methods. They note the emphasis on both programme operation and outcomes; i.e., it is not sufficient to look only at effectiveness but evaluation should also consider the process of delivering the programme, inputs, outputs, and cost effectiveness. Thirdly, they suggest that a key aspect of evaluation is that it should make programmes work efficiently and effectively and argue that it acts as a means of ensuring accountability. Chelimsky (2006) recognises very similar purposes of evaluation and suggests that its

three main purposes are: to generate new knowledge about efficacy; to hold programme managers and policy-makers accountable; and, to support a culture of learning and improvement in institutions.

Impact assessment is one specific type of evaluation where impact can be defined as the: "*positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended*" (OECD, 2010, p. 24). Peersman (2015) notes that an impact evaluation involves causal attribution (also known as causal inference) and therefore must establish what has been the cause of observed changes (i.e., impacts) produced by an intervention.

In terms of assessing impact, an issue which emerges in the literature is how to judge the quality of evidence emerging from an evaluation; i.e., based on the evidence, how sure can we be that intervention x caused outcome y? The Oxford Centre for Evidence-Based Medicine (2011) presents a hierarchy of levels of evidence, where the top level (Level 1) represents evidence from a systematic review of randomised trials and the bottom level (Level 5) represents evidence drawn from mechanism-based reasoning. Such systems are common in health research but may be less applicable in the social sciences. The U.K. Department for International Development (2014, p. 8) suggests that "there is no universally applicable hierarchy of research designs and methods" and they propose that "different designs are more or less appropriate for different research questions". They argue that "typically, stronger bodies of evidence are likely to be characterised by the availability of a wide spectrum of evidence which uses, and triangulates findings from several research designs and methods".

Given that a hierarchy of evidence can be unsuitable in many settings, Petticrew and Roberts (2003) propose a matrix-based approach and they show how different research methods can answer more or less effectively the different questions of interest in an evaluation (i.e., examining effectiveness; process of service delivery; salience; safety; acceptability; cost effectiveness; appropriateness; and, satisfaction with the service). For the purposes of assessing effectiveness (i.e., does an intervention work), they suggest that cohort studies, randomised-controlled trials (RCTs), quasi-experimental studies, and systematic reviews are appropriate, with the strongest evidence provided by systematic reviews of multiple studies.

In an interesting example of assessing impact when an RCT was not possible, Green et al. (2015) consider how the internal and external validity of a natural experiment can be strengthened by integrating the logic of quasi-experimental methods with inductive qualitative analysis. They suggest that their approach may even have methodological advances over randomised designs. The project evaluated by Green et al. (an examination of the impact on young people of introducing free bus travel in London) has some similarities with TPL insofar as they describe it as "*a 'messy' intervention in a complex system*" (p. 395), a description which could arguably also be applied to TPL, given the variety of models, methods, purposes etc. For the purposes of the evaluation conducted by Green et al., three main elements were used: a logic model which mapped out the main pathways of interest to policy makers and practitioners; an epidemiological study that used best practice in the evaluation of natural experiments; and, a qualitative component. The authors suggest that the combination of these methodological approaches provides 'good enough' evidence of the impacts of the free travel scheme.

The logic model used by Green et al. (2015) is a key component of an impact evaluation. Peersman (2015) highlights the importance of a theory of change (or logic model) as this gives "an explanation of how activities are understood to produce a series of results that contribute to achieving the ultimate intended impacts". Peersman advocates using a theory of change with any research design that aims to infer causality.

3.2 KEY CONSIDERATIONS IN EVALUATING TPL

In this section, we turn to the specific considerations necessary when evaluating TPL. The purposes

of carrying out evaluations of TPL and assessing impact mirror those outlined in the previous section regarding the general purposes of evaluation. That is, in answering the question *why* evaluate TPL, we can refer to the general purposes outlined by Chelimsky (2006) whereby evaluation is carried out to generate new knowledge about efficacy; to hold programme managers and policy-makers accountable; and, to support a culture of learning and improvement in institutions. Impact assessment in particular focuses on the efficacy of an intervention. Applying these general principles to TPL, the purposes of evaluation are to determine the impact of participation on teachers and students; to support ongoing improvement in the quality of TPL; and, to support accountability (e.g., the *Action Plan for Education 2018* recognises that CPD should be evaluated. This will help to ensure that it meets the needs of teachers, schools, students, and the Department).

The wide array of TPL activities in which teachers engage and the variety of TPL models underpinning these activities are key considerations in developing a framework for the evaluation of TPL. The resultant framework needs to be adequately broad to account for the variety of activities and models. The list of TPL models outlined by Kennedy (2014) is by no means exhaustive, but serves to demonstrate the variety of TPL activities in which teachers and school leaders engage. The TPL models outlined by Kennedy (2014) range in purpose from the transmission of knowledge from an expert facilitator to teachers, to more transformative TPL activities which aim to transform teaching practice considerably (see Chapter 2 for a detailed description). This is reflected in an Irish context in the *Cosán Framework for Teachers' Learning* (The Teaching Council, 2016a), which includes a lengthy list of the various learning activities ('processes') in which teachers engage.

For their part, Lloyd and Davis (2018) consider key features of TPL, such as the *domain of influence* (whether professional learning activities are mandated or teacher identified), *the sphere of action* (whether learning is formal or informal), and *autonomy-transformation* (whether TPL is individual or guided). Taken together, the work of Kennedy (2014) and Lloyd and Davis (2018) shows that both the model of delivery and the intended outcomes vary considerably across TPL activities, giving rise to one of the main challenges of successful TPL evaluation – encompassing *the spectrum of TPL activities or models which may need to be evaluated and the variety of features of TPL activities*.

A second key consideration is the role of context and the need for the evaluation framework to recognise that what works in one context may not work well in another. Chapter 2 outlined the importance of school culture and school leadership as enablers of TPL. It is clear that these variables are likely to have an impact on the outcomes associated with TPL in a particular school. It is therefore difficult to disentangle TPL impact evaluation from school contextual factors, school culture, and school leadership.

Desimone (2009) advocates the use of a critical features approach to measuring the impact of TPL; i.e., she recommends considering the extent to which a TPL activity has a content focus, uses active learning approaches, is coherent with school and wider policy, is of a sufficient duration, and involves collective participation. Similarly, Darling-Hammond et al. (2017, cited in OECD, 2017, p. 8) argue that successful professional development with demonstrated benefits for students usually displays one or more of the following characteristics (many of which mirror those of Desimone):

- It is content focused.
- It incorporates active learning, utilising adult learning theory.
- It supports collaboration, typically in job-embedded contexts.
- It uses models and modelling of effective practice.
- It provides coaching and expert support.
- It offers opportunities for feedback and reflection.
- It is of sustained duration.

However, Bobis, Kaur, Cartwright, and Darragh (2020) highlight that adherence to such a list of characteristics is not sufficient to guarantee effective TPL and they cite empirical research which

indicated that teachers have been found to report one-off TPL events as highly effective (Beswick, Fraser, & Crowley, 2017). Therefore, in line with Beswick, Anderson, and Hurst (2016), it appears that a *"nuanced approach"* is required for the measurement of TPL effectiveness.

A key challenge for the current research study is the successful development of an evaluation framework which is flexible enough to assess impact of TPL design, development, facilitation, implementation, and improvement. Merchie et al. (2018) propose key conceptual and methodological challenges relating to the evaluation of professional development initiatives (PDI⁸). In their work, the first challenge concerns defining *what* should be evaluated and the second relates to deciding *how* to evaluate the aspects of the TPL in which change is expected. However, before considering what to evaluate and how to do it, it is worth exploring how the design of TPL can facilitate effective evaluation at a later stage. Indeed the processes of design and evaluation are inter-related as the evaluation of one TPL activity should influence the design of a subsequent activity and a TPL activity which has been carefully designed will have identified in advance the outcomes to be evaluated. In the Irish context, the PDST's conceptual framework, used to underpin all of PDST's professional development for teachers and school leaders (PDST, 2017), includes all three components of design, facilitation, and evaluation, thus illustrating this connectedness.

In the Irish context, the CSL has developed an endorsement process (CSL, 2019) which aims to afford providers of professional learning for school leaders on the leadership continuum with "*objective and evidence-based information that will allow them and those funding the provision to ensure the ongoing quality and enhancement of leadership professional learning*" (p. 5). The CSL recognises that not all learning for leadership is "*programmatic*" and that the criteria need to be broad enough to encompass the evaluation of different types of learning activities, including those that are bespoke and/or local. The criteria for endorsement cover three broad areas of provision:

1. Professional learning and delivery

This area requires providers to articulate how their provision:

- Reflects CSL's Model of Professional Learning (outlined in Chapter 4 of this report)
- Reflects the provider's articulated vision, mission, and values
- Addresses the specific needs of school leaders in Ireland taking culture, context, and career stage into account
- Is provided by high-quality personnel, committed to their own on-going professional learning and system improvement
- Reflects national priorities and policies, as appropriate
- Has the potential for collaboration with other providers, where appropriate.

2. Process: Management and administration

High-quality professional learning requires effective management and administration. Provider(s) should:

- Have efficient and effective administration backup
- Have an accurate and clear marketing plan
- Have a clear communication plan
- Have systems to manage data gathering for the purposes of evaluation

⁸ Merchie et al. (2018) use the term professional development initiatives (PDI). As previously noted, the term TPL is used in the current study in order to reflect the critical thinking, continuing learning, and reflective practice in which teachers engage (Bobis et al., 2020). Original terms such as CPD and PDI are used in direct quotations or if the original term is required to conserve the intended meaning.

- Provide ease of access for the target audience through the use of a blended approach if appropriate
- Provide participants with an opportunity to engage through the medium of Irish according to context.

3. Evaluation and impact

This section asks providers to consider how they might evaluate the impact of the professional learning that they are providing. It is acknowledged that measuring the impact of professional learning on student outcomes is very difficult. However, there should be an awareness by providers of the potential to seek information from participants around changes to practice and/or increases in knowledge and understanding.

The professional learning should:

- Include a systematic and rigorous strategy to measure impact
- Enhance participants' knowledge and understanding of the role of the Irish school leader
- Have recognised impact on the school leader's practice
- Impact positively on the person of the leader
- Build and enhance collaboration both within and between schools
- Have a positive impact on the learning experiences, outcomes and wellbeing for students and school communities.

3.3 DESIGNING TPL TO FACILITATE EVALUATION

For the purposes of designing TPL, Guskey (2003, 2014, 2016) advocates considering in reverse the five levels of his evaluation model. That is, he suggests first thinking about the desired student outcomes from TPL and then deciding how a teacher's use of new knowledge and skills in the classroom may impact on students' learning outcomes. From here, it is possible to consider the organisational support and change needed for teachers to be able to transform learning from TPL to bring about positive changes in student learning outcomes.

King (2016) outlines an alternative framework for planning and evaluating TPL, which she highlights as a problematic area for schools (Table 3.1). This framework complements Guskey's (2000) insofar as it focuses on desired outcomes as the first stage of the planning and design process.

King's (2016) framework commences with a baseline assessment of both the individual teacher and school and what the TPL aims to achieve, then moving on to student outcomes and the organisational and staff/teachers' practices needed to achieve effective student outcomes. The framework incorporates three systemic factors (support; initiative design and impact; and, teacher agency) which King (2016) believes to be a crucial consideration for the planning of TPL. It is these systemic factors which may mediate the impact of professional development on student outcomes. The framework also considers the learning outcomes for teachers and the knowledge, skills, and attitudes that may be needed for teachers to implement change following their participation in TPL. The framework is intended for use by teachers and school leaders to "bridge the gap between teacher professional development and implementation and sustainability of new practices to result in improved student outcomes" (King, 2016, p. 590). King (2016) highlights the need for more research on the impact of systemic factors, using a variety of different methods to evaluate the impact of these outcomes.

Planning	Key consideration	Questions
Baseline	Individual/School self-evaluation targets	Where is the school at present? What do we wish to achieve?
Degree and quality of change	Student outcomes	What will the students be able to do (cognitive, affective, and/or psychomotor levels)?
	Organisational	What products/processes can help to achieve the outcomes?
	Staff/Teachers' practice	What instructional practices will produce the desired student outcomes?
	Diffusion	How can diffusion of practices be enabled (to other teachers and students)?
Systemic factors	Support	What support will teachers need to enhance engagement with professional development?
	Initiative design and impact	Is the design structured, research-based, feasible, and focused?
	Teacher agency	Are the teachers who participate open, willing, and motivated to change, in teaching practice or otherwise? Can changes in pedagogic and pedagogic content knowledge be facilitated?
Learning outcomes	Teachers' practice	What knowledge, skills, attitudes will be needed to implement changes?
Professional development experience	Activities/experiences/models	What activities/training/model of professional development is needed for teachers to gain from the experience? Does the model fit the purpose?

Adapted from King (2016, p. 589).

Note that King (2016), in reference to previous literature, distinguishes between teacher professional learning, which she defines as the "*process of learning leading to a growth of teacher expertise*" (p. 574) and teacher professional development as the "*processes, activities, and experiences*" that provide opportunities for teachers' professional learning (p. 576).

3.4 DEFINING THE TPL ACTIVITY: WHAT TO EVALUATE

As described in the previous section, well-designed TPL should have outlined the desired and expected outcomes arising as a result of participation in the TPL; i.e., *what* change or changes are expected as a result of teachers' participation in the TPL? This is a prerequisite for effective subsequent evaluation of TPL. Defining the changes which are expected is a key aspect of developing a logic model for an intervention (see e.g., CDC Division for Heart Disease and Stroke Prevention, nd) and as noted earlier in this chapter, a logic model or theory of change is a necessary prerequisite for assessing the impact of an intervention.

Merchie et al. (2018) devised a list of core and structural features of TPL which are a useful starting point

for TPL evaluation. They critique Guskey's (2000) five-level model of TPL evaluation for the absence of a description of the features of effective TPL. There is some overlap between the features described by Merchie et al. (2018) and key features of TPL described by Lloyd and Davis (2018); however, the core and structural features described by Merchie et al. (2018) provide a more extensive and comprehensive description of the key characteristics of TPL. Merchie et al. (2018, p. 148) describe core features as: "features that refer to the core substance of the PDI" and they define structural features as: "characteristics of the activities' structure or design".

Looking firstly at the core features, these incorporate content focus; pedagogical knowledge; coherent and evidence-based; and, ownership. These relate to the substance of the TPL and are a useful starting place when considering the anticipated impact of TPL. For example, when considering the *content focus* of the TPL activity, it may be helpful to think of the anticipated student learning outcomes, i.e., *what* are the intended learning outcomes for students and *how* are these outcomes best assessed. When considering the core feature of *pedagogical knowledge*, it may be useful to think of the skills and knowledge that teachers are expected to gain through their participation in the TPL and *how* impact in the area of teachers' skills and knowledge can be measured. Merchie et al. (2018) underscore the link between pedagogical knowledge and student outcomes in their review.

Whether the TPL is *coherent and evidence-based* also needs consideration (Merchie et al., 2018). Given the existing evidence base for the TPL and the underlying theory on which it was developed, are changes anticipated in participating teachers' knowledge, skills, and teaching practice? Will these changes result in a change in outcomes for students? The core feature of *ownership* also needs consideration and *how* the impact of TPL may be enhanced if teachers have ownership over the content and process of the TPL. This is a key consideration for TPL design in particular.

Turning to the structural features of TPL, these refer to: *duration; collective or collaborative participation; school or site based; active learning;* and, *trainer quality*. There is some evidence that TPL is more effective when spread out over a longer duration, e.g., a semester (Desimone, 2009). It is also useful to consider the extent to which the TPL supports teacher collaboration with peers and whether or not it is incorporated in teachers' daily work. Active learning methodologies are recommended and Merchie et al. (2018, p. 149) advise that teachers benefit from being "*co-creators*" of knowledge rather than "*consumers*". Finally, the quality of the trainer is relevant, as the trainer acts as a facilitator in supporting teachers to construct knowledge.

As outlined in the previous section, both Guskey (2003, 2014, 2016) and King (2016) highlight the importance of reverse planning; i.e., they recommend planning on the basis of the expected student outcomes from a TPL first and working backwards through the various levels or components of their evaluation frameworks to determine *how* these student learning outcomes can be achieved through the selected TPL. Merchie et al (2018) emphasise the importance of setting clear and measurable objectives from the outset accounting for both expected and unexpected/unintended outcomes. They also caution that certain factors may impede the implementation process for a TPL activity. Merchie et al. (2018) note that previous research has highlighted the importance of gathering data from multiple informants using multiple measures across different components of their extended evaluative framework.

3.5 HOW TO EVALUATE A TPL ACTIVITY

Merchie et al. (2018) summarise some of the main measures used to assess each component of their extended evaluative framework for TPL. The methods of evaluation they suggest are outlined in Table 3.2. Merchie et al. (2018) also present a summary of the main advantages and disadvantages of the various methods used to measure the impact of TPL. The authors divide the methods into quantitative and qualitative measures. They argue that the key advantages of quantitative measures are that they are less costly; data gathering is easier and efficient for larger samples; and, empirical evidence of

associations between variables can be demonstrated. Disadvantages of such measures are that they can be subject to biases such as response bias; they rely on self-report data and can be completed hastily; and, they may not accurately reflect real practice. In addition, quantitative methods (e.g., questionnaires and surveys) can lack the rich, contextual information which qualitative methods (e.g., interviews and focus groups) provide and these data can provide further insight into the process underpinning the area of investigation.

Component	Measure
Features of the intervention	Checklists or rubrics Observation protocols either using video or audio Fidelity forms Questionnaires Interviews
Teacher quality	<i>Quantitative measures:</i> Knowledge tests, interviews, vignettes, simulation videos, questionnaires <i>Qualitative measures:</i> Interviews, digital logs, classroom observations, reflection documents
Teaching behaviour	<i>Quantitative measures:</i> Interviews, questionnaires, documents, rating scales <i>Qualitative measures:</i> Direct or indirect observations, writing logs
Student results	Self-developed or standardised tests Self-reports Interviews Portfolios Analysis of study materials Observations
Contextual factors	Policy documents (national) School records, questionnaires, interviews
Personal characteristics	Questionnaires, interviews School records

Table 3.2: Evaluation measures outlined in Merchie et al.'s (2018) Extended Evaluative Framework

Adapted from Merchie et al. (2018, p. 153).

Merchie et al. (2018) summarise the main advantages of qualitative measures as having the ability to provide deeper insight into complex interactions; providing direct and real time measurement (e.g., observations); and, the ability to capture rich data. The key disadvantage proposed for qualitative measures is that they may also be subject to bias albeit in a different manner than quantitative measures. Also, they are typically more invasive than quantitative measures, and data gathering, scoring, and analysis are typically more intensive than when quantitative methods are employed.

Guskey (2016) suggests the most appropriate method of evaluation for each level within his evaluation model, highlighting the need for coherence between *what* is evaluated and *how* the evaluation is conducted. To evaluate *participants' reactions*, he suggests collecting data using questionnaires or surveys containing a mixture of rating scales and open-ended response questions. While he acknowledges that gathering data on participants' reactions to the TPL provides limited information in relation to the quality of the TPL, he proposes that such information can help to develop the design and facilitation of TPL. As previously noted, Guskey's (2000, 2002a) model is hierarchical in nature and therefore positive evaluation at each level is seen as a pre-requisite for the next level.

Participants' learning is often evaluated with a pre- and post-TPL assessment, and a variety of methods can be employed to assess impact including assessments, skills demonstrations, and oral or written personal reflections. Consideration of unintended outcomes is necessary at this level. These could be either negative (e.g., a decline in student achievement scores as a result of increased student retention) or positive. Depending on the goals of the TPL that has taken place, information for evaluation of *organisational support and change* can take different forms. School records and minutes from follow-up meetings could be examined, and questionnaires could be administered. School administrators may also take part in structured interviews, as well as TPL participants.

The main thing which must be investigated when measuring the impact of *participants' use of new knowledge and skills* is whether the new knowledge and skills that participants learned through their professional learning experience made any difference to their professional practice. In order to ensure only relevant data are being gathered at this level of evaluation, clear indicators of both the degree and quality of the implementation of this new knowledge and skills must be specified. A period of time should pass after the professional learning experience during which participants can implement the new ideas and practices in their work, before data can be gathered. Sometimes, evaluators may need to gather data at multiple time intervals, as implementation tends to be a gradual and uneven process. Questionnaires, structured interviews, oral and written personal reflections, or examinations of journals and portfolios may be used to gather data at this level. Guskey (2016) suggests that the most accurate and useful data are often gathered using direct observations which should always be *"kept as unobtrusive as possible"* (p. 35).

Depending on the goals of the specific professional learning course, the *student learning outcomes* being measured at the final level of Guskey's (2000, 2002a) model will differ. At this level, it is important that evaluators are aware of the important unintended outcomes that may result from a professional learning endeavour. Evaluators must also provide multiple sources of information which match the needs and perceptions of different stakeholder groups, as it is unlikely that providing a single indicator of success will be sufficient for each and every stakeholder involved in the organisation (Guskey, 2012). Measures of student learning can include cognitive indicators of performance such as standardised or classroom assessments, and affective and psychomotor or behavioural indicators of student performance. Surveys which measure students' views on school, evidence of students' attendance patterns, and parents' or families' perceptions can also be especially informative (Guskey, 2002a).

Each of Guskey's (2000, 2002a) five levels are important and no one level should be left out from the evaluation process. Guskey (2016) highlights that the data at every level can be used for improving the quality of professional learning endeavours. Guskey (2016) also warns that determining that a TPL is effective at one level, does not necessarily mean that the TPL will be successful at other levels. Even though success at each level is a prerequisite for success at a subsequent level, success at only one level is not sufficient to create change. Breakdowns can occur at any level and will affect success at subsequent levels.

Desimone (2009) proposed that the three most common methods used to collect data to measure the impact of TPL are observations, interviews, and surveys or questionnaires. Desimone (2009) argues that a bias for or against particular data collection methods is often evident in the literature.

Desimone (2009, p. 188) states that "the argument that teachers' own assessments of their behaviour is not first-hand evidence bears examination". She challenges the notion that observations are always unbiased and surveys are the only feasible way to gather data where the sample of participants is large. Desimone (2009) reviewed early publications which compared these methods of data collection and concluded that the three methods do not always elicit the same information and findings. She critiques the methodological weaknesses of early research and states that the findings of more rigorous studies, in which the observer and teacher self-report protocols are kept consistent for example, reveal moderate to high correlations between these methods. Desimone (2009) concludes that where teacher behaviour is the focus of research, rather than teacher evaluation, i.e., *what* the teacher did rather than *how* well they did it, then observations, interviews, and surveys may be consistent in their findings. She suggests that it is the quality of the measurement instrument that is important in reducing biases in data collection rather than the method of data collection. Desimone (2009) also cautions that the specific research question should be considered and matched to the most appropriate method of data collection to address the research aims.

Boylan and Demack (2018) reconceptualise professional learning in an attempt to offer a new typology which could be used by evaluators to develop a theory of change model for specific professional development innovations. They note that an advantage of using an RCT is that it can establish whether or not an effect has occurred as a result of an intervention (such as a TPL). Therefore, potentially, findings of an RCT can imply causality. However, Boylan and Demack (2018) argue that other additional methods may be required in order to establish *why* this potentially causal relationship exists. The need to triangulate evidence from different sources was discussed earlier in this chapter in relation to the work by Green et al. (2015) who combined data from a natural experiment with qualitative data.

There are several examples in the TPL literature demonstrating how RCTs have been used successfully to evaluate TPL activities. For example, Heller, Daehler, Wong, Shinohara, and Miratrix (2012) conducted a large-scale RCT experimental study examining the impact of professional development for elementary science teachers on teacher knowledge and on student achievement. Findings showed that the test scores of teachers *who* received the interventions and those of their students were higher than controls post-intervention and that the effects were even stronger at one year follow-up.

Another example of using an RCT to evaluate TPL comes from Desimone, Smith, and Phillips (2013) who conducted a 3-year longitudinal quasi-experimental study of mathematics content-focused professional development for teachers at Fourth, Fifth, and Sixth grade in high poverty schools in the US. They examined the impact of teaching practice on student achievement, and then examined the link between professional development and the kind of teaching practice that was shown to influence student achievement. Findings indicate that when teachers taught advanced topics (rather than more basic topics) student achievement grew more quickly, and that teachers who engaged in the professional development were more likely to teach advanced topics.

As a final example, Garet et al. (2008) used an RCT to examine the effect of professional development on early reading knowledge and practice of teachers in urban high poverty settings, and on the reading achievement of their Second-grade students. Two intervention groups were compared to a control group in this study. Intervention group A attended a teacher institute and seminar series and intervention group B attended the teacher institute and seminar series and received in-school coaching. Findings show that teachers' knowledge of early reading content and instruction increased in both intervention groups as predicted, compared to a control group. Given that the provision of additional coaching for group B was anticipated to support translating teacher knowledge into practice, differences in teaching practice were predicted between the two intervention groups. Statistically significant differences were not observed between the intervention groups, but both groups used explicit instruction to a greater extent than the control group, and this group difference was statistically significant. The intervention did not impact student outcomes as measured by standardised tests. Boylan and Demack (2018) outline a number of methodological issues with the use of RCT designs to evaluate professional learning, comparing the features needed for a successful RCT with the features of effective TPL (see Table 3.3). Of course the two sets of features outlined are not mutually exclusive and despite the tensions and potential incompatibilities between effective TPL and RCT designs, Boylan and Demack advocate the use of experimental design to evaluate the impact of professional learning. They conclude that effective experimental design for the evaluation of impact of TPL should be extended to measure teacher learning and practice, in addition to student outcomes. They note that the complexity of professional learning should be considered in depth if an experimental design is to be used to assess impact.

Table 3.3: Features of an effective RCT compared to features of effective TPL from Boylan and Demack (2018, p. 347)

Features needed for RCT	Features of effective TPL
Teachers compliant with protocols	Teachers agentic and creative
Implementation consistency	Implementation localised
Uniformity	Diversity
Predictability	Unpredictable
Adoption	Adaptation
Fidelity	Variation

While RCTs are considered a 'gold standard' for measuring the outcome of interventions, the difficultly in defining clear outcomes from TPL activities should not be underestimated and the cost involved in successfully running an RCT should also be noted. As RCTs may not always be possible to implement in the context of TPL, it is useful to consider alternative research designs which can examine causal relationships between variables. These include quasi-experimental designs and non-experimental designs (Peersman, 2015). Quasi-experimental designs "construct a comparison group through matching, regression discontinuity, propensity scores or another means" while non-experimental designs "look systematically at whether the evidence is consistent with what would be expected if the intervention was producing the impacts, and also whether other factors could provide an alternative explanation" (Peersman, 2015). Other data gathering methods that could also be effective in determining the impact of TPL include the triangulation of data using multiple methods of data collection to assess the validity of findings; strong longitudinal designs with data collection at multiple time points, including longer follow-up timeframes to combat decay effects over the course of time; and, data gathering from multiple stakeholders.

3.6 WHO WILL EVALUATE THE TPL?

When planning an impact evaluation, it is important to consider *who* is evaluating the intervention. In the case of TPL, evaluation should be built into each phase (design, development, facilitation, implementation, and improvement); the evaluating role of the various actors (TPL designers, facilitators, school leaders, teachers, and students) should be clear and where more than one actor evaluates a particular aspect, their roles should be complementary. The *why* of the evaluation should be clear to those doing it. It is particularly important to define who is evaluating the TPL and why the TPL is being evaluated when considering TPL impact assessment, due to the wide range of activities that TPL encompasses.

3.7 CONCLUSIONS

This chapter outlines keys challenges associated with the evaluation of TPL and considers best practice approaches described in the literature. Too often, TPL evaluation simply assesses participant satisfaction with the TPL experience (i.e., gathers data on participants' reactions). While some researchers (e.g., Guskey) argue that this is an important aspect of TPL evaluation, this approach undoubtedly falls short of providing information which can be used to significantly enhance or improve the TPL in order to have a transformative impact on student outcomes. At the other end of the spectrum, RCTs have been successfully used in education contexts to demonstrate the impact of TPL activities.

In summary, this chapter notes that:

- The variety of TPL in which teachers participate poses a key challenge to the development of a TPL evaluation framework that is flexible enough to evaluate different types of TPL design, development, facilitation, implementation, and improvement.
- A second key challenge is determining the anticipated outcomes of a TPL activity across a number of key components and ensuring that outcomes transfer across levels to positively impact students in a measurable way. It was emphasised that outcomes should be defined from the design stage.
- It is challenging to link student outcomes directly with TPL participation although a logic model that clearly outlines anticipated causal pathways would be a useful step in the evaluation process.
- Backward planning is important in order to determine how an impact on student learning outcomes is to be achieved. Furthermore, systemic factors (support; initiative design and impact; and, teacher agency) should be considered when planning TPL.
- Evaluation methods and measures should be embedded from the start. The importance of this is emphasised by Guskey (2016), King (2016), and Merchie et al. (2018).
- All levels of a given framework may be important but success at one level may not necessarily mean impact has been achieved at other levels. TPL activities or interventions may have unintended as well as intended outcomes and these unintended outcomes can be positive or negative.
- There are well-described advantages and disadvantages of different methods of data collection and therefore, it is advised that a multi-level approach is used for impact assessment. This allows for data to be gathered from multiple informants and using multiple measures.

It is worth noting that a number of different organisations and support services in Ireland offer TPL to teachers and school leaders (see Chapter 8 of this report). These organisations and support services vary significantly in their approaches to TPL design, development, facilitation, implementation, and the level of impact assessment they carry out. It is hoped that the framework developed in the current study will be sufficiently generalisable to cater for the range of TPL activities across the various organisations and support groups. As highlighted in this chapter, the engagement of TPL providers in the evaluation process is critical, given that impact assessment and process evaluation methods should be embedded from the outset of designing a TPL. A strength of the current study is the representative nature of the Steering Committee which allows for input from TPL providers to guide the development of the TPL evaluation framework. The concluding chapter of this review will draw together findings from Chapters 2 and 3 to present a checklist of considerations for TPL evaluation.

Finally, it is hoped that data gathered as part of the survey in the current study will shed light on teachers' perceptions of the role of contextual factors, teacher characteristics, and student characteristics in impacting on the effectiveness of TPL. It was noted by King (2016) that further research is needed to better understand the role of contextual factors in influencing the impact of TPL and it is hoped that the current study can address the knowledge gap in this area.

CHAPTER 4 Teachers' professional learning frameworks in the Irish context

This chapter presents three examples of conceptual frameworks used by providers of teachers' professional learning (TPL) in Ireland to underpin their activities. Section 4.1 describes the Teaching Council's *Cosán Framework for Teachers' Learning* (The Teaching Council, 2016a), a descriptive framework developed recently for the Irish context. Section 4.2 presents the TPL framework used by the Centre for School Leadership (CSL). Section 4.3 outlines the framework underpinning the TPL offered by the Professional Development Service for Teachers (PDST), a cross-sectoral provider of TPL for both teachers and school leaders. While other providers may use alternative frameworks (e.g., JCT draw on King (2016)), these three examples serve to illustrate how conceptual frameworks for TPL currently influence the design, delivery, and evaluation of TPL in Ireland. In the conclusions to this chapter, some linkages are drawn between the *Cosán* descriptive framework and the evaluation frameworks reviewed in Chapter 2.

4.1 COSÁN FRAMEWORK FOR TEACHERS' LEARNING

Cosán is the National Framework for Teachers' Learning developed by the Teaching Council (2016a). The Teaching Council is the statutory professional standards body for the profession of teaching in Ireland. The Teaching Council developed *Cosán* as a flexible framework for teachers' learning, which considers learning to be a steady and ongoing journey and highlights the need for teachers to constantly improve their professional knowledge. *Cosán* may be characterised as focusing on transformative models of TPL described by Kennedy (2014), and the framework places a strong emphasis on the role of teachers' reflective practice in their learning. *Cosán* describes four dimensions of teachers' learning, which are described in further detail below, and these dimensions of teachers' learning complement the three continua described by Lloyd and David (2018).

Cosán is a framework which was developed based on feedback from teachers and other stakeholders during a comprehensive consultation process. *Cosán* is the continuation of the journey that commences for teachers on their entry into initial teacher education (ITE), and builds on the progress made by *Droichead*, the integrated professional induction framework (The Teaching Council, 2017). *Cosán* also acknowledges that professional learning is "*part and parcel of a teacher's working life*" (Sherrington, 2014, cited in The Teaching Council, 2016a), and provides a framework for recognising teachers' efforts to engage with their learning. The Teaching Council (2016a, p. 3) aims to cultivate a culture of "*powerful professional learning*" through *Cosán*, based on the active engagement of teachers in their own learning, for their own benefit and that of their students.

Key values and principles in Cosán

Professional development is viewed as both a right and a responsibility of teachers by the Teaching Council and *Cosán* is underpinned by seven key principles which may be summarised as follows:

- 1. Teachers are recognised as autonomous and responsible learning professionals
- 2. Teachers' learning should be linked to teachers' needs, students' needs, and school needs, and differentiated to suit the culture and context of teachers' work
- 3. Techers are best placed to identify and pursue learning opportunities which are relevant to them

- 4. Teachers should be supported in assuring the quality of their learning
- 5. Teachers should have access to rich and varied learning opportunities, and this should be supported by appropriate structures, resources, and processes at national, regional, and local level
- 6. Teachers' learning should be formally acknowledged and publicly recognised
- 7. Teachers should be supported to prioritise learning that benefits them and their pupils/students.

Dimensions of teachers' learning

Four dimensions of teachers' learning are outlined in *Cosán* (p. 13) as follows:

- 1. Formal and informal: Both formal and informal learning are acknowledged as important aspects of teachers' learning. Teacher feedback during the consultation process for *Cosán* emphasised the importance and value of informal learning processes.
- 2. Personal and professional: These are "*inextricably linked*", and teachers who have a deep interest in professional development tend to also have a strong interest in personal development. *Cosán* recognises how interconnected these concepts are alongside their mutually beneficial relationship.
- **3.** Collaborative and individual: Many theorists have argued that all learning is social (Stoll, Fink, & Earl, 2003, cited in The Teaching Council, 2016a), and collaborative teacher learning was considered to be of central importance based on teacher feedback. However, *Cosán* acknowledges that it is important for teachers to strike a balance between the development of their practice as an individual and the creation of a positive community of practice.
- 4. School-based and external: Both school-based and external teachers' learning have important positive aspects, and a combination of both tends to exhibit the best results.

Teachers' learning processes

According to the *Code of Professional Conduct for Teachers* (The Teaching Council, 2016b) teachers are best placed to take personal responsibility for the development and maintenance of the quality of their professional practice. Teachers need to ensure that their professional knowledge is current, use their professional knowledge base to reflect on and critically analyse their professional practice, and avail of opportunities to develop their professional practice. Teachers' learning practices can take many forms including (see Figure 4.1):

- 1. Mentoring/coaching, e.g., supporting a colleague to develop their teaching.
- **2. Practice and collaboration,** e.g., engaging in team teaching, action research, piloting new initiatives.
- **3. Research**, e.g., research carried out as part of an academic programme or action research or participation in a research event.
- **4.** Reading and professional contributions, e.g., reading books/articles/research/web-based information on teaching, learning, and assessment, writing an article based on teaching or research.
- **5. Immersive professional activities,** e.g., a study visit, overseas volunteering, or secondment to a support service.
- 6. Courses, programmes, workshops, and other events, e.g., post-graduate academic studies, participating in a conference, workshop, or Massive Open Online Courses (MOOCs), or attending a lecture or seminar.

Learning areas

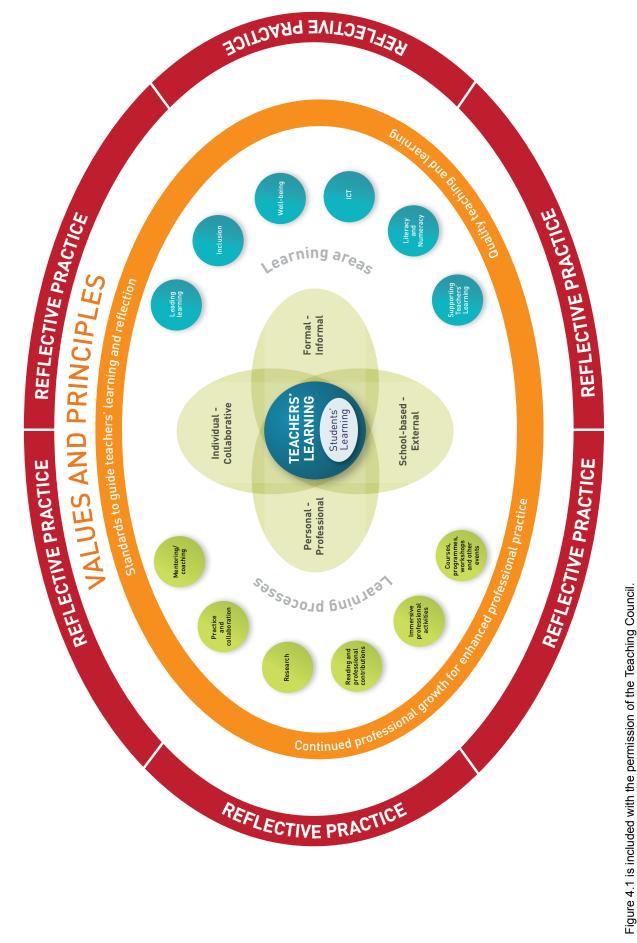
Wellbeing is one of the six learning areas under Cosán (Figure 4.1). (The others - leading learning;

inclusion; ICT; literacy and numeracy; and, supporting teachers' learning – are less directly relevant to the current study and are not discussed in detail). The Teaching Council uses broad terms to interpret wellbeing. Whilst student wellbeing is a core concern for every school community, the Teaching Council also emphasises the importance of teacher wellbeing and teachers' own self-care. If teachers are to effectively lead learning and support and facilitate the learning of their students, their own wellbeing and mental health needs to be a priority. The area of wellbeing therefore could refer to any aspect of individual or collaborative teachers' learning which aims to improve the teacher's ability to cultivate relationships, school culture, and a school environment that positively promotes wellbeing and mental health for the whole school community.

Reflective practice

Cosán places a strong emphasis on the importance of reflective practice in the context of professional learning and development for teachers. As illustrated in Figure 4.1, reflective practice encompasses the other key elements of the *Cosán* framework for teachers' learning. *Cosán* recognises the importance of both individual and collaborative reflection on learning and notes the impact that both may have. In terms of individual reflection, it is likely that teachers use their own practice to identify their professional development needs and plan for learning opportunities to meet these needs. Also, teachers are likely to use examples of their own teaching to identify the impact that their engagement with professional learning has had on their teaching practice.

Turning to collaborative reflection, *Cosán* also provides a framework for collective reflection on how effective teachers' learning is in developing teacher capacity to support student learning. The Teaching Council is developing a set of resources which will support professional conversations between teachers on this topic. As learning professionals, *Cosán* proposes that teachers must display a commitment to developing their professional practice through continued professional development that supports their teaching in a sustainable way. *Cosán* acknowledges that professional learning journeys are not necessarily linear for teachers. Therefore, the *Cosán* (p. 32) professional standards focus on dynamic, ongoing teacher development and are "growth-based" rather than "threshold-based".



4.2 CSL MODEL OF PROFESSIONAL LEARNING FOR SCHOOL LEADERS

Based on original research by Reeves and Fox (2008), the Centre for School Leadership (CSL) has developed a model of professional learning for school leaders (including teacher leaders) in Ireland (CSL, 2019). Figure 4.2 shows what CSL has identified as the six essential elements for effective professional learning for school leaders at every stage of the continuum: *professional standards; reflection on practice; individual & collaborative learning; relevant experiential learning; flexible and sustainable;* and, *cognitive development.* A more detailed explanation of the model is available at

https://www.cslireland.ie/learning-to-be-a-school-leader/graphic-of-the-continuum-and-video.html

Figure 4.2: Learning to be a school leader in Ireland

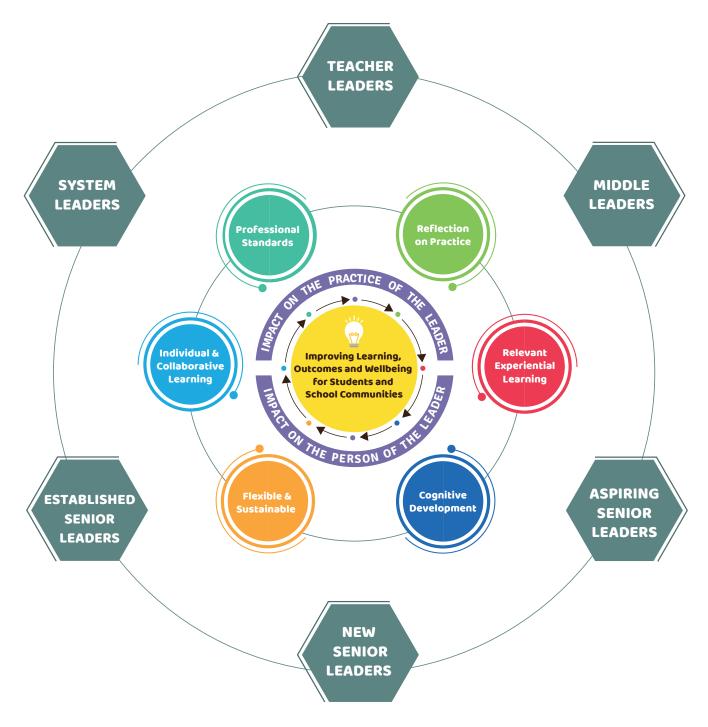


Figure 4.2 is included with the permission of the Centre for School Leadership.

The six elements for effective professional learning for school leaders align with the values, principles, standards, dimensions, and learning processes defined in *Cosán*. The CSL model presupposes that professional learning for teachers should be flexible and sustainable and a variety of TPL opportunities should be available to school leaders. It also recognises that opportunities for individual and collaborative learning should be available, as well as opportunities for relevant formal and/or informal experiential learning. Similarly, *Cosán* acknowledges that teachers should have access to varied learning opportunities and recognises both the various dimensions of learning and the importance of different learning processes. The CSL model considers that professional learning should be guided by professional standards, e.g., *Looking at our Schools* (DES, 2016b, 2016c) while *Cosán* references the importance of standards to reassure the teaching profession and the wider public that teachers' learning is of high quality and able to adapt to changing needs of learners. The importance of reflective practice is highlighted in both the CSL model and *Cosán*.

Figure 4.2 also illustrates the six leadership stages that exist in the Irish school system. These are: teacher leaders; middle leaders; system leaders; aspiring senior leaders; new senior leaders; and, established senior leaders. CSL note that these are presented in a circular fashion, thereby emphasising CSL's vision of a non-hierarchical approach to leadership in schools, with each stage having its own integrity and value.

At its centre, the model places the moral imperative of improving learning experiences, outcomes, and wellbeing for students and school communities. It recognises that professional learning is a process that impacts on both the person and the practice of the leader.

4.3 PDST CONCEPTUAL FRAMEWORK FOR PROFESSIONAL DEVELOPMENT PROVISION

The Professional Development Service for Teachers (PDST) is one of the main support organisations providing TPL to teachers and school leaders in Ireland. Its structure and provision of TPL are described in detail in Chapter 8 of this report but the focus of this section is on the conceptual framework used to underpin all professional development provided by the organisation (PDST, 2017). As the PDST framework is influenced by Kennedy's (2005, 2014) work and also draws on Desimone (2009), many of the key principles underpinning the framework were discussed in Chapter 2.

In devising their framework, the PDST was cognisant of how the different models of professional development proposed in Kennedy's work have been shown to have differing levels of impact on teacher learning. As noted in Chapter 2, Kennedy (2014) outlines a spectrum of CPD models (training, deficit, cascade, award-bearing, standards-based, coaching/mentoring, community of practice, and collaborative enquiry models) which are categorised according to three purposes (transmissive, malleable, and transformative models). It is argued that the different models vary in their potential to precipitate teacher change. In designing their framework, the PDST was also informed by research findings (e.g., Desimone et al., 2002; Garet et al., 2001) indicating that it is the features, rather than the form (e.g., mentoring, workshop, or seminar), of professional development that impact on desired teacher and student outcomes. However, the PDST argues that certain forms of professional development are more conducive to certain features and therefore they consider that it is reductive to examine one without the other. Despite the complex relationship between features and forms, there is a general consensus in the literature on professional development that there are five core features of professional development that are positively associated with teacher change and student achievement. These are: content focus; active learning; coherence; duration; and collective participation (Desimone et al., 2002; Desimone, 2009; Guskey & Yoon, 2009; Wayne, Yoon, Zhu, Cronen, & Garet, 2008; Yoon, Duncan, Lee, Scarloss, & Shapley, 2007). Therefore, these five features are central to the PDST model. In addition to the five features identified by Desimone, the PDST framework refers to characteristics of effective professional learning communities (PLCs); key conditions for effective collaborative professional inquiry;

and, effective pedagogies for teacher learning from Brennan (2017). Table 4.1 presents the key features of the PDST conceptual framework for professional development.

Table 4.1: PDST Conceptual Framework for Professional Development Provision

Content focus	 Does it have a clear focus on pedagogical content knowledge? What is taught and how do children learn the subject? (Shulman, 1986) Does the proposed content explicitly, and effectively, develop relevant knowledge and skills relating to the embedding of digital technologies in teaching and learning? Does the proposed content explicitly, and effectively, develop relevant knowledge and skills relating to the embedding of constructivist methodologies in teaching and learning? Is appropriate use of learning outcomes and learning intentions evident in framing the content? Is the content pitched at the appropriate level? Is the teacher's existing skills base recognised and accommodated? What opportunities exist for the integration of digital technologies? What provision is there for inclusion/SEN? Is there appropriate progression in the content – does the content lead the teachers towards improvement in teacher competences in embedding constructivist methodologies digital technologies in teaching and learning? 	
Active learning	 Is the active learning relevant to classroom practice? Is the active learning combined with a focus on content? 	
Linked to content focus	 Is the active learning combined with a focus on content? Is there opportunity for observation, analysis, reflection, and feedback on the teachers' own and others' understandings and practices? Are there opportunities to review and assess students' work individually and collaboratively? Is there modelling of teaching practices for the introduction of new strategies and approaches? Is there individualised feedback for teachers through coaching and mentoring? Is the active participation of teachers in the workshops/CPD programme facilitated? Is there an appropriate balance between input from the facilitator and teacher participation? Is the active learning relevant to what will be done back at school? Is there opportunity for observation, analysis, reflection, and feedback on teacher's own and others understandings and practices? Is there modelling of effective embedding of digital technologies in teaching and learning? Are the opportunities provided, and challenges presented, by constructivist methodologies and the use of digital technologies in teaching and learning explored and exploited? 	
Duration		
e.g.,		
6 months to 2 years	How many CPD interactions does the programme comprise?	
More than 14 hours	 Over what timespan does the professional development activity last? (Weeks? Months? Years?) 	
Every two weeks	What is the frequency of the support?	

Coherence Does the professional development form a coherent part of a wider s opportunities for teacher learning and development? Linked to duration and frequency of support Does it build upon existing Knowledge and Skills? Does it align with reform measures at school and national level? Is it meeting differing needs of teachers and classrooms? What modes of delivery are used? Is presentation software utilised for purpose, for example? Are opportunities provided and exploited in integrating digital techno during the course of the support? Are opportunities might support teacher self and collective reflection in reformore communities might support teacher self and collective reflection in reformore to communities might support teacher self and collective reflection in reformore assistible linking of schools and learners through digital platforms as Skype to progress learning in various areas of the curriculum Collective participation Are teachers critically reflecting on experiences and sharing expertits is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Supported by active learning methods Key conditions for effective collaboration of PLCs to facilitate bottom-up acros engagement? Characteristics of effective PLCs Key conditions for effective collaboration? Effective pedagogies teachers is access to expertise (internal and external?) (Harris & Jones, 2010; O' Sullvan, 2011; Stell et al., 2006) (Kennedy, 2014; King, 2014; O' Sullvan, 2016) Critical dialogue					
Linked to duration and frequency of support Does it build upon existing knowledge and skills? Does it align with reform measures at school and national level? Is it meeting differing needs of teachers and classrooms? What modes of delivery are used? Is presentation software utilised for purpose, for example? Are opportunities provided and exploited in integrating digital technol during the course of the support? Are opportunities given the opportunity to form communities of practic facilitate ongoing collaboration between, and following, workshops? communities might support teachers self and collective reflection in re to: * Approaches to teaching * Elements that constitute effective learning * Elements that constitute of or uploading content to websites such as Scoilnet * Preparation of content for uploading content to websites such as Scoilnet * Preparation of content for uploading content to websites such as Scoilnet * Disports coherence Supports coherence Supports coherence Supports coherence Supports coherence Support by active learning methods Characteristics of effective PLCs Key conditions for effective collaborative professional inquiry Effective predagogies teacher learning (Harris & Jones, 2010; O' Sullivan, Stolet et al., 2006; Vesoio et al., 2009 (Kennedy, 2014; King, 2014; O' Sullivan, Collaboration with col	set of				
 Is it meeting differing needs of teachers and classrooms? What modes of delivery are used? Is presentation software utilised for purpose, for example? Are opportunities provided and exploited in integrating digital technol during the course of the support? Are opportunities given the opportunity to form communities of practic facilitate ongoing collaboration between, and following, workshops? communities might support teacher self and collective reflection in re to: Approaches to teaching Elements that constitute effective learning Effective seasessment practices Resource development, dissemination, and review Preparation of content for uploading content to websites such as Scolinet Possible linking of schools and learners through digital platforms as Skype to progress learning in various areas of the curriculum Collective participation Are teachers critically reflecting on experiences and sharing expertis subject, or class-level to attend professional development together? Is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Is there scope for the formation of PLCs to facilitate bottom-up acros angagement? What role does school leadership (all levels) play in promoting and sustaining collective participation? What role does school leadership (all levels) play in promoting and sustaining collective participation? What role does school leadership (all levels) play in promoting and sustaining collective participation? Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sus					
 What modes of delivery are used? Is presentation software utilised fa purpose, for example? Are oportunities provided and exploited in integrating digital technol during the course of the support? Are participants given the opportunity to form communities of practic facilitate orgoing collaboration between, and following, workshops? Approaches to teaching Approaches to teaching Elements that constitute effective learning Effective assessment practices Resource development, dissemination, and review Preparation of content for uploading content to websites such as Scolinet Possible linking of schools and learners through digital platforms as Skype to progress learning in various areas of the curriculum Collective participation Are teachers critically reflecting on experiences and sharing expertis Is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Is there an opportunity of teachers from the same school, departme subject, or class-level to attend professional development together? Is there ascope for the formation of PLCs to facilitate bottom-up acros engagement? Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? (<i>Kennedy, 2014; King, 2014; O' Sullivan, Collaboration by the collabora</i>					
Purpose, for example? Are opportunities provided and exploited in integrating digital technol during the course of the support? Are opportunities given the opportunity to form communities of practic facilitate orgoing collaboration between, and following, workshops? communities might support teacher self and collective reflection in reto: Approaches to teaching Elements that constitute effective learning Effective assessment practices Resource development, dissemination, and review Preparation of content for uploading content to websites such as Scoilnet Preparation of content for uploading content to websites such as Scoilnet Collective participation Are teachers critically reflecting on experiences and sharing expertis Supports coherence Is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Is there access to expertise (internal and external?) Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? (Parker et al. 2016) Characteristics of effective PLCs (Kennedy, 2014; King, 2014; O' Sullivan, 2011; Stoll et al., 2006; Vescio et al., 2008) (Kennedy, 2014; King, 2014; O' Sullivan, 2011; Stoll et al., 2006) Shared values and vision Leadership that promotes a learning of work Public sharing of work Collaboration with colleagues External					
 Are opportunities provided and exploited in integrating digital technol during the course of the support? Are participants given the opportunity to form communities of practic facilitate ongoing collaboration between, and following, workshops? communities might support teacher self and collective reflection in re to: Approaches to teaching Elements that constitute effective learning Effective assessment practices Resource development, dissemination, and review Preparation of content for uploading content to websites such as Scolinet Possible linking of schools and learners through digital platforms as Skype to progress learning in various areas of the curriculum Collective participation Are teachers critically reflecting on experiences and sharing expertis is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Is there scope for the formation of PLCs to facilitate bottom-up acros engagement? Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? Characteristics of effective PLCs Key conditions for effective collaborative professional inquiry Key conditions for effective collaborative professional inquiry Key conditions for effective participation? Key conditions for effective collaborative professional inquiry Key conditions for effective responsibility for student learning culture and distributed learning culture and distributed learning of work elearship Leaders	for this				
during the course of the support? Are participants given the opportunity to form communities of practic facilitate ongoing collaboration between, and following, workshops? communities might support teacher self and collective reflection in reto: > Approaches to teaching > Approaches to teaching > Elements that constitute effective learning > Effective assessment practices > Resource development, dissemination, and review > Preparation of content for uploading content to websites such as Scoilnet > Possible linking of schools and learners through digital platforms as Skype to progress learning in various areas of the curriculum Collective participation Are teachers critically reflecting on experiences and sharing expertis is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Supported by active learning methods Is there acope for the formation of PLCs to facilitate bottom-up acros engagement? Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? Characteristics of effective PLCs Key conditions for effective collaborative professional inquiry (Parker et al., 2016) (Harris & Jones, 2010; O' Sullivan, 2011; Stoll et al., 2006; Vescio et al., 2008) (Kennedy, 2014; King, 2014; O' Sullivan, 2011; Stoll et al., 2006) (Parker et al., 2016) Shared values and vision Leadership					
 Are participants given the opportunity to form communities of practic facilitate ongoing collaboration between, and following, workshops?' communities might support teacher self and collective reflection in reto: Approaches to teaching Effective assessment practices Resource development, dissemination, and review Preparation of content for uploading content to websites such as Scoilnet Possible linking of schools and learners through digital platforms as Skype to progress learning in various areas of the curriculum Collective participation Are teachers critically reflecting on experiences and sharing expertise is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Is there scope for the formation of PLCs to facilitate bottom-up acros engagement? Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? Characteristics of effective place of effective collaborative professional inquiry (Kennedy, 2014; King, 2014; O' Sullivan, Collective responsibility for student learning Schi et al., 2006; Vesci et al., 2008 Leadership that promotes a learning culture and distributed student learning Reflective responsibility for student learning Reflective responsibility for student learning External expertise Time for collaboration Teacher agency	ologies				
facilitate ongoing collaboration between, and following, workshops? communities might support teacher self and collective reflection in reto: * Approaches to teaching * Elements that constitute effective learning * Effective assessment practices * Resource development, dissemination, and review * Preparation of content for uploading content to websites such as Scolinet * Possible linking of schools and learners through digital platforms as Skype to progress learning in various areas of the curriculum Supports coherence • Supports coherence • Supports coherence • Plearning methods • • Have teachers' access to expertise (internal and external?) • Have teachers' access to expertise (internal and external?) • Have teachers' access to expertise (internal and external?) • What role does school leadership (all levels) play in promoting and sustaining collective participation? • Characteristics of effective place of the formation of PLCs to facilitate bottom-up across collective responsibility for student learning Effective pedagogies teacher learning • Have teachers' access to expertise (internal and external?) • • Key conditions for effecti					
 Approaches to teaching Elements that constitute effective learning Effective assessment practices Resource development, dissemination, and review Preparation of content for uploading content to websites such as Scolinet Possible linking of schools and learners through digital platforms as Skype to progress learning in various areas of the curriculum Collective participation Are teachers critically reflecting on experiences and sharing expertis Is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Is there scope for the formation of PLCs to facilitate bottom-up acros engagement? Is there scope for the formation of PLCs to facilitate bottom-up acros engagement? Is there scope for the formation of PLCs to facilitate bottom-up acros engagement? What role does school leadership (all levels) play in promoting and sustaining collective participation? What role does school leadership (all levels) play in promoting and sustaining collective participation? (Harris & Jones, 2010; O' Sullivan, 2011; Stoll et al., 2006; Vescio et al., 2008) Characteristics of effective places and vision Collaboration with colleagues Time for collaboration Teacher agency 	? These				
 Elements that constitute effective learning Effective assessment practices Resource development, dissemination, and review Preparation of content for uploading content to websites such as Scoilnet Possible linking of schools and learners through digital platforms as Skype to progress learning in various areas of the curriculum Are teachers critically reflecting on experiences and sharing expertise Is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Is there scope for the formation of PLCs to facilitate bottom-up acros engagement? Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? Characteristics of effective PLCs Key conditions for effective collaborative professional inquiry (Kennedy, 2014; King, 2014; O' Sullivan, Collective responsibility for student learning Reflective professional inquiry Ket collaboration External expertise Time for collaboration Time for collaboration 					
 Effective assessment practices Resource development, dissemination, and review Preparation of content for uploading content to websites such as Sociliet Possible linking of schools and learners through digital platforms as Skype to progress learning in various areas of the curriculum Are teachers critically reflecting on experiences and sharing expertis Is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Is there scope for the formation of PLCs to facilitate bottom-up acros engagement? Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? Characteristics of effective PLCs Key conditions for effective collaborative professional inquiry (Kennedy, 2014; King, 2014; O' Sullivan, Collective responsibility for student learning Reflective professional inquiry External expertise External expertise Engagement with comm of learners 					
 Resource development, dissemination, and review Preparation of content for uploading content to websites such as Scoilnet Possible linking of schools and learners through digital platforms as Skype to progress learning in various areas of the curriculum Collective participation Are teachers critically reflecting on experiences and sharing expertis Is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Is there scope for the formation of PLCs to facilitate bottom-up acros engagement? Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? Characteristics of effective PLCs Key conditions for effective collaborative professional inquiry (Kennedy, 2014; King, 2014; O'Sullivan, 2011; Stoll et al., 2006) Charact values and vision Collective responsibility for student learning Reflective professional inquiry Leadership that promotes a learning culture and distributed learning External expertise Time for collaboration Teacher agency 					
 Preparation of content for uploading content to websites such as Scoilnet Possible linking of schools and learners through digital platforms as Skype to progress learning in various areas of the curriculum Collective participation Are teachers critically reflecting on experiences and sharing expertis Is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Is there scope for the formation of PLCs to facilitate bottom-up acros engagement? Is there scope for the formation of PLCs to facilitate bottom-up acros engagement? Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? 					
Scoilnet » Possible linking of schools and learners through digital platforms as Skype to progress learning in various areas of the curriculum Collective participation • Are teachers critically reflecting on experiences and sharing expertis Supports coherence • Is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Supported by active learning methods • Is there scope for the formation of PLCs to facilitate bottom-up across engagement? Have teachers' access to expertise (internal and external?) • Have teachers' access to expertise (internal and external?) • What role does school leadership (all levels) play in promoting and sustaining collective participation? Effective pedagogies teacher learning • Nones, 2010; O' Sullivan, 2011; (Kennedy, 2014; King, 2014; O' Sullivan, 2011; Stoll et al., 2006) (Parker et al., 2016) • Leadership that promotes a learning culture and distributed student learning • Leadership that promotes a learning culture and distributed leadership • Reflective professional inquiry • External expertise • • Collaboration with colleagues • Time for collaboration •	as				
Collective participation Are teachers critically reflecting on experiences and sharing expertis Is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Is there scope for the formation of PLCs to facilitate bottom-up acros engagement? Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? Characteristics of effective PLCs Key conditions for effective collaborative professional inquiry Effective pedagogies teacher learning (Harris & Jones, 2010; O' Sullivan, 2011; Stoll et al., 2006; Vescio et al., 2008) (Kennedy, 2014; King, 2014; O' Sullivan, 2011; Stoll et al., 2006) (Parker et al., 2016) Critical dialogue • Leadership that promotes a student learning Leadership that promotes a learning culture and distributed learning of work • Engagement with comm of learners • Collaboration with colleagues • Time for collaboration • Time for collaboration • Teacher agency					
Collective participation Are teachers critically reflecting on experiences and sharing expertis Is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Is there scope for the formation of PLCs to facilitate bottom-up across engagement? Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? Characteristics of effective PLCs Key conditions for effective collaborative professional inquiry Effective pedagogies teacher learning (Harris & Jones, 2010; O' Sullivan, 2011; (Kennedy, 2014; King, 2014; O' Sullivan, 2015; Stoll et al., 2008) (Kennedy, 2014; King, 2014; O' Sullivan, 2016) Critical dialogue • Leadership that promotes a learning culture and distributed student learning • Engagement with comm of learners • Collaboration with colleagues • Time for collaboration •					
 Is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Is there scope for the formation of PLCs to facilitate bottom-up across engagement? Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? Characteristics of effective PLCs Key conditions for effective collaborative professional inquiry (Harris & Jones, 2010; O' Sullivan, 2011; Stoll et al., 2006; Vescio et al., 2008) Shared values and vision Collective responsibility for student learning Reflective professional inquiry External expertise Time for collaboration Teacher agency 	n				
 Is there an opportunity for teachers from the same school, departme subject, or class-level to attend professional development together? Is there scope for the formation of PLCs to facilitate bottom-up across engagement? Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? Characteristics of effective PLCs (Harris & Jones, 2010; O' Sullivan, 2011; Stoll et al., 2006; Vescio et al., 2008) Key conditions for effective collaborative professional inquiry (Harris & Jones, 2010; O' Sullivan, 2011; Stoll et al., 2006; Vescio et al., 2008) Kenedy, 2014; King, 2014; O' Sullivan, 2011; Stoll et al., 2006) (Harris & Jones, 2010; O' Sullivan, 2011; Stoll et al., 2006) Collective responsibility for student learning Reflective professional inquiry External expertise Time for collaboration Teacher agency 	se?				
Supports coherence subject, or class-level to attend professional development together? Supported by active Is there scope for the formation of PLCs to facilitate bottom-up across engagement? Have teachers' access to expertise (internal and external?) Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? Effective pedagogies teacher learning Characteristics of effective PLCs Key conditions for effective collaborative professional inquiry Effective pedagogies teacher learning (Harris & Jones, 2010; O' Sullivan, 2011; Stoll et al., 2006; Vescio et al., 2008) (Kennedy, 2014; King, 2014; O' Sullivan, 2011; Stoll et al., 2006) (Parker et al., 2016) • Shared values and vision • Leadership that promotes a learning culture and distributed leadership • Engagement with comm of learners • Reflective professional inquiry • External expertise • Time for collaboration • Group, as well as individual • Teacher agency • Teacher agency					
 Is there scope for the formation of PLCs to facilitate bottom-up across engagement? Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? Characteristics of effective PLCs Key conditions for effective collaborative professional inquiry (Harris & Jones, 2010; O' Sullivan, 2011; Stoll et al., 2006; Vescio et al., 2008) Shared values and vision Collective responsibility for student learning Reflective professional inquiry Key conditions for effective collaborative professional inquiry Key conditions for effective collaborative professional inquiry Key conditions for effective collaborative professional inquiry Key conditions for effective pedagogies teacher learning Reflective professional inquiry Reflective professional inquiry External expertise Time for collaboration Teacher agency 					
Supported by active learning methods engagement? Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? Characteristics of effective PLCs Key conditions for effective collaborative professional inquiry Effective pedagogies teacher learning (Harris & Jones, 2010; O' Sullivan, 2011; Stoll et al., 2006; Vescio et al., 2008) (Kennedy, 2014; King, 2014; O' Sullivan, 2011; Stoll et al., 2006) (Renedy, 2014; King, 2014; O' Sullivan, 2011; Stoll et al., 2006) Shared values and vision Leadership that promotes a learning culture and distributed leadership Public sharing of work Reflective professional inquiry Etfective professional inquiry Public sharing of work Shared values and vision External expertise Public sharing of work Engagement with common of learners Engagement with common of learners Reflective professional inquiry Time for collaboration Time for collaboration					
 Have teachers' access to expertise (internal and external?) What role does school leadership (all levels) play in promoting and sustaining collective participation? Characteristics of effective PLCs Key conditions for effective collaborative professional inquiry (Harris & Jones, 2010; O' Sullivan, 2011; Stoll et al., 2006; Vescio et al., 2008) Shared values and vision Collective responsibility for student learning Reflective professional inquiry Kennedy, 2014; King, 2014; O' Sullivan, 2016; Vescio et al., 2008) Leadership that promotes a learning culture and distributed leadership External expertise Time for collaboration Teacher agency 					
sustaining collective participation?Characteristics of effective PLCsKey conditions for effective collaborative professional inquiryEffective pedagogies teacher learning(Harris & Jones, 2010; O' Sullivan, 2011; Stoll et al., 2006; Vescio et al., 2008)(Kennedy, 2014; King, 2014; O' Sullivan, 2011; Stoll et al., 2006)(Parker et al., 2016)• Shared values and vision • Collective responsibility for student learning • Reflective professional inquiry • Collaboration with colleagues • Group, as well as individual(Kennedy, 2014; King, 2014; O' Sullivan, 2011; Stoll et al., 2006)(Parker et al., 2016)• Time for collaboration • Teacher agency• Effective pedagogies teacher learning • Cillical dialogue • Critical dialogue • Public sharing of work • Engagement with comm of learners					
PLCscollaborative professional inquiryteacher learning(Harris & Jones, 2010; O'Sullivan, 2011; Stoll et al., 2006; Vescio et al., 2008)(Kennedy, 2014; King, 2014; O'Sullivan, 2011; Stoll et al., 2006)(Parker et al., 2016)• Shared values and vision • Collective responsibility for student learning• Leadership that promotes a leadership(Parker et al., 2016)• Collective responsibility for student learning• Leadership that promotes a leadershipPublic sharing of work• Collaboration with colleagues • Group, as well as individual• Time for collaboration • Teacher agency• Time for collaboration • Teacher agency					
 (Harris & Jones, 2010; O'Sullivan, 2011; Stoll et al., 2006; Vescio et al., 2008) Shared values and vision Collective responsibility for student learning Reflective professional inquiry Collaboration with colleagues Group, as well as individual (Kennedy, 2014; King, 2014; O'Sullivan, 2011; Stoll et al., 2006) Leadership that promotes a learning culture and distributed leadership External expertise Time for collaboration Teacher agency 					
 Stoll et al., 2006; Vescio et al., 2008) Shared values and vision Collective responsibility for student learning Reflective professional inquiry Collaboration with colleagues Group, as well as individual 2011; Stoll et al., 2006) Leadership that promotes a learning culture and distributed leadership External expertise Time for collaboration Teacher agency 					
 Shared values and vision Collective responsibility for student learning Reflective professional inquiry Collaboration with colleagues Group, as well as individual Leadership that promotes a learning culture and distributed leadership Leadership that promotes a learning culture and distributed leadership External expertise Time for collaboration Teacher agency 					
 Collective responsibility for student learning Reflective professional inquiry Collaboration with colleagues Group, as well as individual Learning culture and distributed External expertise Time for collaboration Teacher agency 					
student learningleadershipof learners• Reflective professional inquiry • Collaboration with colleagues • Group, as well as individualExternal expertise • Time for collaboration • Teacher agencyof learners	munition				
 Reflective professional inquiry Collaboration with colleagues Group, as well as individual External expertise Time for collaboration Teacher agency 	nunities				
 Collaboration with colleagues Group, as well as individual Time for collaboration Teacher agency 					
Group, as well as individual Teacher agency					
 Mutual trust, respect, and 					
support					
Inclusive membership					
Openness, networks, and					
partnerships					

Alongside each of the five features identified by Desimone (2009), the PDST conceptual framework presents prompts which teams involved in TPL design can consider as part of both the design phase and also when considering a process for TPL evaluation. The design prompts inform the learning objectives of the CPD which are illuminated in the facilitation of the CPD and the professional learning process designed to occur during and after the CPD. These objectives, informed by the prompts,

are then evaluated in the various tools which PDST use in their evaluation processes. The design, facilitation, and evaluation are therefore inextricably linked from the outset much like a teacher's setting of objectives before they teach and basing their later assessment of pupils'/students' learning on those original objectives. This is in keeping with Guskey's (2003, 2014, 2016) rationale for working backwards through his five-level evaluation process. While *Cosán* and the CSL model of professional learning for school leaders do not contain an evaluative component, the conceptual framework proposed by the PDST considers both the design and evaluation of TPL.

4.4 CONCLUSIONS

The purpose of the current research is to develop a framework for TPL capable of describing and evaluating TPL provided by the Department and its support organisations. The *Cosán* framework developed by the Teaching Council focuses on the descriptive component of a TPL framework and provides an account of the various dimensions of teachers' learning, the learning processes that underpin professional learning for teachers, and the standards which guide teachers' learning and reflection. *Cosán* does not contain an explicit evaluative component. Similarly, the model of professional learning for school leaders developed by CSL does not contain an evaluation component. The conceptual framework proposed by PDST considers both design and evaluation of TPL.

A significant volume of work has been carried out by providers of TPL in Ireland to develop frameworks/ models for describing and evaluating TPL. Findings from the systematic review outlined in Chapter 2 of this report and elements of the frameworks proposed by the Teaching Council, CSL, and PDST will be considered in the development of the evaluation framework in the current research. The concluding chapter of this report will make some conclusions and recommendations on a preferred conceptual model of TPL, and desirable features of both the descriptive and evaluative components of a TPL framework.

CHAPTER 5 Broader school context for wellbeing

The current chapter begins with a summary of two broad theories which are relevant to a consideration of student wellbeing in the context of the school environment and learning: Bronfenbrenner's (1979) *ecological systems theory* and Vygotsky's (1962) *social learning theory*. Section 5.2 focuses on the role of wellbeing in the learning environment. Section 5.3 presents information relating to the role of teachers in social and emotional learning and Section 5.4 looks at teacher wellbeing and the role of teacher wellbeing in student outcomes, as well as ways in which the wellbeing needs of teachers may be supported.

5.1 RELEVANT THEORETICAL APPROACHES

Ecology can be described as the interaction between individuals and their environment (Sallis, Owen, & Fisher, 2008). All learning and development for children and young people occurs in context. Each environment, along with the interactions that occur within it that the child or young person experiences on a regular basis will influence how they grow and learn. Theories of development which focus on the school environment stress the crucial role that this environment can play in the growth and development of the child from an early age (Bronfenbrenner, 1979; Vygotsky, 1962). These theories highlight the need for teachers and school leaders to cultivate a positive school environment which focuses on the wellbeing of the child in order to facilitate positive developmental and learning outcomes.

Ecological systems theory

Bronfenbrenner's (1979) *ecological systems theory* describes how children find themselves involved in various ecosystems from the time that they are born. These can range from the more intimate ecosystem of their home, to the larger ecosystem of their school and eventually society and their culture. Each of these ecosystems interacts with and influences the other ecosystems, and the growth and development of the child as a result. The two levels of this ecological model which contain the school environment are the microsystem and the mesosystem.

The *microsystem* refers to the most immediate environment of the child, i.e. "*the setting in which the child lives*" (Santrock, 2017, p. 26). This can include their daily home life, peer group, school, and community. The interactions that the child encounters in this ecosystem generally revolve around the child's personal relationships with their family members, friends, classmates, and teachers (Berk, 2000). How these individuals interact with the child will influence their development. The more supportive and nurturing the interactions between the child and these individuals are, the more positive their developmental outcomes may be.

Similarly, how children react to the people in their microsystem will also influence their development. The child is not merely a "*passive recipient*" of the interactions they encounter in this ecosystem (Santrock, 2017, p. 26). Rather, their behaviour contributes to how this ecosystem is constructed (Santrock, 2017). The child's personality traits and temperament, which are influenced by unique biological and genetic factors, can have a major impact on how the child is perceived and treated by those close to them. Bronfenbrenner refers to bi-directional influences, as the construction of each microsystem can be influenced in two distinct directions.

The *mesosystem* refers to the interactions between the various microsystems in which the child participates, i.e., *"relations between microsystems or connections between contexts"* (Santrock, 2017,

p. 26). It is a system of numerous microsystems which contains links between the child's home and school lives, their friends and their family, and their family and the wider community. Positive interactions between the child's various microsystems will lead to more favourable developmental outcomes, whilst more adverse interactions can affect the child's development in a negative manner.

In summary, both the environment and the social interactions that a child experiences within the environment play an important role in shaping their development and growth and by extension, their learning. Therefore, *ecological systems theory* can be seen to underpin the focus on wellbeing in the school environment.

Social learning theory

Vygotsky (1962) used his *social learning theory* to describe how individuals learn in social contexts and how a child's interactions with those around them can enhance their ability to learn in numerous ways. Traditionally, most classroom settings were based on a model of teaching centred on instruction, with the teacher holding information and then *transmitting* this information to students. Vygotsky's (1962) theory promotes a learning and classroom environment which allows students to play an active role in their own learning. It highlights the importance of the student voice and of having an open classroom environment where students can socially interact with their peers and their teacher.

According to *social learning theory*, the roles of the teacher and the student are shifted, and the role of the teacher is to provide opportunities for guided discussion and collaboration, and to provide feedback. Although the teacher is the topic expert, their role is not to *transmit* knowledge but to facilitate the creation of an environment where guided interactions and discussion can occur. The aims are to promote deeper knowledge construction on the part of students, allow Socratic student discussions, and to build an active learning community within the classroom setting (Berk & Winsler, 1995).

The far-reaching impact of Vygotsky's work is reflected in the primary curriculum in Ireland which recognises the child as an active agent in his or her learning; notes that learning should involve guided activity and discovery methods; and, that the child's existing knowledge and experience for the base for learning (DES, 1999b). Detailed discussion of the review and redevelopment of the primary curriculum is provided in Chapter 7. Also, at post-primary level, 'learning to learn' is one of the eight principles of Junior Cycle education, emphasising the importance of supporting students to become independent learners (DES, 2015a).

5.2 THE ROLE OF WELLBEING IN EFFECTIVE LEARNING ENVIRONMENTS

The teacher-as-facilitator as described by Vygotsky is of course only part of the overall human exchange in which teaching and learning takes place. Some research has examined student characteristics in the context of what makes 'good' learners, but these risk to reinforce older notions of teaching-as-transmission (e.g., focusing on student adherence to rules and students' efforts to be compliant, Wentzel, 1991, cited in Sylva, 1994, p.154). Other research has attempted to identify individual student characteristics that are associated with positive learning outcomes. For example, Dishion (1990) reported a positive association between social adjustment and academic achievement in a sample of 204 Fourth-grade male students and their families. The difficulty with this strand of research is that it fails to consider the underlying reasons for variations in social adjustment and risks to place the cause of poor learning outcomes on individual students. This perspective is inconsistent with an ecosystems one.

We suggest instead that it is more helpful to consider what students themselves consider to be characteristics of effective learning environments and good teachers. In a survey of young people aged 15 to 19 years carried out by Pearson in 2016, the top five qualities of effective teachers were noted as:

- 1. The ability to develop relationships with their students
- 2. Having a patient, caring, and kind personality
- 3. Having knowledge of the learners (including awareness of their cognitive, social, and emotional development)
- 4. Possessing a dedication to teaching (including dedication to students' successes)
- 5. Engaging and motivating students to learn (Peterson-DeLuca, 2016).

These qualities of effective teachers which were highlighted by young people themselves, indicate the important role of teacher characteristics in promoting an effective learning environment.

The OECD's Teaching and Learning International Survey (TALIS; OECD, 2019) provides empirical data on the characteristics of effective learning environments across a large number of countries, highlighting the extent to which there is variation in teaching practices across countries. The 2008 cycle of the study showed that post-primary teachers in Ireland were less likely to employ student-oriented practices (such as group work) and enhanced activities (such as extended project work) than their counterparts in many other countries (Gilleece et al., 2009). Ireland has not participated in subsequent cycles of TALIS so more recent data on the usage of active teaching methodologies is not available from this source.

In addition to considerations of effective learning environments, it is important to consider how the skills associated with good wellbeing can be promoted in learning environments and fostered among students. Loveless (nd) identifies a number of strategies that teachers can employ to promote wellbeing and a positive learning environment including: making learning relevant; developing a code of conduct for behaviour; developing a positive actions curriculum to teach positive behaviours for physical, social, and emotional wellbeing; helping students to develop intrinsic motivation; reinforcing positive behaviours; and, modelling positive communication and interactions by responding in a positive way to students and others. It is important to also note that what makes a learning environment effective varies according to local contexts and needs, for example, for some children and young people, basic needs such as provision of food in school, may also impact on physical wellbeing. Findings from TALIS showed that based on teacher reports, teacher-student relations in Ireland compared favourably to those in other countries, with the mean score in Ireland significantly above the corresponding OECD average (Gilleece et al., 2009).

In taking an *ecological systems theory* (Bronfenbrenner, 1979) approach to considering the role of wellbeing in the learning environment, it is important to consider the role of teachers within this environment and how interactions with teachers and other students can impact on wellbeing and learning. Through the various strategies that they employ, teachers can promote both wellbeing and learning simultaneously, helping students to develop important behaviours and skills to support their wellbeing. In line with *social learning theory* (Vygotsky, 1962), teachers are in a position to create a classroom environment which allows students to play an active role in their own learning. A more detailed account of the role of teachers in social and emotional learning is presented in Section 5.3.

5.3 THE ROLE OF TEACHERS IN SOCIAL AND EMOTIONAL LEARNING

Teachers play a key role in the creation and maintenance of the learning environment in the classroom. There are numerous ways in which teachers' behaviour can help create an environment that promotes social learning. For example, the tasks a teacher sets; the feedback they provide; the role they adopt in relation to instruction; and, the level of opportunity they provide for students to interact with one another are highly relevant.

In the Irish context, findings from the International Civic and Citizenship Education Study 2009 (Cosgrove, Gilleece, & Shiel, 2011) showed a positive association between civic and citizenship knowledge and two measures of student participation in school. Students' perceptions of the value of participation at school and their perceptions of the openness of classroom discussion were both positively associated

with civic achievement (having controlled for student and school demographic and other background variables). Findings from TALIS show that the mean score in Ireland for classroom disciplinary climate was significantly above the OECD average and a majority of teachers in Ireland reported that students took care to create a pleasant learning environment (Gilleece et al., 2009).

Teachers also play a large role in developing their students' social and emotional skills and competencies. The Collaborative for Academic, Social, and Emotional Learning (CASEL) has developed an integrated framework for social and emotional learning (SEL) which promotes the child's interpersonal, intrapersonal, and cognitive functioning (CASEL, 2017). This framework consists of five core competencies: selfawareness; self-management; responsible decision making; relationship skills; and, social awareness. CASEL (2017) suggests that teaching students about self-awareness gives them the ability to recognise how their emotions, values, and thoughts can influence their behaviour. Furthermore, they indicate that it allows students to view and assess their own strengths and limitations from a place of optimism and confidence. According to CASEL, one purpose of teaching self-management is to give students the skills to regulate their behaviours, skills, and thoughts in challenging and everyday situations. The development of these skills can enable students to motivate themselves to work towards both personal and academic goals, control their impulses, and manage their stress. CASEL proposes that developing students' decision making skills means that they will be able to evaluate the consequences of their actions with reference to their own wellbeing and that of others, and thus make constructive choices. CASEL asserts that developing students' ability to listen, cooperate, and compromise with their peers, communicate constructively, resist peer pressure, and negotiate conflicts in a mature and constructive manner is vital to enable them to make and maintain positive and healthy relationships. Lastly, CASEL considers that developing students' social awareness enables them to empathise with and take the perspective of people from diverse backgrounds and understand the social and cultural norms that can dictate people's behaviours (CASEL, 2017).

SEL improves children's ability to deal effectively with everyday tasks alongside any challenges they may encounter by integrating their skills, attitudes, and behaviours (CASEL, 2017). These skills can be taught in many ways across many different settings. Research has indicated that SEL works best when children are exposed to SEL approaches in all environments in which they spend their time, such as the classroom, throughout the school, in their home, and in their wider community and CASEL supports this approach. A recent meta-analysis of 213 SEL programmes involving over 270 thousand participants from kindergarten to high school (aged 5-18 years), indicated a positive impact of school-based SEL programmes on social and emotional skills, attitudes, behaviour, and academic performance (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Therefore, the school is clearly one key environment where children can learn the social and emotional skills they need to navigate their lives in a mature and constructive way.

Overall, it seems that the school environment plays an integral role in the development and growth of all children. Here, they are not only taught academic knowledge but also the emotional and social skills they need to navigate the world safely and confidently. It is in the school environment also that the child can put their social skills into practice, interacting with peers and teachers and applying these interactions to their learning. Therefore, it is important that the school environment that each child experiences is open, warm, friendly, and social. That positive social interaction is encouraged, and children are guided to learn together in a constructive manner. The positive development of the child is dependent on the environments that they grow up in - it is important therefore that the school environment is one that nurtures growth.

5.4 TEACHER WELLBEING

Currently, the Department is placing a strong emphasis on the active promotion of student wellbeing in both primary and post-primary schools. The publication of documents such as that of *Better Outcomes, Brighter Futures* (DCYA, 2014) and the *Junior Cycle Wellbeing Guidelines* (NCCA, 2017a) has

demonstrated the dedication of the DES to improvement in this area. These documents aim to highlight the importance of student wellbeing with regards to their physical, social, and emotional growth; their learning; and, their development. However, when focusing on the promotion of student wellbeing, the wellbeing of teachers should not be overlooked as teacher wellbeing is widely acknowledged as a critical factor in student wellbeing; moreover, taking an ecological systems approach to understanding student wellbeing in school contexts necessitates a consideration of teacher wellbeing.

Recent developments related to teacher wellbeing include the publication of the Cosán Framework for Teachers' Learning (The Teaching Council, 2016a) and the Wellbeing Policy Statement and Framework for Practice 2018-2023 (DES, 2018b) which have drawn attention to the importance of promoting the self-care and wellbeing of teachers alongside the wellbeing of their students. Prior to the Wellbeing Policy Statement and Framework for Practice 2018-2023, the guidelines for mental health promotion and Well-being in Primary Schools; Guidelines for Mental Health Promotion and Suicide Prevention (DES, HSE, & DOH, 2015b) and Well-being in Post-primary Schools (DES, HSE, & DOH, 2013) were in place and these also emphasised the importance of teacher self-care and the need for supports for teacher wellbeing.

By international standards, Irish teachers tend to be largely satisfied with their employment, see e.g., Clerkin (2013). Based on data from PIRLS 2011, teachers at primary-level in Ireland expressed higher levels of career satisfaction than teachers in most other countries (Clerkin, 2013). At post-primary level, teachers in Ireland participating in TALIS 2008 had above average levels of self-efficacy (see Gilleece et al., 2009). Although both of these studies were conducted about a decade ago, they suggest that levels of wellbeing amongst Irish teachers compare favourably to those of teachers on average internationally. The wellbeing of teachers is an important factor to take into account when aiming to promote wholeschool wellbeing. The level of wellbeing that a teacher is experiencing can have a direct effect on their ability to cope with stressors in the workplace and create a positive learning environment for their students (Hattie, 2009). Much of the previous research in the area of teacher wellbeing has tended to focus on the factors leading to stress in teachers, teacher retention problems, and teacher burn-out (Roffey, 2012). Recently however, the DES has begun to focus more specifically on the active promotion of teacher wellbeing, to improve the health and happiness of teachers, and to prevent the development of this work-stress and burn-out symptoms that can have a negative impact on the quality of teaching that students are experiencing throughout the country. Kennedy, Flynn, O'Brien, and Greene (2020) present evidence in the Irish context that participation in evidence-based classroom management training is associated with reductions in self-reported levels of teacher burnout and improvements in teacher wellbeing and self-efficacy.

There is some evidence of difficulties with recruitment and retention of teachers in Ireland, particularly at post-primary level (TUI, 2019). Improving and promoting teacher wellbeing is one element of ensuring that the profession is attractive to teachers. Teacher wellbeing is important not only for teachers but also in contributing to safe and secure learning environments for students. Nurturing the wellbeing of teachers is not only important in its own right, but it is also a key step in the promotion of student wellbeing and positive student outcomes.

Teacher wellbeing and student outcomes

The idea that teacher wellbeing may be linked to student outcomes is supported in the literature. In a study by Briner and Dewberry (2007), which involved 24,100 staff in 246 primary and post-primary schools across the UK, three dimensions of teacher wellbeing were analysed: feeling valued and cared for; job stimulation and enjoyment; and, feeling overloaded. It was found that around 8% of the variation in both primary and post-primary students' scores on Statutory Assessment Tests (SATs) was attributable to teacher wellbeing. Average teacher wellbeing scores were also found to be associated with student SAT scores across all subjects. The authors advised caution when interpreting these findings, as this relationship may be bi-directional, that is teachers' feelings of efficacy and wellbeing could be increased

as a result of student achievement in addition to student achievement increasing as a result of improved teacher wellbeing. Despite this potentially circular relationship, it is relevant to note the associations between student outcomes and teacher wellbeing.

Zee and Koomen (2016) conducted a review of the impact of teacher self-efficacy on classroom processes, student academic adjustment, and teacher wellbeing and reported a positive relationship between teacher self-efficacy and aspects of teachers' psychological wellbeing. Of the 165 articles included in the review, a small number reported indirect effects of teacher self-efficacy on both student academic adjustment and teacher wellbeing. The effect of teacher self-efficacy on student academic adjustment may be mediated through style of teaching instruction. The impact of teacher self-efficacy on teacher wellbeing may be mediated through aspects of the classroom environment. The authors state that high self-efficacy can help teachers to stay motivated and satisfied thus improving psychological wellbeing. They also argue that conclusions relating to the impact of teacher self-efficacy on student outcomes have been largely based on theoretical work to date and, as a consequence, more empirical evidence is needed to uncover the relationships between teacher self-efficacy and student outcomes and the influence of classroom processes on this relationship. The work of Kennedy et al. (2020) cited above is an important contribution in this regard.

Moving beyond the impact of teacher wellbeing on outcomes relating to student academic achievement, a recent paper by Harding et al. (2019) reported a positive relationship between teachers' mental health and wellbeing and students' mental health and wellbeing. Better teacher wellbeing was also associated with lower psychological distress in students. Reporting these results from a survey of over 3,000 students aged 12 to 13 from 25 secondary schools in England and Wales and their teachers, Harding et al. postulate that teacher presenteeism and teacher-student relationships may mediate the relationship between teacher wellbeing and student wellbeing. Although the effect sizes reported by Harding et al. are small, their research highlights that the impact of teacher wellbeing on student wellbeing should also be considered in addition to considering the impact on students' academic achievement. Harding et al. (2019) also highlight the reciprocal nature of teacher-student relationships and they cite earlier research by Spilt, Koomen, and Thijs (2011) who suggest that positive teacher-student relationships are important for teachers to feel a sense of relatedness to or connectedness with their students.

In the Irish context, findings from TALIS 2008 noted positive associations between classroom disciplinary climate and teacher security of employment (permanent employment and full-time work), after controlling in a multi-level model for various teacher and school characteristics (Gilleece et al., 2009). Positive teacher-student relations were also positively associated with a positive classroom climate after controlling for other variables.

Reporting findings from the Growing Up in Ireland (GUI) study, Smyth (2015) highlights the importance of teacher-student relationships and their effect on children's self-image. Using longitudinal data from the GUI child cohort at 9 and 13 years of age, Smyth (2015) reports that negative relationships with teachers at primary level have a negative impact on children's views of themselves as learners. These negative views that children hold about themselves as learners can increase during the transition from primary to second-level education. At post-primary level, results from PISA 2012 indicate the important association between strong teacher-student relationships and increased student engagement with and at school (OECD, 2013a, 2013b).

Supporting teacher wellbeing

One factor which has been argued to be important for the development and maintenance of teacher wellbeing is that of social capital. Social capital has been defined as "*networks together with shared norms, values and understandings that facilitate cooperation within or among groups*" (OECD, 2001, p. 41). Coleman (1994) suggests that social capital makes possible the achievement of goals that would otherwise be unattainable, due to the fact that individuals are more likely to share information with

one another and be caring towards each other in communities with high levels of social trust. It has been estimated that teachers are involved in about a thousand interpersonal contacts every day and depending on the quality of these contacts, they can either contribute to a "*toxic work environment*" or improve and sustain the teachers' sense of wellbeing (Holmes, 2005, cited in Roffey, 2012, p. 10). Teachers' social capital in the context of the school is centred on the quality of the connections that teachers have with other individuals within the school community. When teachers feel that they have quality connections within the school environment and feel positively connected to those around them, they will achieve a level of social capital which enhances their wellbeing, and enables them to achieve their goals (Roffey, 2012).

Fitting well with the sentiments of both Vygotsky and Bronfenbrenner, Roffey (2012) highlighted similarities between the ways in which both teacher and student wellbeing can be supported. She also highlighted the synergy between the promotion of the wellbeing of the teacher and the promotion of the wellbeing of their students. The improvement of the teacher's wellbeing can improve the outcomes of their students through improved quality of teaching and increased enthusiasm, empathy, and patience. Fostering a sense of belonging has been shown to be crucial for both academic outcomes and health in students and teachers (Blum, 2005; Rowe, Stuart, & Patterson, 2007). Feelings of belonging allow teachers to feel they are needed and important. Catalano, Haggerty, Oesterle, Fleming, and Hawkins (2004) explained how both students and teachers need to believe that they have an investment in the school in order to promote connectedness within the school environment. Teachers can also benefit from having their strengths recognised by school leaders, much the same as students can benefit from recognition from their teachers (Noble & McGrath, 2012). Having senior management and school leaders making teachers feel valued, respected, and cared for can increase their wellbeing, and positively influence the way that teachers interact with each other and down the line with their students (Roffey, 2012). These findings underline the importance of fostering wellbeing within a whole-school approach. Also, other research confirms the complex and multi-directional relationships between various factors associated with positive wellbeing which suggests that any TPL programme aimed at enhancing student wellbeing is likely to be sub-optimal unless these complexities are taken into consideration. For example, Marzano (2003) found that positive teacher-student relationships can improve teachers' wellbeing by improving their perceptions of their job. These positive relationships can also improve the social and emotional wellbeing of students (Murray-Harvey, 2010). Related to this, the fundamental role of good communication practices has been identified as a critical requisite for the enhancement of wellbeing. For example, positive communication within relationships can increase job satisfaction and thus wellbeing for teachers (De Nobile, 2008). Both positive downward communication and positive horizontal communication between colleagues was found to lead to improved outcomes for both teachers and students.

Overall, it is clear that sustaining teacher wellbeing is very important in its own right, ensuring that teachers are healthy, happy, and enjoying their jobs. Improving the wellbeing of teachers in turn enables teachers to perform well in the classroom and provide high quality education and a stable learning environment for their students. Further, the fact that levels of teacher wellbeing can actually have a direct impact on student outcomes has been highlighted in the literature (Michie & Cockcroft, 1996; Briner & Dewberry, 2007). Therefore, it seems that improving and sustaining teacher wellbeing is not only important for teachers themselves but also for their students. It has been suggested that one factor that is crucial for the improvement of teacher wellbeing is the development of social capital and quality relationships within the school environment (Roffey, 2012). Alongside this, it has also been suggested that teacher wellbeing and student wellbeing of the teacher and the wellbeing of the student. The improvement of the wellbeing of teachers can directly improve the wellbeing of students through fostering a sense of belonging, improving teacher-student relationships, recognising strengths and communicating positively within relationships (Roffey, 2012).

5.5 CONCLUSIONS

As described in the current chapter, the wellbeing of children and young people is impacted by the various environments in which they live and not exclusively by the school setting. As outlined in the Wellbeing Policy Statement and Framework for Practice 2018-2023 (DES, 2018b) and other recent Government policies and guidelines, four key areas are identified for health promotion in schools: culture & environment; curriculum (teaching & learning); relationships & partnerships; and, policy & planning. All four areas impact children and young people both within the school setting and beyond. In particular, relationships and partnerships between school staff, children and young people, and their families are important in the broader context of wellbeing. Community partnerships, peer relationships, and external supports are important for the wellbeing of children and young people both within the school context and the wider contexts in which they live. Student-staff relationships are also important and can impact the wellbeing of children and young people and school staff themselves. The culture and climate of the school is important and fostering a positive school culture and climate can impact on the growth and development of children and young people and consequently impact on their wellbeing. The provision of TPL to support the wellbeing of children and young people is also highlighted as a priority with respect to school policy and planning, and self-care and supports for teachers are noted in a number of recent guidelines and policy documents. Taking all of this into account, student wellbeing is impacted by a number of factors and the promotion of wellbeing in schools needs to be considered at a holistic wholeschool level. While a more extensive account of teacher wellbeing is beyond the scope of the current review, the impact of student wellbeing on teacher wellbeing and vice versa, and the impact of the school and wider environment on both must be acknowledged.

CHAPTER 6 A profile of the wellbeing of children and young people in Ireland

This chapter describes a number of large-scale national and international studies on wellbeing involving a nationally representative sample of Irish children and young people of school-going age (5 to 18 years old). In selecting studies for inclusion in the present chapter, a decision was made to limit the scope to large-scale nationally representative surveys conducted over the past 10 years. One consequence of this is that small scale studies which may also provide detailed and valuable information on wellbeing are not included in the current review (an example of one excluded study is the *Moving Well - Being Well* study see Behan, Belton, Peers, O'Connor, & Issartel, 2019). In addition, studies are included in the current review only if they involve school-aged children and young people. However, it became apparent that the wellbeing of children and young people from disadvantaged backgrounds was not a major focus in some of the studies reviewed, and therefore findings from seldom heard groups are discussed for one study although these include older adolescents and young adults. It is likely that at least some of these findings will also be relevant to children and school-aged young people from the same seldom heard groups.

The next section of this chapter describes the aims and design of each study reviewed. Section 6.2 describes recent efforts to expand the role of children and young people in research about their wellbeing. Section 6.3 presents key findings from national studies about the wellbeing of children and young people. Section 6.4 presents comparable findings from international studies which have the benefit of providing an international comparative dimension. In general for both national and international studies, findings associated with physical and social/emotional wellbeing are discussed separately. Where possible and where studies report findings for subgroups of participants, we discuss findings for students from socioeconomically disadvantaged backgrounds and students with special educational needs (SEN) in addition to overall findings. Section 6.5 presents some broad conclusions on the basis of findings in this chapter and discusses implications of the findings for the provision of teachers' professional learning (TPL) in the area of student wellbeing.

6.1 OVERVIEW OF NATIONAL AND INTERNATIONAL STUDIES ON THE WELLBEING OF 5 TO 18-YEAR-OLDS

This section provides an overview of Growing Up in Ireland (GUI); the My World Survey (MWS) and My World Survey 2 (MWS 2); Health Behaviour in School-aged Children (HBSC); Programme for International Student Assessment (PISA); Progress in International Reading Literacy Study (PIRLS); and, Trends in Mathematics and Science Study (TIMSS). The descriptions in this section are supported by a summary table in Appendix 2 which provides additional detail on the measures used in the various studies.

Growing Up in Ireland (GUI)

GUI is a national, longitudinal study of the lives of children and young people in Ireland. The study is carried out jointly by Trinity College Dublin and the Economic and Social Research Institute (ESRI) and is managed by the Department of Children and Youth Affairs (DCYA) and the Central Statistics Office (CSO). The study comprises a nationally representative sample of over 20,000 cohort members from across Ireland. GUI follows two main cohorts: Cohort '98 (the 'Child Cohort') who were 9 years old

when they were first interviewed in 2007, and Cohort '08 (the 'Infant Cohort') who were 9 months old during the first wave of data collection in 2008. The Child Cohort were followed up most recently at age 20 years. The Infant Cohort were followed up most recently at age 9 years, with the next wave of data collection scheduled for when this cohort are 13 years old. GUI gathers data on a wide range of topics across the domains of health, cognitive/educational development, and socio-emotional development and uses a mix of questionnaires, direct measurement, and interviews. Data are gathered from the child/ young person themselves, as well as key stakeholders such as caregiver(s), teacher(s), and the school principal.

Data collected by GUI are made available to researchers via the CSO and the Irish Social Science Data Archive (ISSDA) for further data analysis, providing a rich resource of longitudinal data relating to this population. The main objective of GUI is to inform Government policy about the lives of children and young people in Ireland. Stated aims of the GUI study are to: chart the progress of children's development over time; to examine children's progress and wellbeing at critical ages throughout their childhood and adolescence; establish what is typical/normal in each age category and therefore what is atypical/abnormal; identify the key factors that help or hinder the child's development; establish the effects of early childhood experiences on later life; and, to gain the views and opinions of the children themselves (Greene et al., 2010). It also aims to provide data on the whole child and to provide evidence for the development of future policies and services for families and children in Ireland (Greene et al., 2010).

My World Survey (MWS) and My World Survey 2 (MWS 2)

MWS was a national, cross-sectional study published in 2012 which was jointly carried out by University College Dublin (UCD) and Headstrong: National Centre for Youth Mental Health (now Jigsaw). MWS aimed to improve the understanding of what it is like to be a young person in Ireland, mapping the mental health of young people between the ages of 12 and 25 years (Dooley & Fitzgerald, 2012). A second wave of the survey (MWS 2) was conducted in the academic year 2018/2019 with findings published in 2019 (Dooley, O'Connor, Fitzgerald, & O'Reilly, 2019).

Prior to 2012, large-scale studies of adolescent mental health, especially in the Irish context, had only provided data up to the age of 18 years, and tended to focus only on the negative aspects of youth mental health (Dooley & Fitzgerald, 2012). The two main aims of the first MWS were to extend this age range up to 25 years and to focus on protective as well as risk factors for youth mental health. Adolescents were recruited via 72 secondary schools. These schools were randomly selected from the DES database. A total of 6,085 adolescents aged 12 to 19 years and 8,221 young adults aged 17 to 25 years (totalling 14,306) took part. The sample was nationally representative in that data were collected from young people in second-level schools in each of the 26 counties, and from 12 third-level institutes in the Republic of Ireland. The survey comprised several questionnaires to measure various aspects of mental health and wellbeing.

The sample for MWS 2 comprised 10,459 adolescents aged 12 to 19 years, from 83 second-level schools (randomly selected for participation from the DES database). A further 8,290 young adults (aged 18 to 25 years) who were either studying at a third-level institute or employed were also surveyed. MWS 2 also included responses from young people with a physical disability and from 658 young people enrolled in Youthreach, Colleges of Further Education (CFE), or community training.

Health Behaviour in School-aged Children (HBSC)

HBSC is an international, cross-sectional study which collects data once every 4 years on children and young people's health and wellbeing, social environments, and health-related behaviours. Research for HBSC Ireland is carried out by the Health Promotion Research Centre, National University of Ireland, Galway. The findings from HBSC are used both nationally and internationally to inform policy and

practice, to gain new insights into the health and wellbeing of young people, and to understand the social determinants of health. Since 1994, HBSC Ireland has been a member of the HBSC network. The first survey of Irish schoolchildren was conducted by the HBSC research team in 1998, on children aged between 9 and 18 years. Data are gathered via a survey which asks about various aspects of their health and wellbeing.

Programme for International Student Assessment (PISA)

PISA is a study of the Organisation for Economic Co-operation and Development (OECD). It is the largest study of education of its kind which assesses the achievement of 15-year-olds in reading, mathematics, and science as its core domains. In 2018, data were gathered from over 600,000 students in 79 countries or education systems⁹. In Ireland, 5,577 students from 157 schools participated in 2018 (McKeown, Denner, McAteer, Shiel, & O'Keeffe, 2019). The PISA tests are designed in a way that measures both problem-solving abilities and cognition, requiring students to answer questions which are based on 'real-life tasks' considered important for effective functioning in adult society.

Alongside providing information on students' mathematics, science, and reading achievement, PISA collects detailed contextual information from school leaders, students, and (in some countries) teachers and parents relating to topics such as student wellbeing, instructional practices, and school policies and governance. PISA 2015 included for the first time a specific focus on student wellbeing and a stand-alone wellbeing questionnaire was subsequently introduced for PISA 2018. PISA aims to provide internationally comparable data which can be used by participating countries to improve their educational outcomes and policies.

Progress in International Reading Literacy Study (PIRLS)

PIRLS is an international, cross-sectional study which assesses the reading skills of Fourth-class pupils in Ireland, and the equivalent grade level internationally. It takes place every 5 years and Ireland participated for the first time in 2011 and again in 2016. In 2016, 4,607 pupils from 148 schools in the Republic of Ireland completed the PIRLS test (Eivers, Gilleece, & Delaney, 2017). PIRLS is overseen by the International Association for the Evaluation of Educational Achievement (IEA) whilst the International Study Centre in Boston College manages the study at an international level.

PIRLS aims to provide information which can help to improve teaching and learning in the area of literacy in each participating country. Alongside the collection of information related to literacy and reading ability, PIRLS collects detailed contextual information on school resources, curriculum implementation and instructional practices, and children's home environments, with the aim of improving these internationally. There is a more limited focus on wellbeing in PIRLS than in the studies previously discussed.

Trends in Mathematics and Science Study (TIMSS)

As with PIRLS, TIMSS is an international, cross-sectional study overseen by the IEA. It assesses the science and mathematics achievement of Fourth-class pupils and Second-year students in Ireland, and the equivalent grade levels internationally, every 4 years. Ireland took part at Fourth-class level in 2011, for the first time since 1995. In 2015, Ireland took part at both class levels; 4,344 Fourth-class pupils and 4,704 Second-year students participated in TIMSS (Clerkin, Perkins, & Cunningham, 2016).

⁹ Including all 37 OECD countries.

TIMSS aims to provide information which can help to improve teaching and learning in the areas of science and mathematics in all participating countries/education systems. Alongside the information collected regarding student achievement in science and mathematics, TIMSS also collects detailed contextual information regarding the school's instructional practices, school resources, curriculum structure and implementation, and home environments, to gain a deeper understanding of the background and environmental factors that may be related to student achievement in each country. Information on wellbeing gathered in TIMSS is similar in scope to that gathered in PIRLS which as noted previously, is more limited than that gathered in the studies previously discussed.

6.2 EXPANDING THE ROLE OF YOUNG PEOPLE IN RESEARCH ON THEIR WELLBEING

The Department of Children and Youth Affairs (DCYA) published a national strategy aimed at promoting children and young people's participation in decision-making (DCYA, 2015). This strategy advocates for the voices of children and young people to be heard and included in decision making across a variety of settings, including but not limited to schools and healthcare settings. The strategy is underpinned by *Lundy's model of participation* (Lundy, 2007) which lists four key elements necessary for participation. The first of these elements is space; i.e., children and young people should have a safe space in which to express their views. The second element of the Lundy model refers to voice; i.e., children and young people are facilitated to express their views. Thirdly, the views of children and young people are listened to (audience). The final element of the Lundy model is influence which emphasises the importance of acting on the views of children and young people. A checklist for participation, developed in conjunction with Professor Lundy, is provided by the DCYA (2015).

Other notable developments related to expanding the role of young people in wellbeing research relate to the inclusion of the views of young people in the design, development, and dissemination of research which concerns them. Several frameworks have been developed to specifically guide the involvement of young people in research, as well as guidelines such as those proposed by INVOLVE (2019). Two notable examples of surveys in Ireland in which young people were involved in the development, design, and/or dissemination of the research are the HBSC and the MWS. These are discussed in turn in the following sections.

Involvement of young people in HBSC survey design

Recently, the HBSC survey has begun to include children and adolescents in its study design. This youth participation in the HBSC has been described by Kelly et al. (2020, p. S7) as "a unique combination of integrated knowledge translation and Public and Patient Involvement in health-related research, drawing on elements of both of these approaches". Youth participation is incorporated into the HSBC in a number of ways, including through its 'young engagement' strategy, by having a dedicated youth engagement advisory team, and through the involvement of young people at biannual HBSC conferences (Kelly et al., 2020, p. S7). This approach to design is implemented by the HBSC research team as it believed to be empowering for young people to have active participation in the research process and it is considered important to offer young people the opportunity to influence decision-making on issues which affect them directly (Daniels et al., 2014).

Youth participation in the HBSC was facilitated through two participatory workshops, each of which had specific objectives in relation to the HBSC research process (Daniels et al., 2014). These were carried out with young people from various counties across Ireland. The purpose of the workshops was to ensure that the 2014 HBSC survey accurately reflected the most important aspects of young people's lives in Ireland. The six key themes that emerged from the workshops were: *relationships; diversity/ individuality; independence/influence of parents/adults; drink and lifestyle; bullying and mental health;* and, *social life*. The themes of diversity/individuality, independence, and the link between bullying and

mental health were areas which had not been previously addressed by HBSC surveys (Daniels et al., 2014).

One reported advantage of the participatory workshops was that themes which had not previously been considered a priority (e.g., diversity/individuality) were identified as important (Daniels et al., 2014). A further documented advantage is that the participatory research workshops established a foundation for young people's participation in research and demonstrated the benefits of including young people in research which is about them (Daniels et al., 2014). The methodology has provided initial steps towards HBSC International becoming a more youth inclusive project.

Involvement of young people in MWS and MWS 2 survey design

Involvement of young people in research is a key feature of Jigsaw's approach to mental health service provision in Ireland. As a result, both research design and the focus of the research were heavily influenced by members of Jigsaw's Youth Advisory Panel for both MWS and MWS 2 (Dooley & Fitzgerald, 2012; Dooley et al., 2019). For example, during the planning phase for MWS 2, young people were consulted on three occasions and asked for feedback on survey plans.

6.3 KEY FINDINGS ON CHILDREN'S AND YOUNG PEOPLE'S WELLBEING FROM NATIONAL RESEARCH

This section summarises key findings from large-scale *national* surveys and assessments of wellbeing in children and young people. As previously noted, the scope is limited to surveys of children and young people aged 5 to 18 years that were carried out over the past 10 years. Table 1, Appendix 2 provides further information about the key findings presented in this section. Full details of the measures used to assess wellbeing in GUI and MWS/MWS 2 are provided in Appendix 3.

Growing Up in Ireland (GUI)

Infant cohort, physical

Findings relating to physical health and wellbeing are drawn from three waves of data collection, i.e., the GUI Infant Cohort at 5 years old (Wave 3), 7/8 years old (Wave 4), and 9 years old (Wave 5) (GUI Study Team, 2017a; GUI Study Team, 2018a; Murray, McNamara, Williams, & Smyth, 2019). Findings related to physical health were positive overall and based on parent reports, most children were in good health at all three waves of data collection. Furthermore, almost 75% of parents reported that their child was developing normally at 7/8 years old (GUI Study Team, 2017a).

However, findings show that one in five 5-year-olds were overweight or obese and this was maintained from Wave 3 to Wave 5 (GUI Study Team, 2018a). Diet quality was linked to household socio-economic status, with those from disadvantaged backgrounds found to consume more calories at Wave 3 and a higher level of consumption of unhealthy food at Wave 5 (GUI Study Team 2018a; Murray et al., 2019). Lower maternal education was also associated with a higher level of consumption of unhealthy food at Wave 5 (GUI Study Team, 2018a).

Infant cohort, social and emotional

In addition to measures of physical health, social and emotional health were measured at 5 years old (Wave 3), 7/8 years old (Wave 4), and 9 years old (Wave 5) (GUI Study Team, 2017b; GUI Study Team, 2018b; Murray et al., 2019). Data were gathered on parent-child relationships, social skills, and social, emotional, and behavioural difficulties.

Most parents indicated having a very positive relationship with their child, characterised by high levels of closeness and low levels of conflict at Waves 3, 4, and 5 (GUI Study Team, 2017b; GUI Study Team, 2018b; Murray et al., 2019). Findings also showed that parents were more likely to discuss bad behaviour (explaining why the behaviour was wrong) than to engage in more punitive discipline at 5 years old. Parents were significantly more likely to have a close relationship with girls than boys at 5 years of age (Murray et al., 2019). At age 9, mothers' reported conflict levels with sons and daughters were very similar, but mothers tended to report that they were still closer with their daughters than their sons, with 49% of mothers reporting the highest possible closeness score for them and their daughters, versus 41% for their sons (GUI Study Team, 2018b).

At Wave 3, there was limited evidence of differences in the development of social skills across various socio-economic backgrounds when high scorers were compared (Murray et al., 2019). Instead, the biggest differences were associated with gender and family type.

Girls were more likely than boys to be in the top quartile in all areas of social skills. The biggest gender difference was observed in relation to empathy. There were some variations by family composition; i.e., children living with two parents were the most likely to be in the highest scoring social skills quartiles, whilst children who lived with siblings and one parent were least often in the highest scoring quartile for social skills competencies including assertion, responsibility, empathy, and self-control (Murray et al., 2019). At Wave 4, scores in relation to empathy remained high, and both girls and boys scored high on prosocial behaviours (GUI Study Team, 2017b).

Most children were doing well in relation to their social, emotional, and behavioural development at Waves 3, 4, and 5. Children who had longer periods of screen time were more likely to have behavioural issues at 5 years old (Murray et al., 2019). Boys were more likely than girls to have a high total difficulties score across social, emotional, and behavioural domains at age 7/8 years old, and a higher percentage of children from low-income families relative to high-income families had a high total difficulties score (GUI Study Team, 2017b). Mothers were more likely to report behavioural problems for sons than for daughters at Wave 5. Children in lower income families were more likely than those in high-income families to be in the group experiencing social, emotional, and/or behavioural difficulties. Daughters were more likely than sons to be rated higher for prosocial behaviour such as showing consideration and sharing (GUI Study Team, 2018b).

Reading, 'make believe', and playing on a tablet or computer were 7/8-year-olds' favourite leisure activities (GUI Study Team, 2017b). Children spent 1 to 2 hours on average on a screen a day during weekdays and up to 3 hours a day at the weekend. In general, girls adjusted to school better than boys and about three quarters of 7/8-year-olds felt positively about school. Most 9-year-olds had four or more close friends. The majority said they *always* or *sometimes* liked school and school subjects. Most read for fun at least once a week, with girls reading for fun more often than boys (GUI Study Team, 2017c).

Child cohort, physical

Findings relating to physical health and wellbeing are based on three waves of data collection with the GUI Child Cohort at 9 years old (Wave 1), 13 years old (Wave 2), and 17/18 years old (Wave 3) (GUI Study Team, 2016a; Williams et al., 2009; Williams et al., 2018).

Although most children were in good health at each wave according to their parents, 1 in 10 had a chronic illness or disability. Respiratory problems accounted for half of all chronic illnesses. One in four were either overweight or obese at 9 years old and at 18 years old. Boys were more physically active than girls at all three waves of data collection (GUI Study Team, 2016a; Williams et al., 2009; Williams et al., 2018).

At Wave 1, most children were reported (via parent report) to eat relatively well but they also ate a lot of

unhealthy high calorie snacks. Almost all children practiced good oral health with 95% percent stating that they brushed their teeth at least once daily. Over half of 13-year-olds thought that they were *just the right size*, however, dieting behaviours were already common at 13 years old. Girls were more likely than boys to want to lose weight, whilst boys were more likely to want to gain weight (Williams et al., 2009; Williams et al., 2018).

Findings from Wave 3 show that the vast majority of 17/18-year-olds were in good health (GUI Study Team, 2016a). A quarter were overweight or obese. The majority exercised regularly but there were differences in weight across social class and gender, with boys and those from higher social classes being more likely to engage in more regular exercise. Diet varied according to maternal education, with those whose mothers had attained a higher level of education having a healthier and more nutritious diet. Screen time differed widely by gender (with boys having higher levels than girls), maternal education, and weight class.

Child cohort, social and emotional

As with physical health, findings relating to social and emotional wellbeing are drawn from three waves of data collection with the GUI Child Cohort at 9 years old (Wave 1), 13 years old (Wave 2), and 17/18 years old (Wave 3) (GUI Study Team, 2016b; Williams et al. 2009; Williams et al., 2018). At Wave 1, data were collected in relation to parenting, children's self-concept, temperament, and social, emotional, and behavioural difficulties. At Wave 2, data were gathered in relation to parenting and parent-child relationships, children's self-concept, feelings, and social, emotional, and behavioural difficulties. At Wave 3, social, emotional, and behavioural difficulties were assessed, as well as coping strategies and feelings.

At Wave 1, most children lived with two parents and mothers of over half the children worked outside the home. Hanging out with friends was their favourite pastime. Sport was their favourite activity or hobby. Most of the children in this cohort got on very well with their family at Wave 1 and had frequent contact with extended family (Williams et al. 2009). Mothers and friends were the most likely sources of support for relationship advice. Being in a highly conflictive parent-child relationship at Wave 2 was significantly associated with being at risk of behavioural and emotional difficulties (Williams et al., 2018). Whilst the children in this cohort reported a positive relationship with their parents, quite a few reported never sharing private things with them at Wave 3. At 17/18 years old, most adolescents were generally quite satisfied with their lives (GUI Study Team, 2016b).

At Wave 2, 1 in 10 participants reported depressive symptoms. Boys were significantly less likely than girls to report depressive symptoms. At 13 years of age, children in the most disadvantaged social class (never employed, i.e., neither the primary or secondary caregiver has a work history outside the home) were also significantly more likely to display depressive symptoms than their peers (17% vs 9-12% for those in higher social classes). At Wave 2, girls were more likely to fall into an *at risk* category for emotional wellbeing (Williams et al., 2018).

At Wave 2, boys generally had a more positive self-concept than girls, with a significantly higher percentage of girls (35%) compared to boys (24%) reporting lower self-concept overall. Those who were bullied were also substantially more likely to have lower self-concepts (Williams et al., 2018).

At Wave 3, coping strategies related to friends made up four of the top five coping strategies used by 17/18-year-olds. Around a quarter of participants said they would very often or always go to friends for advice. Other popular coping strategies related to planning a solution (GUI Study Team, 2016b).

Child cohort, children with special education needs

A secondary analysis of GUI data explored wellbeing (among other variables) in children with SEN

(Cosgrove et al., 2018). The analysis was carried out on data gathered when the study participants were 13 years old and, where the same outcome was measured at 9 years of age and 13 years of age, progress from 9 to 13 years was examined.

Children with SEN had significantly lower levels of wellbeing than children with no SEN and this was evident in both overall wellbeing scores and on the six subscales of the Piers-Harris Children's Self-Concept Scale (see Appendix 3 for a description of this measure). In the overall sample, there was an increase in wellbeing scores from age 9 to age 13 and this increase was more marked for those with SEN (Cosgrove et al., 2018). Wellbeing scores were reported to be relatively stable across this time-span (Cosgrove et al., 2018). Children in all of the seven SEN groups¹⁰ had significantly lower wellbeing scores at 13 years of age (Cosgrove et al., 2018).

In relation to contextual factors, Cosgrove et al. report that neither school DEIS status (at primary and post-primary level) nor school sector (at post-primary level) impacted on wellbeing (Cosgrove et al., 2018). Being bullied at 9 years old had a negative impact on later wellbeing scores at age 13 (Cosgrove et al., 2018). Some gender differences were also noted in the analysis. For boys, lower wellbeing scores were observed for those who had SEN at age 9 and age 13, in comparison to those who had SEN at age 9 only or age 13 only. For girls, a different pattern was observed, with lowest wellbeing scores observed for girls who had SEN at age 9 only only (Cosgrove et al., 2018).

At age 13, children completed a measure of mood and feelings (Mood and Feelings Questionnaire, see Appendix 3 for a description of this measure). Compared to children with no SEN, children with behavioural, emotional or social difficulties; general learning disabilities or difficulties; autistic spectrum disorders (ASD); and, multiple or unclassified SENs, reported lower mood (Cosgrove et al., 2018). At 13 years old, 10% of all children reported that they had been bullied during the previous 3 months and more children with SEN (16%) than without SEN (8%) reported having been bullied (Cosgrove et al., 2018).

In terms of engagement with school, more children with SEN than with no SEN reported disliking school (17% compared to 10%). In general, school dislike increased from 9 to 13 years, and this increase was more pronounced for those with SEN. Liking of school was significantly lower in five of the SEN groups than in children without SEN at age 13. Liking of school did not differ from children without SEN in two of the SEN groups (ASD and multiple or unclassified SEN) (Cosgrove et al., 2018).

My World Survey (MWS)

Adolescent sample (12 to 19-year-olds), physical

The majority (79%) of adolescents fell into the normal drinking range, around 15% were classified as problem drinkers, and 3% as harmful and hazardous drinkers (Dooley & Fitzgerald, 2012). Over a quarter of adolescents recorded a score of two or higher on the CRAAFT scale which indicates a high level of substance misuse. Further detail on MWS findings related to physical wellbeing are outlined in Table 1, Appendix 2.

Adolescent sample (12 to 19-year-olds), social and emotional

Doctors/GPs were the most likely source of formal support for young people (Dooley & Fitzgerald, 2012). Other sources of formal support identified were psychologists, counsellors, and teachers. Only 11% of young people reported that they would be likely to use a helpline. Friends, parents, the internet, and relatives were the most likely sources of informal support. Females reported a significantly higher

¹⁰ The seven SEN subgroups included: Behavioural, emotional or social difficulties; general learning disabilities or difficulties; specific learning difficulties or speech and language difficulties; ASD; physical/sensory disabilities that impact on daily life; multiple or unclassified SENs; SEN at age 9 only.

level of perceived social support than males. Almost 70% of 12 to 19-year-olds enjoyed family life with First-year students more likely to report this than Sixth-year students. School, family, and friends were the three biggest sources of stress in the lives of 12 to 19-year-olds. In relation to bullying, 40% had been bullied at some point and 7% reported being bullied on a weekly or daily basis.

Males had significantly higher levels of self-esteem than females, as did First-year students compared to all other year groups (Dooley & Fitzgerald, 2012). Just over a quarter (27%) of students ranked themselves as being *top of the class* in schoolwork. First-year students and males were more likely to report this than Sixth-year students and females. Males reported higher levels of optimism than females, First-year students displayed significantly higher levels than those in later years, whilst Fourth-year students and Sixth-year students displayed the lowest levels.

Almost half of respondents reported that they coped well with problems, with males more likely to report this than females (Dooley & Fitzgerald, 2012). Males were also significantly more satisfied with their lives than females. Some (12%) reported having a parent who has had mental health issues. Approximately 11% had seen a mental health professional, with Sixth-year students being much more likely to have seen one than First-year students. A majority (70%) of respondents were classified as having normal levels of depression. Almost 10% reported that they *felt angry a lot*, with 43% reporting they *felt angry sometimes*, and 45% reporting that they *did not feel angry a lot*. Further information on findings relating to social and emotional wellbeing are outlined in Table 1, Appendix 2.

My World Survey 2 (MWS 2)

Adolescent sample (12 to 19-year-olds), physical

Over half (57%) of the sample reported never having drank alcohol, only 22% reported doing it less than monthly, around 16% monthly, and a small percentage reporting drinking either weekly or daily (Dooley et al., 2019). Whilst the majority of First-year students reported having never drank alcohol, this had fallen to only 13% by Sixth-year. Of those who did drink alcohol, over half (65%) fell into the low risk drinking range. Around 32% were classified as problem drinkers or harmful or hazardous drinkers, and 3% were classified as potentially alcohol dependent.

Of the adolescents surveyed, just under half (47%) reported getting between 8 and 10 hours sleep a night, whilst around 46% reported getting between 6 and 7 hours sleep a night. A further, 7% only got an average of 0 to 5 hours of sleep each night. Males (52%) were more likely to be getting an adequate amount of sleep each night than their female counterparts (44%). Also, First-years (68%) and Second-years (56%) were both more likely to report getting an adequate amount of sleep than adolescents in the Senior Cycle. Further information on findings in relation to physical wellbeing are outlined in Table 1, Appendix 2.

Adolescent sample (12 to 19-year-olds), social and emotional

The majority (60%) were classified as being in the normal range for depression whilst 15% were in the severe or very severe range. Males were more likely to be in the normal range, whilst females were much more likely to be in the severe or very severe ranges (Dooley et al., 2019).

Adolescents displayed average levels of self-esteem and body esteem (Dooley et al., 2019). Males scored significantly higher than females on measures of both self-esteem and body esteem, whilst First-year students scored significantly higher than all older years. Males reported higher optimism than females, and there was a gradual decrease in optimism levels across school year, with older years displaying significantly less optimism. Males and First-year students again were more satisfied with their lives than females and older year groups.

Just under half (41%) reported coping well with problems, whilst 8% did not cope well (Dooley et al., 2019). Males were more likely to report coping well than females. Friends, music, and sport/exercise were the most used methods of coping. Females had a slightly higher level of school connectedness than males. Also, First-year students showed significantly higher levels of both school and peer connectedness than other years.

Adolescents scored above the midpoint of 48 for overall social support, which indicated that they had a good level of social support available to them (Dooley et al., 2019). Females also reported a higher level of overall perceived social support than males. First-years also had the highest level of perceived social support. The most reported informal sources of social support were parents (68%), friends (68%), relatives (37%), and online (20%). The most reported forms of formal support included GPs (21%), teachers/guidance counsellors (20%), and phone helplines (7%). Further detail on findings relating to social and emotional wellbeing are outlined in Table 1, Appendix 2.

Findings for seldom heard groups

The MWS 2 collected data from young people in the following seldom heard groups:

- 1. Youthreach: An education, training and work experience programme provided by the DES for early school leavers aged 15 to 20 years.
- 2. CFE/community training: Young people engaged in any further study after post-primary school which is not considered part of higher education.
- 3. Young people with physical disability: This group included wheelchair users, young people who were visually impaired, or those living with deafness or hearing loss.

The findings from each of these groups were compared to a random sample of the MWS 2-SL (School Level) and MWS 2-PSL (Post-School Level) sample combined (SL/PSL). This random sample mirrored the seldom heard groups for both age and gender. The average age of the seldom heard groups was 18-19 years.

Youthreach

Under half (39%) of young people in Youthreach reported having a long-term health difficulty or disability and a small proportion (11%) reported providing help to a family member with a long- term illness, for which they went unpaid. Young people in Youthreach were much more likely to report having been in trouble with the Gardaí, than their peers in the SL/PSL group (43% vs 9%). More young people in Youthreach also reported feeling angry *a lot* (28%) than those in the SL/PSL sample (15%). Over half (54%) of those in Youthreach reported being bullied and around 19% reported having experienced unfair treatment as a result of their identity (Dooley et al., 2019).

Young people in Youthreach also reported their top three stressors as the future (53%), finance (42%), and family (38%). Music (64%), friends (40%), and sleep (36%) were reported to help cope with problems. Those in Youthreach were much more likely to be in the severe category for anxiety (29%) than those in the SL/PSL sample (15%). The Youthreach sample reported significantly lower levels of family support than the SL/PSL sample (Dooley et al., 2019).

CFE/community training

Under half (43%) of those in CFE/community training reported having a long-term health difficulty. They were also more likely to have been in trouble with the Gardaí (17%) than their peers in the SL/PSL sample (9%). Over half (55%) of this group reported experiencing bullying in the past and around 16% were treated unfairly due to their identity (Dooley et al., 2019).

Young people in this group were much more likely to report that they did not cope well with their problems (15%) than their peers in the SL/PSL group (9%). Just over half of the young people in this group (51%) reported talking with someone they trusted when faced with problems. Like those in Youthreach, young people in this group were much more likely to be in the very severe range for anxiety (24%) than those in the SL/PSL sample (Dooley et al., 2019).

Physical disability

Young people who had a physical disability were found to be more likely to report always enjoying family life (84%) than those in the SL/PSL sample (53%). Over half of young people in this group reported that they felt somewhat angry *a lot*, a small proportion (13%) felt angry *a lot*, and around a third (33%) reported that they did not feel angry *a lot*. This was similar their peers in the SL/PSL group. Young people in this group were more likely to report having few or no problems (46%) than those in the SL/PSL group (28%), and 76% of young people in this group reported that when they have problems, they tend to speak about them with someone that they trust (Dooley et al., 2019).

Over half (53%) of young people with a physical disability reported being bullied and a smaller proportion (24%) reported experiencing unfair treatment due to their identity. Around one in four young people with a physical disability reported that their family was a source of stress; however, a higher proportion (37%) reported that their family help them to cope with problems. There were also no significant differences between young people in this group and the SL/PSL group in terms of anxiety and depression (Dooley et al., 2019).

6.4 KEY FINDINGS ON CHILDREN'S AND YOUNG PEOPLE'S WELLBEING FROM INTERNATIONAL RESEARCH

This section summarises key findings from large-scale *international* surveys and assessments of student wellbeing over the past 10 years. Where possible, comparisons with international data are noted. Further information is provided in Table 2, Appendix 2.

Health Behaviour in School-aged Children (HBSC)

10 to 17-year-olds, physical

In 2010, over one-third of participants reported *excellent* health (Kelly, Gavin, Molcho, & Nic Gabhainn, 2012). Younger children and boys were more likely to report positive health than older children and girls. A minority (12%) smoked at the time of the survey, older children and those from a lower social class were more likely to report having smoked at some time in their lives and 21% were current drinkers (Kelly et al., 2012). A fifth (20%) of children had fruit and/or vegetables more than once a day, with younger children, girls, and those from a higher social class more likely to report this. Just over half reported exercising four or more times a week with boys, younger children and those from a middle-class background reporting the highest levels of physical activity (Kelly et al., 2012).

Reports of general health remained stable between 2010 and 2014, with 34% of children remaining in *excellent* health (Gavin et al., 2015). There was a decrease in reported levels of drunkenness (21% vs 31% in 2010) and smoking (16% vs 28% in 2010), and an increase in the level of children reporting having never drank alcohol (58% vs 52% in 2010) (Gavin et al., 2015). Levels of fruit and vegetable consumption had increased since 2010. Girls, younger children, and those from higher social classes were more likely to report higher levels of fruit and vegetable consumption. Consumption of sweets (27% vs 37% in 2010) and soft drinks (13% vs 21% in 2010) had decreased. There was an increase in the proportion of children currently dieting (16% vs 13% in 2010). Reported levels of physical activity remained stable since 2010 (52%) as did self-care reports (Gavin et al., 2015).

In 2018, 33% of boys and 25% of girls reported *excellent* health, with younger children and those from higher social class groups more likely to report this (Költő et al., 2020). A small minority (5%) of respondents were current smokers and only 17% of respondents had had an alcoholic drink in the past 30 days (Költő et al., 2020). Girls (25%) were more likely than boys (20%) to report consuming fruit and vegetables more than once a day, with younger children and those from a higher social class more likely to report this also. Around 20% of respondents reported consuming sweets at least once a day, and around 7% reported consuming soft drinks daily or more. Boys (57%) were significantly more likely than girls (42%) to exercise four or more times a week (Költő et al., 2020).

10 to 17-year-olds, social and emotional

In 2010, half reported feeling *very happy*, and 76% reported high life satisfaction (Kelly et al., 2012). In relation to sexual activity, 27% of 15 to 17-year-olds reported ever having sex, with boys and those from lower social classes more likely to report this than girls and those from a higher social class (Kelly et al., 2012). Overall, 24% of children reported ever having been bullied. Boys and younger children were more likely to report this than girls and older children (Kelly et al., 2012). Over a third (35%) of children reported having been in a physical fight in the past 12 months, with boys and children from lower social classes (Kelly et al., 2012). Overall, 17% of children admitted to bullying others (Kelly et al., 2012).

In 2014, over three quarters (76%) of children reported high life satisfaction, which again remained unchanged from 2010 (Gavin et al., 2015). There was a decrease in the percentage of children reporting having been in a physical fight in the past 12 months (29%) (Gavin et al., 2015). There was also a decrease in the percentage of children who reported having ever bullied others (13% vs 16%), but the percentage of children that reported having ever been the victim of bullying remained stable (25%). The percentage of children who reported ever having sex also remained stable between 2010 and 2014 (27%) (Gavin et al., 2015).

In 2018, 47% of boys and 40% of girls reported feeling *very happy* with their life at present (Költő et al., 2020). Younger children were more likely to report this than older children. Boys (77%) were significantly more likely than girls (70%) to report high life satisfaction, with younger children and those from higher social classes being again more likely to report this (Költő et al., 2020). Boys (17%) were more likely than girls (10%) to report bullying others in the past couple of months, whilst 30% of both boys and girls reported being bullied in school over the past couple of months (Költő et al., 2020). At 15 to 17 years old, boys (28%) were more likely than girls (20%) to report having had sexual intercourse. Girls scored significantly worse in the Mental Health Inventory (Berwick et al., 1991) and the WHO-Five Well-being Index (WHO, 1998) than their male counterparts (Költő et al., 2020).

How does Ireland compare to other countries?

In 2010, physical activity measures compare favourably with those in other countries (Currie et al., 2012). Children aged 11-15 years in Ireland reported physical activity levels (at least 60 minutes a day in Ireland) which were above the HBSC average (Currie et al., 2012). Overall, 15-year-olds in Ireland ranked first on this indicator out of all 41 countries (Keane et al., 2017).

In 2010, 15-year-olds in Ireland were below the international average for 'bullying others' (20.2%) (Currie et al., 9012). 15-year-olds in Ireland were below the HBSC international average for 'liking school' (59.8%). 15-year-olds in Ireland were ranked 10th overall for 'feeling pressured by schoolwork' (Keane et al., 2017).

In 2014, 15-year-olds in Ireland were above the HBSC average for self-rated health (29.2% vs HBSC average of 28.9%). However, 15-year-olds were below the HBSC average for life satisfaction (68.3% vs HBSC average of 70.3%). Ireland ranked fourth out of all 42 countries for physical activity levels in

15-year-olds, a drop from 1st place in 2010 (Inchley et al., 2016).

In 2014, 15-year-olds in Ireland were still below the international average for bullying others (16.3% vs HBSC average 26.4%), but were also still below the HBSC average for liking school (63.5% vs HBSC average 68.9%). In 2014, 15-year-olds also felt very pressured by their schoolwork, as Ireland was ranked third out of all 42 participating countries for this indicator. This represents a large jump from tenth place in 2010 (Inchley et al., 2016).

The most recent HBSC international report on findings from 2017-18 data collection comparing 11 to 15-year-olds across 45 countries indicates children in Ireland are more likely to engage in the recommended amount of daily vigorous physical activity than children from other countries. In Ireland, both boys and girls from more affluent backgrounds reported a significantly higher level of self-rated health than their peers from less affluent backgrounds, and this trend was also found in two-thirds of participating countries (Inchley et al., 2020a).

At age 15 years, Irish adolescents reported high levels of problematic social media use although in a positive finding, half of boys and two-thirds of girls reported high levels of social support (Boer et al., 2020; Inchley et al., 2020b). A quarter of 15-year-olds in Ireland preferred to talk about their feelings online. Very few countries showed an association between family affluence and the likelihood of the adolescent experiencing cyberbullying. However, in Ireland, girls were found to be more likely to have experienced cyber-bullying if they came from a less affluent background. For 15-year-olds who felt pressured by schoolwork, Ireland was ranked 12th highest out of the 45 participating countries (Inchley et al., 2020b).

Programme for International Student Assessment (PISA)

PISA 2012 (15-year-olds), social and emotional

Internationally, four out of five students *agreed* or *strongly agreed* that they feel happy at school or that they feel like they belong at school. A very large percentage (85%) of advantaged students (i.e., those in the top quarter nationally on the PISA index measuring economic, social and cultural status [ESCS]) and a large percentage (78%) of disadvantaged students (those in the bottom quarter nationally on ESCS) *agreed* or *strongly agreed* with the statement *I feel like I belong at school* (OECD, 2013a, 2013b). In Ireland, 79.7% of students *agreed* or *strongly agreed* with the statement, *I feel like I belong at school* (Perkins, Shiel, Merriman, Cosgrove, & Moran, 2013). Across, most countries, socio-economically disadvantaged students reported lower levels of engagement, drive, motivation, and self-belief (OECD, 2013a). In the majority of countries, including Ireland, better student-teacher relationships were strongly associated with greater student engagement with and at school (OECD, 2013a, 2013b).

PISA 2015 (15-year-olds), physical

Findings from PISA 2015 show that on average across OECD countries almost half of students practiced sports before school whilst 66% exercised or practiced sports after school. Boys were more likely than girls to report exercising both before and after school and those who came from higher social classes were also more likely to report engaging in moderate to vigorous physical activity (OECD, 2017).

Just over a quarter (26%) of boys and 18% of girls on average in OECD countries indicated that they had skipped breakfast on the most recent day that they had attended school, with girls being more likely than boys to have skipped breakfast. In Ireland, a higher percentage of girls (over 20%) than boys reported skipping breakfast (OECD, 2017). One possible explanation for the finding that girls were more likely than boys to skip breakfast is that at age 15, girls may be more likely than boys to be influenced

by their perceptions of their own bodies (OECD, 2017).

PISA 2015 (15-year-olds), social and emotional

Many students internationally (around 64% of girls and 47% of boys) were very anxious about schoolwork and tests (OECD, 2018). This was not related to the number of school hours, or the frequency of tests, but rather the level of support they were getting from teachers. Girls had higher levels of anxiety than boys and test anxiety was negatively related to test performance. In Ireland, a high percentage of students agree or strongly agreed with a number of statements about schoolwork related anxiety, e.g. *even if I am well prepared for a test I feel very anxious* (63%) and *I get very tense when I study* (46%) (OECD, 2017).

Bullying was an issue in Irish schools with 14.7% of students reporting being victims of any type of bullying act *at least a few times a month* (OECD, 2017). Bullying was lower in schools where students reported more positive relationships with their teachers (OECD, 2018). In Ireland, boys were more likely to report a greater sense of belonging in school (OECD, 2017).

Most 15-year-olds in Ireland were found to be satisfied with their lives and life satisfaction scores were in line with the OECD average of 7.3 out of 10 (OECD, 2017). In Ireland, among other countries, the likelihood of reporting low satisfaction with life was more than four times higher if the student reported feeling like an outsider (OECD, 2017). However, girls and disadvantaged students (i.e., those in the bottom quarter on ESCS) were more likely than boys and advantaged students (those in the top quarter on ESCS) to be dissatisfied with their lives. One in five students internationally reported that they received some form of unfair treatment from a teacher (they were harshly disciplined or felt offended or ridiculed in front of others) at least a few times a month (OECD, 2018).

PISA 2018 (15-year-olds), subjective wellbeing

Just over a quarter (27%) of 15-year-olds in Ireland reported that they *always* put pressure on themselves to do well on tests, 24% *always* felt pressure from their parents to do well on tests and 22% felt pressure from their teachers to do well (McKeown et al., 2019). Over half (51%) of students worried *often* or *always* about what would happen if they failed an exam or test and 43% reported *often* or *always* feeling nervous and stressed when thinking about or doing exams and tests (McKeown et al., 2019).

Over half (61%) of students reported that they were satisfied with their life (significantly lower than the OECD average of 66.9%), with significantly fewer females in Ireland reporting that they were satisfied with their life (55.5%) compared to their male peers (67.3%) (McKeown et al., 2019). Just over 45% of Irish students reported that they felt *happy always*, whilst around 32% of Irish students reported *always* feeling joyful and 27% *always* feeling cheerful (compared to the average across OECD countries of approximately 41% for both emotions). In comparison with these positive feelings, only 5% of Irish students reported *always* feeling sad (OECD average of 6.5%), and only 3% reported *always* feeling afraid (OECD average of 10.3%) (McKeown et al., 2019; OECD, 2019).

Regarding bullying, only 9% of students in Ireland reported *frequently bullying others*. However, 16% reported that they were made fun of by their peers *at least a few times a month*. Around 9% reported that other students left them out of things on purpose. Lastly, a small percentage of Irish students reported being threatened by their peers (6%) or hit and pushed by their peers (6%) *at least a few times a month* (OECD, 2019). Over half (67%) of Irish students *agreed* or *strongly agreed* with the statement *I feel like I belong at school*. Again, over half of students (76%) *agreed* or *strongly agreed* with the statement *I feel like I make friends easily at school*. Lastly, a large majority of Irish students (89%) *agreed* or *strongly agreed* with the statement *other students seem to like me* (OECD, 2019).

How does Ireland compare to other countries?

In 2012, Ireland was above the international average regarding how happy students felt in school and ranked 36th out of all OECD countries on this indicator. Although the mean score in Ireland for students' sense of belonging in school was not significantly different to the OECD average in 2012, it had dropped significantly from the corresponding score in 2003 (OECD, 2013a).

In 2015, Ireland was ranked second out of all OECD countries for exercise after school. Ireland was also ranked fifth internationally for physical activities in and out of school. Ireland was well below the OECD average for skipping meals. For boys who skipped dinner on the most recent day they had attended school, Ireland was ranked the lowest of all OECD countries (a low rank indicates little skipping of dinner which is a positive finding) (OECD, 2017).

In 2015, students in Ireland were above the international average for schoolwork-related anxiety (e.g., 63.2% vs. 55.5% agreed or strongly agreed with the statement, even if I am well prepared for a test I feel anxious and 46% vs. 36.6% agreed or strongly agreed with the statement, I get very tense when I study) (OECD, 2017). In 2015, Ireland was comparable to the international average for sense of belonging at school (73.3% vs 73%), and below the international average for bullying (14.7% vs 18.7%, percentage of students who reported being bullied by any type of bullying act at least a few times a month). Overall, Ireland was slightly below the international average for students who were very satisfied with life (32.4% vs 34.1%) (OECD, 2017).

In 2018, Irish students scored significantly below the overall OECD average for life satisfaction (61% vs 66.9%). Irish students also reported *always* feeling cheerful (32%) and *always* feeling joyful (27.3%) significantly less than other OECD countries (approximately 41% of students on average). However, Irish students also reported *always* feeling sad (5%) and *always* feeling afraid (3%) significantly less than students in other OECD countries (6.5% and 10.3% respectively) (McKeown et al., 2019). The prevalence of the exposure of Irish students to bullying in school was in line with the OECD average (22.7%) (OECD, 2019).

Progress in International Reading Literacy Study (PIRLS)

Fourth-class, physical

In 2011, 78% of Irish Fourth-class pupils had teachers who reported that their instruction was *not at all* limited by lack of proper nutrition amongst pupils, i.e., a lack of proper nutrition was not identified as a problem by teachers for a large majority of pupils. However, 22% of pupils had teachers who indicated that instruction was limited *some* or *a lot* by lack of proper nutrition amongst their pupils (Mullis, Martin, Foy, & Drucker, 2012). Teachers of 38% of Irish Fourth-class pupils reported that instruction was *not at all limited* by the pupil not getting enough sleep, whilst 62% of pupils had teachers who identified lack of sleep as limiting instruction *some* or *a lot* (Mullis et al., 2012).

In 2016, teachers reported that their instruction was limited *very little* by a number of different pupil attributes including lack of proper nutrition and not getting enough sleep for 47% of their pupil, *some* for 52% of their pupils, and *a lot* for 1% of their pupils (Mullis, Martin, Foy, & Hooper, 2017).

Fourth-class, social and emotional

In 2011, Irish data revealed that 64% of pupils reported that they experienced bullying *almost never*, a quarter experienced bullying *about monthly*; and, 12% experienced bullying *about weekly* (Mullis et al., 2012).

In 2016, 74% of Irish pupils reported that they experienced bullying *almost never*, 20% experienced bullying *about monthly*, and 5% experienced bullying *about weekly*. Over half (61%) of Irish pupils reported having a *high* sense of school belonging, 31% reported having *some sense* of school belonging, and 8% had a *low* sense of school belonging (Mullis et al., 2017).

How does Ireland compare to other countries?

In 2011, Ireland was below the international average for teacher instruction being hindered *some or a lot* due to lack of proper nutrition in their pupils (22% vs 27% international average). However, Ireland was above the international average for teacher instruction being hindered *some or a lot* due to lack of proper sleep in their pupils (62% vs 49% international average) (Mullis et al., 2012).

In 2011, Ireland was ranked fifth lowest out of all participating countries for the number of pupils who experienced bullying (Mullis et al., 2012).

In 2016, Ireland was below the international average for teacher instruction being hindered *a lot* by pupil attributes, e.g., lacking prerequisite skills, absent, suffering from a lack of sleep or proper nutrition, and disruptive (1% vs 4% international average), and teacher instruction being hindered *some* by pupil attributes (52% vs 63% international average). However, Ireland was above the international average for teacher instruction being hindered *very little* by pupil attributes, at 47% compared to an international average of 34% (Mullis et al., 2017).

In 2016, Ireland had one of the lowest levels of bullying, ranked third lowest of participating countries. Ireland was ranked 19th out of all participating countries for overall sense of school belonging (Mullis et al., 2017).

Trends in Mathematics and Science Study (TIMSS)

Fourth-class and Second-year, physical

In 2011, Fourth-class teachers in Ireland reported that their instruction was *not at all* limited by lack of proper nutrition in 79% of their pupils, whilst their instruction was limited *some or a lot* by lack of proper nutrition for 21% of their pupils. Teachers also reported that their instruction was *not at all* limited by the pupils not getting enough sleep for 38% of their pupils, whilst their instruction was limited *some or a lot* by the student not getting enough sleep in 62% of their students (Martin, Mullis, Foy & Stanco, 2012).

In 2015, Fourth-class teachers in Ireland reported that their teaching was *not limited* by a number of different pupil attributes including lack of proper nutrition and not getting enough sleep for 48% of their pupils, *somewhat limited* for 48% of their pupils, and *very limited* for 4% of their pupils (Mullis, Martin, Foy & Hooper, 2016).

In 2015, Second-year teachers in Ireland reported that their teaching was *not limited* by a number of different student attributes including lack of proper nutrition and not getting enough sleep for 41% of their students, *somewhat limited* for 53% of their students, and *very limited* for 6% of their students (Mullis et al., 2016).

Fourth-class and Second-year, social and emotional

In 2011, 64% of Fourth-class pupils in Ireland reported that they experienced bullying *almost never*, 25% experienced bullying *about monthly* and 12% experienced bullying *about weekly* (Martin et al., 2012).

In 2015, 73% of Fourth-class pupils in Ireland reported that they experienced bullying almost never,

20% experienced bullying *about monthly,* and 6% experienced bullying *about weekly.* Almost three quarters (73%) of pupils had a *high* sense of belonging at school, 23% had an *average* sense of school belonging, and 4% had *little* sense of school belonging (Mullis et al., 2016).

In 2015, 75% of Irish Second-year students reported that they experienced bullying *almost never*, 22% experienced bullying *about monthly*, and 4% experienced bullying *about weekly*. In relation to feeling a sense of school belonging, 42% of students had a *high* sense of school belonging, 48% percent had an *average* sense of school belonging, and 10% had *little* sense of school belonging (Mullis et al., 2016).

How does Ireland compare to other countries?

In 2011, Ireland was below the international average for teacher instruction being hindered *some or a lot* due to lack of proper nutrition in their students. However, Ireland was above the international average for teacher instruction being hindered *some or a lot* due to their students getting insufficient sleep (Martin et al., 2012).

In 2015, Ireland was below the international average for teaching being *very limited* by pupil/student attributes and teaching being *somewhat limited* by pupil/student attributes in both Fourth class and Second year. However, Ireland was above the international average for teaching being hindered *very little* by pupil/student attributes in both Fourth class and Second year (Mullis et al., 2016).

Ireland was ranked as the sixth lowest out of all participating countries for the levels of bullying that Fourth-class pupils experienced in 2011 (Martin et al., 2012). Again, Ireland had one of the lowest levels of bullying present out of all participating countries for Fourth-class pupils and Second-year students in 2015. Ireland was ranked 11th highest out of all participating countries for sense of school belonging in Fourth grade (i.e., Fourth class) and 21st highest out of all participating countries for sense of school belonging in Eighth grade (i.e., Second year), a significant drop from Fourth grade (Mullis et al., 2016).

6.5 CONCLUSIONS

This review of large-scale national and international surveys from the last decade on the wellbeing of children and young people provides a range of positive findings, such as supportive relationships among family and peers and comparatively high levels of wellbeing in general. However, the current review identified a range of challenges in the area of wellbeing which may be useful to consider for the purposes of determining the content of wellbeing-related TPL. Furthermore, the findings presented in this chapter, and wellbeing findings from large-scale assessments more generally, provide information on the overall levels of student wellbeing in the population which may be helpful when considering wellbeing in particular schools. The overall population data are likely to be useful when considering anticipated changes in wellbeing arising from teacher engagement in TPL. A further advantage of reviewing national and international measures used in wellbeing research is that the measures used to assess wellbeing in large-scale surveys may be appropriate to adapt for use in assessing student outcomes as part of an evaluation of TPL.

Some of the challenges identified in this chapter which are likely to have implications for TPL in the area of children and young people's wellbeing are:

- Social and financial inequalities in physical, social, and emotional wellbeing outcomes are evident from an early age and may increase over time, possibly augmented by the manner in which inequalities manifest themselves in (in)stability and (dis)harmony in home environments. These inequalities indicate a highly tailored and targeted approach to supporting and enhancing wellbeing which begins early and is built on as children move into adolescence.
- Children and young people with SEN and/or disabilities remain a group in need of early, targeted,

and sustained support for their wellbeing needs.

- Gender differences also have implications for TPL; for example, targeting social and emotional skills among younger boys, and enhancing self-esteem among older girls.
- Mental health issues are common among adolescents, and more so in girls, and this underlines the need for early and sustained support (incorporating TPL) for the development of protective coping strategies and healthy self-esteem.
- Public health issues relating to diet, sleep, physical activity, and substance use are found across many of the studies and indicate an ongoing need for cross-sectoral work including TPL which promotes healthy behaviours amongst children and young people.
- International comparative data indicates that young people in Ireland reported comparatively lower life satisfaction and liking of school along with rather high levels of pressure relating to schoolwork. Findings from PISA 2018 suggest that stress about schoolwork and tests is having a negative impact on students. PISA findings also suggest that this stress is being placed on students by the students themselves, their parents, and their teachers. National studies show a dip in wellbeing and school engagement in Second year (see e.g., Smyth, Dunne, McCoy, & Darmody, 2006). Findings related to exam stress and wellbeing have been flagged in Section H of the 2016 *Report on the Committee on the Rights of the Child* where it is noted that the pressures on young people arising from the State Examinations remains a matter for concern and that the State Examinations are in need of reform. One aspect of the reform process for the Senior Cycle involves an OECD review (see OECD, 2020) as part of a wider consultation on Senior Cycle reform conducted by the National Council for Curriculum and Assessment (NCCA, see www.ncca.ie). In the shorter term, findings of exam-related stress have implications for TPL insofar as they are suggestive of a need to build resilience and coping strategies for stress among post-primary students.
- On a positive note, the evidence suggests that rates of bullying in Ireland may be lower than
 internationally at both primary and post-primary levels, with some data suggesting that positive
 student-teacher relations are associated with lower rates of bullying among students. This
 finding again suggests the importance of TPL in the area of fostering positive relationships
 between and among the school body, perhaps within a whole-school framework.

CHAPTER 7 National policy context for student wellbeing

The current study aims to develop a framework for the evaluation of teachers' professional learning (TPL) and apply that framework to TPL related to student wellbeing. Given the proposed application of the framework to the domain of wellbeing, this chapter examines recent policy developments related to wellbeing, with a particular focus on educational policy. While the focus of the chapter is on the educational policy context in a broad sense, some consideration is given to specific curricular developments that are particularly relevant to the development and promotion of wellbeing.

It is recognised that wellbeing in schools and centres for education is situated within the wider public health policy context and, as such, may be influenced by health policies such as *Healthy Ireland – A Framework for Improved Health and Wellbeing 2013-2025* (DOH, 2013). The four goals of Healthy Ireland relate to increasing the proportion of people who are healthy at all stages of life; reducing health inequalities; protecting the public from threats to health and wellbeing; and, creating an environment where everyone can play their part in achieving a healthy Ireland. As schools and centres for education are not the primary focus of the health policies under the Healthy Ireland framework (DOH, 2013), these are not reviewed further in this chapter.

It is also acknowledged that work at a national level regarding wellbeing is influenced and informed by international work in the area. An example of relevant international work is the OECD's *Strength Through Diversity* project (OECD, nd) which explores how education systems can be more inclusive and equitable. The project examines how diversity can affect the wellbeing of students and examines the dimensions of diversity by considering: migration; ethnic groups, national minorities, and Indigenous peoples; gender; gender identity and sexual orientation; special education needs (SEN); and, giftedness. The OECD's work in this area involves desk-based analysis, country reviews and policy fora and draws heavily from data gathered through PISA (see Chapter 6 of this report for an overview of PISA). The current chapter focuses on national policy rather than international comparisons.

One particular area of education in which wellbeing will increasingly become a focus of attention over the coming years is in school self-evaluation (SSE). Therefore, this chapter briefly outlines the frameworks and guidelines underpinning SSE to demonstrate how these will be used to embed wellbeing in a whole-school approach.

The remainder of this chapter is organised as follows: Section 7.1 outlines *Better Outcomes, Brighter Futures – the National Policy Framework for Children and Young People 2014–2020* (DCYA, 2014) in order to present the broader policy context of wellbeing for children and young people. Subsequent sections focus on education policy documents. Specifically, Section 7.2 presents *Cumasú Empowering through Learning Action Plan for Education 2019* (DES, 2019a). Section 7.3 summarises the *Wellbeing Policy Statement and Framework for Practice 2018–2023* (DES, 2018b). Section 7.3 includes a brief description of the interagency guidelines on *Well-being*¹¹ *in Primary Schools* (DES, HSE, & DOH, 2015b) and *Well-being in Post-Primary Schools: Guidelines for Mental Health Promotion and Suicide Prevention* (DES, HSE, & DOH, 2013) which were superseded by the *Wellbeing Policy Statement and Framework for Practice 2018–2023*. Sections 7.4 and 7.5 gives an overview of frameworks and guidelines underpinning the school self-evaluation process [Looking at Our School: A Quality Framework for Primary and Post-primary Schools (DES, 2016b, 2016c); School Self-evaluation Guidelines, 2016–2020 Primary and Post-primary (DES 2016d, 2016e)]. Section 7.6 identifies some curriculum developments related to

wellbeing at primary level, i.e., *Primary Curriculum Review and Redevelopment* (NCCA, 2019a). Section 7.7 examines curriculum developments relevant to wellbeing at post-primary level. Finally, Section 7.8 presents some conclusions and final observations.

7.1 BETTER OUTCOMES, BRIGHTER FUTURES – THE NATIONAL POLICY FRAMEWORK FOR CHILDREN AND YOUNG PEOPLE 2014 – 2020

The National Strategy on Children and Young People's Participation in Decision-making 2015-2020 (DCYA, 2015), was discussed in Chapter 6 of this report where it was noted that the strategy advocates for the voices of children and young people to be heard and included in decision-making in settings including health and education. The strategy on the participation of children and young people is a constituent of the broader framework *Better Outcomes, Brighter Futures: The National Policy Framework for Children and Young People 2014-2020*, which sets out a vision for Ireland to be one of the best small countries in the world in which to grow up and raise a family (DCYA, 2014). It hopes to create an environment in Ireland where the rights of all children and young people are respected, protected, and fulfilled; where their voices are heard; and, where they are supported in reaching their full potential throughout their lives.

The development of the *Better Outcomes, Brighter Futures* framework was guided by five key principles (children's rights; family-orientated; equality; evidence-informed and outcomes-focused; and, accountability and resource efficiency). One purpose of the framework is to co-ordinate policy across Government across five outcomes, which aim for children and young people to (DCYA, 2014, p. 4):

- be active and healthy and take care of/optimise their physical and mental wellbeing
- achieve full potential in all areas of learning and development
- be safe and protected from harm
- have economic security and opportunity
- be connected, respected, and contributing to their world.

A second purpose of the framework is to identify areas that have the potential to improve outcomes for children and young people, if such areas are given focused attention. Thirdly, the framework aims to transform the effectiveness of existing policies, services, and resources. Six transformational goals were set to achieve the national outcomes. These are to:

- support parents
- have earlier intervention and prevention
- listen to and involve children and young people
- ensure quality services
- strengthen transitions
- have cross-government and interagency collaboration and coordination.

Implementation of the framework is tracked over time and assessed against a number of key indicators. For each national outcome area, a small number of key indicators were identified in the framework to allow progress to be measured. For example, related to the national outcome area *active and healthy*, key indicators include: breastfeeding initiation rates; the percentage of 11-year-olds categorised as overweight or obese; suicide and intentional self-harm death rates for 15 to 29-year-olds; and, alcohol consumption in 15 to 16-year-olds. Targets related to the outcome area *achieving full potential in learning and development* refer to participation rates in early childhood education; percentages of primary school pupils achieving minimum standards in reading and mathematics in National Assessments of these subjects; improvements in reading, mathematics, and science achievement at post-primary level; and, a reduction in the rate of early-school leaving. Targets related to the other three national outcomes include a reduction in the percentages of 15-year-olds who report being bullied at school; a reduction in the

percentage of children living in poverty; and, an increase in the percentage of students who report being interested in political issues in their community.

Implementation, impact, and effectiveness of the framework was examined in a mid-term review (DCYA, 2018). It was concluded that the implementation structures for the framework had worked well and provided for effective cross-collaboration and interdepartmental working. However, the level of awareness of the framework was considered to be low. It was suggested that a smaller number of priority areas should be the focus of the second phase of the framework. It was recommended that these priority areas include, at least: child poverty; child homelessness; mental health and wellbeing; prevention and early intervention; and, the progression of the Early Years Strategy.

7.2 ACTION PLAN FOR EDUCATION

Turning to educational policy, a key document is *Cumasú Empowering through Learning: Action Plan for Education 2019* (DES, 2019a). This is the annual plan for 2019 which sits within the wider action plan framework (*Action Plan for Education 2016-2019*; DES, 2016a) and which is driven by the *Department's Statement of Strategy 2019-2021* (DES, 2019b). The overall 2016-2019 Action Plan – the first of its kind for education in Ireland – sets out the ambition of having the best education and training system in Europe by 2026 (DES, 2016a). In the year following publication of an overall Action Plan and in each subsequent year of the plan's lifespan (i.e., from 2017 onwards), an updated annual plan is published which contains actions to be implemented in that year (at the time of writing, the 2019 plan is the most up-to-date available¹²). Quarterly implementation reports are also published.

The annual 2019 plan (DES, 2019a) outlines five key goals. These are (p. 15):

- to shape a responsive education and training system that meets the needs and raises the aspirations of all learners
- to advance the progress of learners at risk of educational disadvantage and learners with special educational needs in order to support them to achieve their potential
- to equip education and training providers with the skills and support to provide a quality learning experience
- to intensify the relationships between education and the wider community, society, and the economy
- to lead in the delivery of strategic direction and supportive systems in partnership with key stakeholders in education and training.

In examining progress since 2016, the 2019 annual plan (DES, 2019a) identifies progress in the areas of (pp. 9-11):

- enhancing the quality of education and training provision, e.g., through the introduction of education-focused inspections in the Early Learning and Care sector and through the establishment of the Schools Excellence Fund
- strengthening leadership, teaching, and workforce planning, e.g., through commencing the Fitness to Teach provisions of the Teaching Council Act; the implementation of a new strategy on teacher supply; and, the establishment of the Centre for School Leadership (CSL)
- a focus on wellbeing, e.g., with the implementation of the *Wellbeing Policy Statement and Framework for Practice 2018-2023* (for an overview Section 7.3) and an increase in the number of psychologists in the National Educational Psychological Service (NEPS)
- curricular reform, e.g., with the roll out of the new Framework for the Junior Cycle and the introduction of the new Primary Language Curriculum

12 See https://www.gov.ie/en/consultation/a437de-action-plan-for-education-2020-public-consultation/

- education inclusion, e.g., with the delivery of a new DEIS plan (DES, 2017a)
- attracting international student talent
- developing strong structures, e.g., by commencing provisions in the Education (Admission to Schools) Act 2018
- increasing digital abilities, e.g., by implementing the Digital Strategy for Schools
- improving skills offerings, e.g., through the implementation of the National Skills Strategy 2025.

Under each strategic goal, various actions and sub-actions are specified for 2019.

Wellbeing is specifically highlighted under strategic goal 1 and the first action under this goal refers to overseeing the roll-out of the implementation of the DES *Wellbeing Policy Statement and Framework for Practice 2018-2023* (DES, 2018b; for details of this policy, see Section 7.3 below). The specific sub-actions related to wellbeing include the development of CPD to support the implementation of the Wellbeing Policy Statement. The roll-out of supports to DEIS schools is also noted under the sub-actions. In particular, teacher programmes will continue to be rolled-out to DEIS schools by NEPS psychologists and the roll-out of the Student Support Team Project in DEIS post-primary schools enters Phase 3. Also relevant from a wellbeing perspective is Action 1.4 which refers to a review of the supports and support structures for vulnerable children and young people at key points of transition within and between education settings.

7.3 WELLBEING POLICY STATEMENT AND FRAMEWORK FOR PRACTICE 2018–2023

This policy statement, published in 2018 and revised in 2019, provides an overarching structure for all existing, ongoing, and developing work in the area of wellbeing. Such work includes at primary level *Aistear: the Early Childhood Curriculum Framework* (NCCA, 2009) and the *Social, Personal, and Health Education* curriculum (DES, 1999a) and at post-primary level, the Junior Cycle Wellbeing Programme (NCCA, 2017a). The policy defines wellbeing as present when:

"a person realises their potential, is resilient in dealing with the normal stresses of their life, takes care of their physical wellbeing and has a sense of purpose, connection and belonging to a wider community. It is a fluid way of being and needs nurturing throughout life" (DES, 2018b, p. 10).

According to the framework, the vision and ambition of the DES is to ensure that by 2023:

- the promotion of wellbeing is at the core of the ethos of every school and centre for education
- all schools and centres for education are providing evidence-informed approaches and support, appropriate to need, that promote the wellbeing of all children and young people
- Ireland will be recognised as a leader in the area.

Five key principles guided the development of the *Wellbeing Policy Statement and Framework for Practice 2018-2023*. Thus, the policy is designed to be child/young person-centred; equitable, fair, and inclusive; evidence-informed; outcomes-focused; and, based on partnership/collaboration. Implementation, coordination, and review of the policy is the responsibility of the DES Wellbeing Steering Committee.

A distinction is made in the policy between the role of the government and the role of schools and centres for education in the promotion of wellbeing. Regarding the role of Government, this typically relates to strategies and initiatives of various departments designed to promote wellbeing. The DES is recognised as one with a key role to play, and as such, oversees various initiatives related to wellbeing. These include: Junior Cycle reform; funding for the delivery of DEIS; implementation of the model for allocating Special Education teachers to mainstream schools and the establishment of the National

Council for Special Education (NCSE) Support Service; revision of child protection procedures; and, the ongoing reviews of both the Primary Curriculum and the Senior Cycle Programme.

Turning to the role of schools and centres for education, the policy recognises the importance of the development of the 'whole child', given the connections between cognitive and emotional development. It aims to provide schools with a whole-school, multicomponent, and preventative approach to wellbeing promotion in order to ensure that all of the key areas that contribute to wellbeing promotion in schools are given a focus. These key areas are: culture and environment; curriculum (teaching & learning); relationships & partnerships; and, policy & planning (see Figure 7.1).

Figure 7.1: Four key areas of wellbeing promotion in the whole-school approach outlined in *Wellbeing Policy Statement and Framework for Practice 2018-2023*

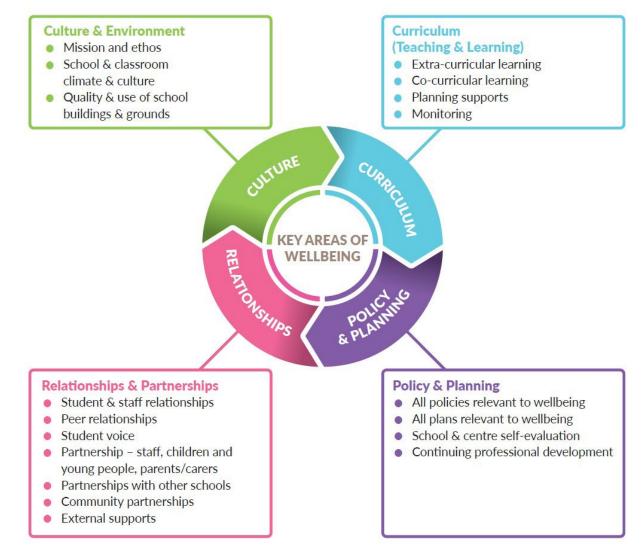


Figure 7.1 is included with the permission of NEPS, on behalf of the DES.

In the school setting, factors which can put wellbeing at risk include disengagement and absenteeism; violence or bullying; low achievement, learning difficulties, or SEN; cultural differences; school transitions; poor connections between family and school; inconsistent discipline; and, lack of opportunity to develop social and emotional learning (DES, 2018b, p. 13). Therefore the policy emphasises the importance of strengthening school-based protective factors and minimising school-based risk factors.

The strategy recognises that there are challenges associated with the measurement of wellbeingrelated outcomes and advises caution in aiming to measure the wellbeing of individuals. While the need to identify and establish clearer ways of measuring successful wellbeing promotion in schools is acknowledged, some measures are suggested which may be helpful to schools in monitoring change in wellbeing. These include measures of student attendance; of successful school completion; and, of successful transition of students. It is proposed that it may be appropriate to gather data in the school or centre for education (e.g., via survey, interview, or checklist); through consultation with children and young people, parents, teachers, and other staff members; or, from inspection reports which may provide commentary on the quality of the school's wellbeing promotion work but do not seek to measure wellbeing-related outcomes.

In order to support the implementation of the wellbeing promotion process, wellbeing resources are made available online. It is expected that these will be of use to schools and centres for education in monitoring their work to improve wellbeing.

It is intended that existing SSE and planning processes will be used to focus attention on wellbeing at school level. Every school and centre for education is required, by 2023, to select wellbeing promotion as a topic for SSE and to incorporate actions arising from the SSE into their school improvement plan (SIP). It is argued that the alignment of the *Wellbeing Policy Statement and Framework for Practice 2018-2023* with the standards outlined in *Looking at Our School* (DES, 2016b, 2016c) will facilitate schools in using the SSE process to engage with wellbeing. Given the requirement to select wellbeing as a topic for SSE, sections 7.4 and 7.5 provide some greater detail on the quality frameworks and guidelines which inform the SSE process. The *Well-being in Primary Schools* guidelines (DES, 2015b) and *Well-being in Post-Primary Schools* guidelines (DES, 2013) have been superseded by the *Wellbeing Policy Statement and Framework for Practice 2018-2023*. These documents are outlined briefly in the following two sub-sections.

Wellbeing in primary schools

Published in 2015, the *Well-being in Primary Schools* guidelines (DES, HSE, & DOH, 2015) set out a number of key aims including the promotion of mental health awareness and good practice in primary schools; assisting schools to focus on a whole school approach to mental health while involving key stakeholders including children, their teachers, and parents; raising awareness of supports available to schools; and, helping schools to deal with issues as they arise. Emphasis is placed on the importance of both the school and family context in relation to wellbeing. The guidelines take a whole-school approach to wellbeing and outline a continuum of support framework for the promotion of mental health in schools which includes some supports for all; increased supports for some pupils who have milder additional needs; and, individualised supports for a small number of pupils who may have more complex needs. Signposting to supports from both within the school and external supports are provided for schools. *The Well-being in Primary Schools* guidelines also state that the SSE process provides a framework for schools to identify needs in relation to the promotion of wellbeing, including needs relating to professional development of staff. A number of key areas for whole-school professional development are suggested with the aim of assisting teachers in the promotion of mental health and wellbeing. These include:

- identifying and building upon existing good practice and implementation of SPHE
- developing an understanding of the mental health and wellbeing of young people and child development
- exploring risk and protective factors for mental health and wellbeing and raising awareness of the links between risk factors and the later development of mental health problems
- providing opportunities for reflection on the school and classroom environments and practices and the promotion of healthy relationships
- raising awareness of the importance of consistency between home and school environments for the effective implementation of strategies and programmes to promote mental health
- considering the implementation of supportive practices when addressing issues which may arise between children and exploring positive strategies to assist children to learn the necessary

skills to deal with negative situations with peers

• guiding teachers to develop skills to cope in a variety of social situations and to assist their pupils to also develop such skills (see DES, HSE, & DOH, 2015b, p. 25).

Wellbeing in post-primary schools

The Well-being in Post-primary Schools: Guidelines for Mental Health Promotion and Suicide Prevention were published in 2013 by an inter-departmental group from across DES, HSE, and DOH. These guidelines set out to provide practical guidance on how post-primary schools can promote mental health and wellbeing. They aim to outline how schools can progress mental health promotion work using the NEPS Continuum of Support Framework; highlight the need for a holistic approach; build on existing good practice; and, provide an outline of relevant supports and services available for schools. Similar to other policies reviewed, these guidelines emphasise the importance of a whole-school approach and note the importance of both SSE processes and the SPHE curriculum to mental health promotion.

The Well-being in Post-primary Schools: Guidelines for Mental Health Promotion and Suicide Prevention were followed by guidelines for Student Support Teams in Post-primary School (DES, 2014), which promote wellbeing including interventions designed for all/some/few, depending on students' identified level of need, at post-primary level. This publication provides guidelines for establishing a Student Support Team (SST) in post-primary schools or reviewing an existing SST. Typically, a SST includes staff such as the principal or deputy principal, guidance counsellor, special needs co-ordinator, year heads, and SPHE co-ordinator, as well as the home school community liaison (HSCL) teacher, school completion officer (SCO), chaplain, and/or behaviour support teacher where applicable. The SST is student-focused and functions to:

- co-ordinate the support available for students in the school
- facilitate links to the community and other non-school support services
- enable students with support needs to continue to access a full education
- assist staff to manage those students effectively
- ensure new staff members are briefed about policies and procedures relating to student wellbeing and support
- advise school management on the development and review of effective student support policies and structures (DES, 2014, p. 6).

The SST should meet regularly to discuss the needs of specific students, identified through clear referral pathways to the team, with the aim of providing short-term interventions which are solution focused and can be implemented to support students' and later evaluated.

7.4 LOOKING AT OUR SCHOOL: A QUALITY FRAMEWORK FOR POST-PRIMARY SCHOOLS and LOOKING AT OUR SCHOOL: A QUALITY FRAMEWORK FOR PRIMARY SCHOOLS

Published in 2016 by the DES Inspectorate, these frameworks (one for primary and one for postprimary) provide a set of standards for the two key aspects of the work of schools: *teaching and learning*; and, *leadership and management*. The frameworks are designed for teachers and school leaders to strengthen the quality of leadership in their schools, and to support them in implementing the most effective and engaging teaching and learning practices. They also aim to help schools to identify their strengths and areas for development. In this way, they support the SSE process and form the basis for the guidelines discussed in the next section. The quality frameworks also inform the work of inspectors. The quality frameworks and guidelines are relevant to the current study as SSE will increasingly become one method of focusing attention on wellbeing at a whole-school level. The two dimensions in the frameworks – *teaching and learning*, and *leadership and management* – are divided into a number of distinct, interrelated domains. Each of the domains has associated standards. These represent the behaviours and attributes characteristic of practices in an effective, well-functioning school. As an example of dimensions, domains and standards, under the teaching and learning dimension, the first domain relates to learner outcomes and the first standard for this outcome is that "*students enjoy their learning, are motivated to learn and expect to achieve as learners*" (DES, 2016b, p. 12).

For each standard, statements of effective practice and statements of highly effective practice have been developed to allow teachers, school leaders, and others involved in evaluation activities to assess each aspect of the school's provision. Continuing with the example above, one statement of effective practice in this area is that:

Students' enjoyment in learning is evident and is often linked to a sense of making progress and of achievement. Their engagement with learning contributes to their sense of wellbeing (p. 13).

The corresponding statement of highly effective practice is that:

Students' enjoyment in learning is evident and *arises from* a sense of making progress and of achievement. Their engagement with learning contributes to their sense of wellbeing (p. 13, emphasis in original).

The intention is that taken together, the statements of effective practice and statements of highly effective practice should enable teachers, school leaders, and inspectors to undertake internal and external evaluative processes and arrive at evidence-based conclusions about the quality aspects of the school's core work.

Relevant to the current study, the quality frameworks recognise that students' wellbeing is intrinsic to a holistic view of learning, "both as an outcome of learning and as an enabler of learning" (p. 6). Also, of particular importance to the current research, the frameworks consider career-long professional development to be of central importance to the work of the teacher and identify reflection and collaboration as cornerstones of professional learning. Other principles of the quality frameworks are a recognition of: the importance of quality teaching; of the school as a dynamic learning organisation; of the complementary roles of external and internal evaluation; and, of the inseparability of leadership and management.

The frameworks are intended to be used in a number of ways. Some of their key uses are as a tool for reflection; for developing and sustaining teachers and leaders; for recruitment; for professional development across the system; and, for transparency, accountability, and improvement. Looking at their application in the area of professional development in more detail, the frameworks are intended to support various bodies such as support services of the DES, third-level institutions, professional associations, and management and patron/trustee bodies with decision-making around professional development. In detail, the frameworks are intended to support these bodies in (p. 11):

- developing professional development programmes and courses with a consistent view of what makes for high-quality teacher and learning and leadership
- evaluating the strengths of current programmes and courses, and exploring opportunities for further development
- considering demands from teachers and from current and aspiring school leaders in the context of current challenges.

7.5 SCHOOL SELF-EVALUATION (SSE) GUIDELINES 2016-2020 (PRIMARY AND POST-PRIMARY VERSIONS)

The SSE guidelines (DES, 2016d, 2016e) aim to provide practical support to schools undertaking school self-evaluation. They expand on the framework described above - *Looking at Our School 2016: A Quality Framework for Post-Primary Schools* (primary school version also available). The guidelines focus on the teaching and learning dimension of the quality framework. The rationale for focusing on this dimension in the guidelines is that schools were advised to focus on this area for SSE purposes between 2016 and 2020. Various DES circulars (i.e., 0039/2016 and 0016/2018 at primary level and 0040/2016 at post-primary level) advised schools that teaching and learning should be the focus of the second cycle of SSE.

Introduced systematically across schools in 2012/13, the first cycle of SSE took place between 2012 and 2016. It is a process of internal school review which is inclusive, collaborative, reflective, and evidencebased. It is intended to allow teachers and school leaders to identify areas in their school in which good practice is taking place, alongside areas which need development and improvement within the school. SSE requires evidence to be gathered by teachers and school leaders from numerous sources and judgements to be made on this evidence in order to improve the quality of students learning.

SSE is a six-step iterative process that facilitates repeated cycles of analysis or a return to a previous stage, if required (p. 11). The six elements of the process are:

- Identify focus: Teachers and school leaders should identify an area of focus, based on perceived development and improvement needs in an area of teaching and learning
- Gather evidence: Qualitative and quantitative data can be gathered from various sources, including teachers, students, parents, school leaders, and management
- Analyse and make judgements: Statements of practice should be used to assess strengths and weaknesses (this is an example of using the *Looking at Our Schools* framework in the SSE process)
- Write and share report and improvement plan: This is a school's record of their process and findings and outlines how identified improvements will be implemented
- Put improvement plan into action
- Monitor actions and evaluate impact: Monitoring of actions is necessary to evaluate impact of any changes.

Schools are required to produce a concise SSE report and school improvement plan (SIP) annually (a single document with two sections, amounting to not more than three pages in length). A summary of the self-evaluation report and SIP should be shared with the whole school community. In the context of DEIS schools, SSE takes place through the school's 3-year DEIS planning process, and does not need to be completed as a separate process; i.e., for a DEIS school, its 3-year DEIS plan is its SIP.

7.6 PRIMARY CURRICULUM REVIEW AND REDEVELOPMENT

As the last primary curriculum reform took place in 1999, there is general agreement of the need to reform (NCCA, 2019a). With this aim, the NCCA is working with teachers, school leaders, parents, management bodies, researchers, children, and other stakeholders to develop a high quality school curriculum for the next 10 to 15 years. This curriculum will build on the successes and strengths of the *1999 Curriculum* (DES, 1999b) while responding to challenges, changing needs and priorities. The new Curriculum Framework aims to gives increased agency and flexibility to schools in their role as 'curriculum-makers'. It also aims to promote stronger connections between children's experiences in primary school and their prior experiences in pre-school, and with their later experiences in post-primary school. It presents an updated set of priorities for children's learning and development; proposes changes to how the curriculum is structured and presented; and, supports a variety of pedagogical approaches

and strategies with assessment considered central to teaching and learning.

The design of the new Primary Curriculum Framework proposes to recognise and respond to the different cultures, viewpoints, abilities, and needs of all primary school children. It proposes to include new areas of learning (such as computational thinking) and place greater emphasis on existing areas such as wellbeing (which will include physical and health education; and, social, personal, and values education.

Building on the work carried out to date, including the 2017 consultation on curriculum structure and time, the NCCA have published a draft overview of a redeveloped primary curriculum for consultation in February 2020. This draft forms the basis for public consultation which will ultimately determine the overall shape and direction of the redeveloped curriculum. The consultation period will run until end year and it is expected that the Framework will be finalised, considered and approved by the Council and Minister in Q2 2021. Following approval, individual specifications will be developed.

7.7 WELLBEING CURRICULUM IN POST-PRIMARY SCHOOLS

Wellbeing is both a general principle and a key skill of Junior Cycle education. It is integral to the 24 statements of learning therefore wellbeing underpins a student's Junior Cycle education. *The Junior Cycle Wellbeing Programme* is a new area of learning that incorporates learning traditionally included in Physical Education, SPHE (incorporating RSE), and CSPE (DES, 2015a). The *Junior Cycle Wellbeing Guidelines* (NCCA, 2017a) aim to support schools in planning and developing a coherent wellbeing programme that builds on practices and structures already in place for wellbeing in schools.

The Junior Cycle Wellbeing Guidelines outline four aspects of wellbeing related to culture & environment; curriculum; policy & planning; and, relationships & partnerships. They acknowledge that wellbeing is a complex concept and efforts to promote it require a whole-school approach. The guidelines also suggest that the four aspects of wellbeing (culture & environment; curriculum; policy & planning; and, relationships & partnerships) coincide well with the four areas of action recommended in the *Guidelines for Mental Health Promotion and Suicide Prevention* (2013), produced by an inter-department group comprising the DES, the HSE, and the DOH (see overview in Section 7.3).

In terms of wellbeing at school, it is suggested that key influences on students' sense of wellbeing in school are their sense of connectedness and the existence of positive relationships between students and teachers and amongst students themselves. Connectedness is promoted through the school culture that the student experiences on a day-to-day basis and also through the quality of the relationships students experience with their teachers and their peers. This highlights the need for not only the curriculum components associated with wellbeing but the importance of a broad whole-school approach.

The Junior Cycle Wellbeing Programme, provides for 400 hours of time-tabled curricular provision for all students. This began with a minimum of 300 hours of timetabled engagement in 2017, increasing to 400 hours for the First-year cohort of students commencing post-primary education in 2020.

The *Junior Cycle Wellbeing Guidelines* (p. 52) advise that the process of developing a school's wellbeing programme should be:

- Collaborative
- Consultative
- Responsive to students' needs and context
- Adaptable to new and emerging circumstances
- Linked to local community resources.

Linked to whole-school planning and other planning processes, including the requirement for every school and centre for education to initiate a wellbeing promotion and review development cycle by 2023.

Given the status of wellbeing as a principle of the Junior Cycle and Wellbeing as a curricular programme, reporting on wellbeing is necessarily somewhat different to reporting on achievement in other subjects. Reporting in wellbeing takes place in a range of ways and is important throughout the three years of Junior Cycle. The focus is on gathering evidence and reporting on what the student has learned about wellbeing and the skills they have developed to support their wellbeing. Assessment and reporting in wellbeing is not about teachers assessing or reporting on the student's subjective state of wellbeing.

A curriculum for Level 1 Learning Programme (L1LP) and Level 2 Learning Programme (L2LP) for Junior Cycle was developed by the NCCA (2015a, 2015b, 2015c) for the purposes of recognising the greater diversity of needs among the student population and supporting the inclusion of students with SEN. L1LPs are targeted at a very specific group of students with general learning disabilities in the range of lower functioning moderate to severe and profound categories. The L2LPs and qualification are targeted at students who have general learning disabilities in the higher functioning moderate and low functioning mild categories. L1LPs and L2LPs are important from a wellbeing perspective as they allow a greater diversity of learners to experience the principles, statements of learning, and key skills underpinning the *Framework for Junior Cycle* (DES, 2015a). *Level 1 Learning Programmes Guidelines for Teachers* advise that "the learning experience for students participating in the L1LPs includes: the student's L1LP; other learning experiences; wellbeing; and, elements of the student's personalised programme (IEP)" (NCCA, 2015b, p. 16). It is recognised that some students undertaking L1LPs may need to complete some of their Junior Cycle Priority Learning Units (PLUs) and short courses as part of their Senior Cycle programme (NCCA, 2015b). Similar to Junior Cycle level, L1LPs allow a greater diversity of students to access the eight principles of the Senior Cycle curriculum.

Turning to wellbeing more generally at Senior Cycle, it is relevant to briefly mention developments associated with SPHE and in particular, a recent review of RSE at primary and post-primary levels (NCCA, 2019b). At Senior Cycle, SPHE focuses on health and wellbeing including mental health, gender studies, substance use, RSE, and PE and nutrition (NCCA, 2011). Recently, a review of RSE at primary and post-primary levels identified as a key action the need for enhanced professional development opportunities for teachers in the area of RSE (NCCA, 2019). The review highlighted the need for specific TPL for school leaders and teachers working with children and young people with ASD or learning difficulties.

Also relevant to wellbeing at Senior Cycle, the National Centre for Guidance in Education (NCGE) published the *NCGE: A Whole School Guidance Framework* (NCGE, 2017) which outlines eight key competencies grouped under three areas of learning as follows: developing myself; developing my learning; and, developing my career path. The key learning area *developing myself* focuses on competencies such as developing and maintaining positive self-esteem and self-concept; interacting effectively with others; and, developing and growing throughout life. These all relate to wellbeing and personal development.

7.8 CONCLUSIONS

This chapter provided an overview of the recent national policy developments, initiatives, and frameworks in the area of student (pupil) wellbeing. There is strong evidence for a recent and growing emphasis on student wellbeing in national policy, and this trend is consistent with international trends (e.g., the OECD's Programme for International Student Assessment [PISA] first examined student wellbeing in 2015; see OECD, 2017).

Central to the present study, perhaps, is the importance of defining wellbeing, which can be challenging insofar as wellbeing is a broad and complex construct. As noted in Chapter 1, we have adopted the *Wellbeing Policy Statement and Framework for Practice 2018–2023* definition, according to which wellbeing is present when "a person realises their potential, is resilient in dealing with the normal stresses of their life, takes care of their physical wellbeing and has a sense of purpose, connection and

belonging to a wider community. It is a fluid way of being and needs nurturing throughout life" (DES, 2018b, p. 10). As outlined in previous chapters, particularly Chapters 2 and 3, the evaluation of impact of TPL in the area of wellbeing may be particularly challenging. Moreover, there are some important gaps in the literature which the current study aims to address through the national survey of teachers and school leaders taking place as part of the broader study of which this review is one part. The review of research findings from large-scale national and international surveys and assessments presented in Chapter 6 points to some particular areas of student wellbeing which may benefit from being the focus of TPL activities.

CHAPTER 8 Teachers' professional learning in the area of student wellbeing in Ireland

This chapter gives a brief overview of the organisations (within the scope of this project) providing teachers' professional learning (TPL) in Ireland (i.e., the Teaching Council, NIPT, PDST, JCT, NEPS, HSE, NCSE, ETBI, and the Education Centres) and describes the TPL they provided in the area of student wellbeing over the past 5 years. Additionally, where organisations provided data, the chapter outlines the design and development protocols used by each organisation when developing their professional development courses, and considers how each TPL provider evaluates their courses. TPL in the area of student wellbeing is also provided by a number of local and national agencies, e.g. Jigsaw's One Good School initiative which provides evidence-based activities to the school community and support with the school self-evaluation (SSE) process in selected post-primary schools. As noted earlier in the report, the term TPL is the preferred term in this project to describe teachers' learning. However in this chapter, various terms, including teachers' learning and continuing professional development (CPD), are used for consistency with the terms used by providers themselves and to remain faithful to their submissions. It is understood that there may not be complete alignment between the usage of the terms across organisations and in some instances, an organisation may identify provision as an example of TPL which would be considered training by another organisation. Therefore, this chapter gives a flavour of the breadth of wellbeing-related TPL recently offered in Ireland.

The DES has recently published a useful resource – *Directory of Wellbeing CPD: September 2019 to June 2020* (DES, 2019c)¹³ – aimed at service users. Teachers can identify supports they would like to access by searching under the heading '*I am looking for assistance with...*' and then finding an appropriate support under the relevant topic (e.g., implementing child protection requirements; Stay Safe Programme; or, Teaching the Primary PE curriculum). The current chapter by contrast offers an overview of TPL activities in the recent past as reported by providers, and offers some initial conclusions on the findings related to content, mode, frequency, optional/mandatory status, and evaluation activity, with the overall aim of identifying areas in need of further consideration in the context of an overall framework for TPL.

Information on the provision of TPL for this chapter was gathered from the eight organisations in mid-2019 with a further update at the end of 2019¹⁴. Organisations had the opportunity to check the presentation of their data in mid-2020 and to elaborate on the work of their organisations regarding the provision of wellbeing-related TPL, prior to publication of this report. Organisations were asked to provide information on wellbeing-related TPL under various headings (who TPL was delivered to; who TPL was delivered by; delivery method; location of TPL; number of participants in 2018/2019; frequency; ongoing/fixed date; certification of TPL; evaluation conducted by organisers; method of evaluation; and, fate of evaluation data). It is recognised that the presentation of information by provider as in this chapter is a first step to a more formal description of TPL according to various criteria or using a particular descriptive framework. Also, criteria for inclusion were not imposed. Therefore, the breadth of provision is represented in this chapter. Activities include locally-developed courses arising from local needs as well as internationally-developed courses which have been rigorously researched and evaluated through randomised-controlled trials (RCTs). We return to this issue in the concluding chapter

¹³ Some of the listed CPD may not have taken place due to school closures as a result of COVID-19.

¹⁴ An exception to this is ETBI who provided data in mid-2020.

of the report. For readers interested in the detailed data provided by organisations, an e-Appendix (in Excel format) provides, for each organisation, a list of TPL in the area of student wellbeing over the past 5 years by content, mode, frequency, optional/mandatory status, and evaluation activity is available (see e-Appendix available at http://www.erc.ie/TPLwellbeing). Summary Table 8.1 at the end of this chapter provides an overview of the same information.

The remainder of this chapter describes organisations providing TPL in Ireland and outlines their reported provision of TPL in the area of student wellbeing. As noted in Chapter 1, only those organisations which are funded, facilitated, accredited, or otherwise supported by the Department, its support services, or its agencies are within scope for this project. While private providers offer TPL in the area of wellbeing, these are not examined in this chapter. Readers are advised that the order of organisations in this chapter is not in any way reflective of their relative size, or the volume or quality of their TPL activity.

8.1 THE TEACHING COUNCIL

The Teaching Council (www.teachingcouncil.ie) is the statutory professional standards body for the profession of teaching in Ireland. Therefore, it is the duty of the Teaching Council to act in the interest of the Irish public by regulating and promoting professional standards in teaching. The Teaching Council's function in relation to professional development is to promote engagement in professional development, conduct research into professional development, raise awareness of the benefits of professional development, and to advise the Minister in relation to teachers' professional development. The Council has recently developed *Cosán Framework for Teachers' Learning* (The Teaching Council, 2016a; described in more detail later in this section and in Chapter 4 of this report) with the objective of maintaining and enhancing a culture of active engagement with professional learning amongst teachers in Ireland.

The Teaching Council facilitates collaboration and reflection on professional learning in a number of ways. Some, such as *FÉILTE* (Festival of Education in Learning and Teaching Excellence), are led by the Council (see Table 8.1). Others, such as the *Wellbeing for Teachers and Learners* (WTL) group are a collaboration with stakeholder bodies. *FÉILTE* is an annual two-day event. It allows teachers to collaborate and share their work and knowledge with each other and the wider public whilst also celebrating the work they do as teachers every day. *FÉILTE* also incorporates workshops and showcases on numerous aspects of teaching each year including wellbeing. Some of the wellbeing events facilitated during *FÉILTE* 2018 included *Outdoor Learning to Support PE* and *Wellbeing and Flow: Mindfulness through Activity.*

The WTL group is a collaboration between the Teaching Council and the following groups - Irish Primary Principals' Network (IPPN), National Association of Principals and Deputy Principals (NAPD), National Parents' Council - Primary (NPC-P), and the Children's Ombudsman. The group has led the showcasing of how wellbeing is being enhanced in schools around the country. There has been significant engagement between this group and the DES.

The Teaching Council also publishes a number of research e-zines and produces webinars on a range of themes including wellbeing, inclusion for all, and student engagement which are freely available on the Teaching Council website for teachers to access. These resources provide summaries and discussions of research articles which consider each topic from a range of different perspectives.

The spirit and approach of this work by the Teaching Council is reflected in *Cosán*, the National Framework for Teachers' Learning. *Cosán* is a flexible framework for teachers' learning that is designed to have continuity with initial teacher education, and which also builds on the progress made by *Droichead*, the new model of teacher induction (The Teaching Council, 2017, discussed in Section 8.2). According to the *Cosán* framework, teachers should take personal responsibility for the development and maintenance of the quality of their professional practice. *Cosán* acknowledges that there are numerous dimensions

associated with teachers' learning, including formal and informal learning, personal and professional learning, school-based and external learning, and collaborative and individual learning. *Cosán* also acknowledges that teachers' learning can take many different forms including mentoring and coaching, research, immersive professional activities, as well as courses, programmes, workshops, or other events. The *Cosán* framework recognises that all dimensions and forms of teachers' learning have potential to provide effective and fulfilling professional learning experiences for teachers in Ireland.

Cosán also recognises that professional learning is an important part of a teachers' working life and thus provides a framework for recognising teachers' efforts to engage with their learning. For its part, the Teaching Council incorporates evaluation mechanisms into all professional learning that it facilitates. The evaluation methods used vary from course to course, with *FÉILTE* being evaluated by a number of methods, including an online evaluation tool; e-zines being evaluated by the number of clicks and times the e-zine is opened; and, webinars being evaluated by a survey which is issued to all attendees, asking them to rate from 1 (*not strongly*) to 5 (*very strongly*) how enriching a learning experience the attendee found the webinar to be. Feedback is also sought from stakeholders on an ongoing basis on the above events. Feedback from all courses is used to inform the planning, topics, and formats of future professional learning opportunities facilitated by the Teaching Council.

8.2 THE NATIONAL INDUCTION PROGRAMME FOR TEACHERS (NIPT)

The NIPT (www.teacherinduction.ie) is a dedicated support service managed by Dublin West Education Centre and funded by the Teacher Education Section (TES) of the DES.

NIPT aims to support the induction of primary and post-primary newly qualified teachers (NQTs) into the teaching profession in line with the requirements of the DES and the policies of the Teaching Council on induction and the continuum of teacher education including *Droichead*: *The Integrated Professional Induction Framework* (The Teaching Council, 2017). *Droichead* builds on the foundations set down during the initial teacher education phase of the continuum, and paves the way for teachers' subsequent professional development and growth. The work of NIPT is directed by the *Droichead* Induction Planning Group which is convened by the Teaching Council.

NIPT's vision is to ensure *quality induction for every teacher*. Support underpins the delivery of the NIPT programme of work and this is echoed through the NIPT motto – *To ask for support is a sign of strength*. NIPT offers systematic support in the induction phase which can be captured under the following:

- Induction Workshop Programme: A suite of 23 workshops delivered mainly through the local Education Centre network, by practising teachers with a practical classroom focus. The workshops provide an opportunity for teachers engaging in this programme to develop a network of peers. They also allow NQTs to engage with more experienced practising teachers to examine areas which may be challenging them. Some of the workshops specifically address wellbeing-related issues, e.g., *Teacher Professionalism* and *Wellbeing and Child Protection and Safety*. NQTs engaging in *Droichead* are not obliged to engage in the *Induction Workshop Programme*. However, many opt to undertake a workshop or workshops as their additional professional learning activity, as set out in the *Droichead* framework. A limited number of workshops are available via the NIPT online learning platform onlinelearning.teacherinduction.ie.
- Professional Development: In the implementation of *Droichead: The Integrated Professional Induction Framework*, NIPT provides a range of professional development opportunities including professional support team (PST) professional learning programmes; shared learning events; focus groups; and principals' oversight role events. NQTs engaging in *Droichead* must attend at least one cluster meeting per term and these are facilitated by the NIPT. Wellbeing is specifically addressed in cluster meetings 2 and 3.
- School Support: School support visits can be arranged to support NQTs and PSTs in identified areas. School support is available to schools who are and are not engaging in *Droichead*.

Wellbeing is an area that has been identified by some NQTs and PSTs in recent times. NIPT also offer whole staff presentations on request and provide phone and email support.

All NIPT events undergo an online evaluation process by participants via the NIPT website. These evaluations are used for ongoing review of materials to meet participants' needs. This materials review process is undertaken in line with protocols agreed by the Teaching Council, TES, Inspectorate, and NIPT. Specific events such as *NQT Voice* focus groups, together with the *Droichead* Quality Assurance process feed specifically into the adaptation of cluster meetings as required. NIPT events (with the exception of cluster meetings) are certified.

8.3 PROFESSIONAL DEVELOPMENT SERVICE FOR TEACHERS (PDST)

Similar to the NIPT discussed in the previous section, the PDST (www.pdst.ie) is also funded by the TES of the DES and managed by Dublin West Education Centre. The PDST is the largest single support service in Ireland offering professional development opportunities to school leaders and teachers in a wide range of educational, pedagogical, and curricular areas. The PDST aims to support school improvement by fostering reflective practice through the SSE process. The PDST also aims to assist the professional development of teachers and school leaders through a range of professional development models.

Within this range of models, the PDST offers a number of optional professional development opportunities for both primary and post-primary teachers in the area of wellbeing and, more specifically, aspects of student wellbeing. Of particular significance and with the aim of mirroring best practice in TPL provision [e.g.,Cordingley et al. (2003); Timperley et al. (2007); Desimone (2009); Banks & Smyth (2011); Conway & Murphy (2013); The Teaching Council (2016a)], the PDST employs a school-based model of professional learning, whereby the team work with teachers and school leaders in their schools and classrooms. The support is bespoke, contextualised, and collaborative and has been found to be most effective when provided on a sustained basis in line with the school's identified goals. Examples of PDST provision related to student wellbeing include:

- Child Protection Seminars: The DES issued the *Revised Child Protection Procedures for Primary and Post-primary Schools* in December 2017 underpinned by the revised guidelines *Children First: National Guidance for the Protection and Welfare of Children* (DCYA, 2017). The PDST updated its range of supports for schools in line with the revised procedures and new guidelines. These seminars specifically focus on the role and responsibilities of the designated liaison person (DLP) and their deputy (DDLP), (e.g., liaising with external agencies; supporting staff; reporting to Tulsa; communications with the Board of Management and parents; and, curriculum implementation). PDST also offer a whole-school e-learning programme on the roles and responsibilities of all staff in relation to child protection, available on their website.
- Seminars for Relationships and Sexuality Education (RSE): At primary level, these seminars focus on teaching the sensitive elements of RSE from Infants to Sixth-class, in the context of SPHE education. The TPL is experiential and practical in its approach to covering topics including RSE as a core component of SPHE; the role and function of an RSE policy; methodologies for teaching RSE; and, creating a safe classroom environment. At post-primary level, RSE seminars in *Substance Misuse, Personal Safety, and Mental Health* outline curriculum content; and, teaching, learning, and assessment methodologies, which aim to develop teacher confidence and knowledge in teaching sensitive topics. Seminars for SPHE outline the SPHE course content alongside various methodologies and relevant resources which are designed to help teachers fulfil best practice guidelines in teaching and learning in SPHE. At primary level, teaching and learning in SPHE through cross-curricular approaches are encouraged. At post-primary level, course content is outlined to develop teacher confidence in teaching SPHE with a focus on experiential teaching, learning, and assessment, as well as planning in SPHE. SPHE, as part of the curriculum, supports the personal development, health and wellbeing of young

people and helps them create and maintain supportive relationships. These seminars support teachers with both the existing SPHE syllabus and the recent NCCA short course in SPHE.

- Stay Safe Workshops: Supporting the mandatory nature of the Stay Safe Programme, as per the revised *Child Protection Procedures for Primary and Post-primary Schools* (DES, 2017b). These workshops familiarise teachers with the rationale, structure, key messages and content of the revised *Stay Safe Programme*. The aim is to support and enable teachers to implement the revised programme within the context of the SPHE curriculum, exploring a cross-curricula approach.
- PDST Health and Wellbeing National Conference: This bi-annual conference facilitated by the PDST Health and Wellbeing team is an opportunity for teachers to experience a range of workshops and facilitated discussions across a wide range of health and wellbeing topics. With a focus on building contextual wellbeing; creating healthier cultures in schools; and, developing respectful, safe relationships in school communities, this conference facilitates interactive engagements, discussions, and experiential workshops which explore wellbeing, resilience, managing stress, and overcoming adversity.
- Restorative Practice (RP) for Schools: RP is an evidence-based anti-bullying intervention and prevention strategy that is designed to help build and maintain positive relationships (see PDST, 2019). Closely related to the principles of the SPHE curriculum, it aims to develop the skills associated with emotional language and understanding others' perspectives. At school level it finds expression in the development of a positive school climate. The PDST team are fully trained RP facilitators and assist schools in developing restorative approaches through the school-based support model of TPL.
- PE and Physical Literacy: The PDST offers seminars, workshops, and summer courses in the areas of *PE and Physical Literacy* to support the development of fundamental movement skills and the physically literate child. At primary level, the focus is on developing all domains of physical literacy with children through the teaching and learning experiences in the PE curriculum, i.e., movement competence; developing motivation and confidence; knowledge and understanding; and, the opportunities to engage in physical activities for life. At post-primary level, PE workshops develop teachers' knowledge and confidence in teaching all units of the PE curriculum. PDST are also leading on the design and national delivery of TPL for schools implementing the new Leaving Certificate Subject and the Senior Cycle PE Frameworks (NCCA, 2017b). TPL is provided through workshops, seminars, webinars, and professional learning communities (PLCs).
- School-Based Support: The PDST provides a model of school-based support whereby schools apply for specific support according to their self-identified needs and improvement goals. The PDST Health and Wellbeing teams offer contextualised school-based support across the PE and SPHE curricula at both primary and post-primary levels. This includes sustained support which engages schools in deeper transformational modes of TPL while building capacity in schools and embedding change. PDST's evaluation of sustained school-based support is responsive to the needs on the ground, cognisant of both teacher and student voice. A dedicated PDST sustained school support committee created and piloted a range of evaluation tools including pre/post inquiry, learning logs, interviews, and focus groups. As part of the evaluation process the PDST advisors providing the sustained support engage in self-study and their own reflective practice in line with *Cosán*, encouraged and supported through internal projects supported by the research committee. Internal shared learning fora allow for the public sharing of this work with colleagues as part of the reflective process.

There are some differences between the topics at primary and post-primary level; i.e.,

At primary level, school-based support includes:

SPHE planning and policy development; bespoke support on *Anti-Bullying, Internet Safety, SPHE, RSE, Stay Safe, Restorative Practice, Integrating SPHE and Visual Arts, Wellbeing Promotion, and Teacher*

Wellbeing. In-school support for PE at primary level includes PE planning and policy development, and bespoke support in specific areas (e.g., physical literacy; fundamental movement skills; developing social skills and personal qualities through PE; creating a motivational climate in PE; Active School Flag support; SSE support for PE; gymnastics; athletics; outdoor and adventure activities; games; dance; and, aquatics support).

At post-primary level, school-based support includes:

Teaching and Learning in SPHE (SPHE teachers are supported through the methodologies and content of the SPHE curriculum at Junior Cycle Short Course and Syllabus. Support required in this area can be considerable as SPHE is not a focus of ITE). Many schools avail of sustained support in this area to train up a group of SPHE teachers in the SPHE Curriculum as well as whole staff sessions on areas such as *Anti-Bullying* and *Substance Misuse*. Support varies depending on the topic under consideration.

- RSE is a core feature of SPHE curriculum at Junior Cycle and a minimum of six lessons must be taught in every year of post-primary school. Teachers require ongoing TPL in this area because of the highly sensitive nature of the content and in order to be proactive and responsive to the needs of students.
- Teacher Wellbeing This is typically offered as a two-hour after-school session with the whole staff. It is a very sought after topic for in-school support as it explores the various practical ways in which one's own wellbeing can be maintained and supported.
- Restorative Practice (RP) Schools who wish to engage in a whole-school approach to the development of RP are provided with the opportunity to commit to five school visits under the sustained model of support where the whole school staff will be supported in embedding the concept of RP in the school over time.

In developing their TPL, the PDST has consistently adhered to a research-based conceptual framework (see Chapter 4 for full details) to inform TPL design as well as a set of design protocols. Strategic Professional Development Frameworks (usually over 3 years) are drawn up for any new curricular area or area undergoing policy reform. This framework consists of a number of professional development models and outlines the proposed content of each TPL programme in broad terms. This framework is reviewed by the National Director of the PDST before being submitted to the DES for final approval.

The PDST employs two separate sets of design protocols depending on the type of TPL course being developed. Type one designs are attached to 'high stakes' reform agendas such as new Leaving Certificate subjects and the Primary Curriculum. Type two designs encompass the development of specific workshops, seminars, and webinars to support type one TPL or in response to emerging teacher needs (e.g., *Team Teaching; SolidWorks* for T4 [technology] teachers; or, *Play-based Maths* for primary classrooms). Each type of TPL is then conceptualised in two distinct phases. A design overview template is completed as part of phase one, outlining the key messages; proposed learning outcomes for participants; and, the content of the professional development course. Phase two is concerned with the formal design of the professional development course presentation and associated materials.

Both design types entail multiple stakeholder feedback including a central interagency forum which interrogates the design. Membership includes the Inspectorate, NCCA, State Examinations Commission (SEC), and third-level institutions where appropriate. A number of internal PDST stakeholders are involved in the process; a Deputy Director for CPD Research and Design, a cross disciplinary team leader for CPD Research and Design, subject/sectoral specific team leaders, the Digital Technology team, and PDST advisors.

The PDST provides certification of attendance at all primary and post-primary TPL events. All TPL events are evaluated using a questionnaire which teachers are asked to complete at the end of the TPL event, usually in the form of an online evaluation form where responses are recorded anonymously.

Evaluation forms are used by PDST to reflect on the TPL provided in terms of content and pedagogical approaches adopted as well as to inform the content, pedagogical approaches, and facilitation of future TPL events which may include further seminars, workshops, professional learning communities, webinars, or school-based support.

More in-depth and longitudinal evaluations are conducted for particular areas of Health and Wellbeing TPL where pre/post inquiry, learning logs, interviews, and focus groups are used. Mixed methods approaches are employed and data are triangulated across methods. Such evaluations use recognised frameworks such as Guskey's five-step model. These type of evaluations are particularly applicable to TPL which is school-based and sustained in nature.

8.4 JUNIOR CYCLE FOR TEACHERS (JCT)

JCT (www.jct.ie) is a dedicated support service of the DES for the continuing professional development of Junior Cycle teachers in post-primary schools. JCT exists to "*inspire, support and empower teachers in the transformation of Junior Cycle education in Ireland*" (JCT Development Strategy, Building on our Achievements 2018-2021). It aims to provide high-quality and appropriate TPL to school leaders and teachers alongside high-quality teaching and learning resources. The TPL and resources provided support schools during their implementation of the Framework for Junior Cycle (DES, 2015a). The *Framework for Junior Cycle* was developed to allow schools and teachers to plan quality, relevant, and inclusive educational programmes for their students. It aims to improve the learning experiences of all students, especially those with SENs.

The *Framework for Junior Cycle* is underpinned by a new focus on wellbeing which is both a timetabled curricular area and a principle and key skill. Wellbeing TPL delivered by JCT is underpinned by the NCCA's *Junior Cycle Wellbeing Guidelines* (2017a). The JCT offers several professional development opportunities related to student wellbeing. Most of these are underpinned by DES Circular 0055/2019, providing for TPL during school-time. There are also a number of elective offerings, particularly using online webinars.

- Subject TPL: Learning outcomes underpin each Junior Cycle subject and short course, with the aim of increasing student engagement and connectedness with learning (expected to indirectly enhance student wellbeing). JCT has 15 subject teams. Student wellbeing is referenced at various points within their TPL workshops.
- Whole-school TPL: Every post-primary school is entitled to a day of whole-school planning and self-evaluation for Junior Cycle, for each year of implementation up to the school year 2021/22. Most post-primary schools received the following TPL that had specific links to wellbeing:
 - » Junior Cycle Framework, Context and Rationale (facilitated in 2016/2017 and 2018/2019)
 - » Wellbeing in Junior Cycle (facilitated 2017/2018 and 2018/2019).

The Wellbeing Programme was an aspect of the *Framework, Context and Rationale* TPL day and was central to the *Wellbeing in Junior Cycle* day. TPL was delivered locally in each school, by the JCT Whole School Team, with teachers attending for the course of the school day. The DES multi-component approach to wellbeing promotion was advocated, and the four key areas that contribute to wellbeing promotion in schools were given a focus.

Special schools also received TPL in the area of Junior Cycle Wellbeing during their whole school days. These were facilitated by the Level 1 and Level 2 Learning Programmes (L1LP, L2LP) team (also discussed in Chapter 7). JCT also provided these TPL days for schools in the Youth Justice Service, the Youth Encounter Project, High Support Units, and Hospital Schools, adapting the content to the unique requirement of each sector. JCT also delivered TPL to Youthreach staff which focused, in part, on wellbeing.

- School Leadership TPL: School leaders are offered two distinct Junior Cycle related workshops in any school year. These are facilitated through the Education Centre network by the JCT Leadership Team. Three of these have specifically referenced the Junior Cycle Wellbeing Programme in the past 5 years:
 - » Wellbeing in Junior Cycle (Spring 2017)
 - » Student Centred Strategic Planning (Spring 2019)
 - » Leadership and Management of the Wellbeing Programme in the Junior Cycle Curriculum (Autumn 2019).
- The Wellbeing Programme: PE, CSPE, and SPHE TPL: Schools must include CSPE, PE, and SPHE as part of their Wellbeing Programme. JCT supports these three areas of curricular provision through TPL in our subject clusters (PE) and second teaching subject provision (PE, CSPE, and SPHE). The TPL focus here is on the NCCA Short Course in PE, SPHE, and CSPE and the Junior Cycle Wellbeing Programme.
- The Wellbeing Programme: Curricular provision beyond PE, CSPE, and SPHE: Curricular provision beyond PE, CSPE, and SPHE, in order to achieve the 400 timetabled hours, is an aspect of all the above TPL workshops. Particular attention is given to Appendix I of the *Junior Cycle Wellbeing Guidelines*. Appendix I is the planning template to support schools in planning units of learning in Wellbeing. JCT works closely with the NCCA and the DES in clarifying curricular provision through, for example, joint publication of the *Some Commonly Asked Questions* document, as a response to feedback from our TPL workshops.
- Elective and other TPL workshops: Webinars are a feature of JCT elective provision, with SPHE, CSPE, PE delivering TPL online during the school year. These workshops are subsequently available on the JCT website, www.jct.ie.

The current focus of content in these areas is effective reporting in CSPE, SPHE, and CSPE within Wellbeing, since reporting on wellbeing is introduced on the Junior Cycle Profile of Achievement for the first time for Third-year students in 2021.

A workshop, *Guidance in Junior Cycle Wellbeing* was delivered through the Institute of Guidance Counsellors (IGC) branch network. A webinar was also delivered, *Guidance related units of learning in Wellbeing*.

The JCT develops its TPL courses in line with specified design and development protocols. After an extensive research process the JCT established six key tenets of professional development which guide the development of all JCT TPL events:

- 1. Enhance reflective practice
- 2. Develop pedagogical skills and content knowledge
- 3. Social and collaborative in nature
- 4. Support both meaning making and teacher agency
- 5. Focus on active learning experiences
- 6. Mindful of teacher needs and interests.

These tenets highlight the importance of ensuring that TPL experiences are sustainable and that both teachers and schools will continue on their own collaborative and personal professional development journeys long beyond the life cycle of the JCT as a support service. The facilitation of a TPL event is also an aspect which needs to be taken into consideration when designing the TPL event. Overall, the JCT design framework aims to support sustainable Junior Cycle reform through these six tenets.

JCT engages in a *Critical Friends* process with partners in education and practicing teachers prior to the roll-out of TPL. This is a process of critique in order to strengthen the day. Partners include the

NCCA, the DES Inspectorate, the Teaching Council, the NCSE, the PDST, and Management Bodies, as appropriate.

The JCT does not certify attendance at face-to-face TPL events. JCT records attendance at leadership, subject cluster, and second teaching subject days. Attendance at whole school TPL in both post-primary and special schools is the responsibility of school management. Certification is typically provided for online engagement with webinars.

To evaluate each of the TPL events, the JCT requests that each attendee completes an online evaluation form which contains a series of multiple choice and open-ended response items. Participants are asked to rate the sessions on a three-point scale from *not at all helpful* to *very helpful*. Participants can elaborate on their feedback in free-text boxes.

Feedback is reviewed internally and used to support ongoing evaluation and development of TPL.

The JCT recognises the importance of consulting students and through TPL, supports school leaders and teachers to become more familiar with techniques for student consultation. JCT Wellbeing TPL recognises that the process of developing a school's Junior Cycle Wellbeing Programme should be in line with the principles for development outlined in the *Wellbeing Policy Statement and Framework for Practice 2018-2023* (DES, 2018b, see Chapter 7 for details). It is expected that a future JCT elective workshop will be held on *Student Voice*, delivered as a local course through the Education Centre network.

8.5 NATIONAL EDUCATIONAL PSYCHOLOGICAL SERVICE (NEPS)

NEPS is the psychological service of the DES, providing a range of psychological services to both primary and post-primary schools. NEPS psychologists work with the whole school community and are concerned with learning, behaviour, social, and emotional development. In common with psychological services in other countries and in keeping with best practice, NEPS has a key role in empowering teachers to intervene effectively with all students, in particular with students who present with SENs and concerns in relation to well-being, ranging from mild to severe and transient to enduring. NEPS works closely with schools to bring about systemic change and to engage in preventative work to reduce the numbers of students who may experience barriers to education. NEPS offer a range of TPL programmes in a multitude of areas, including wellbeing. Psychologists deliver a range of evidence-based training programmes and short workshops to teachers in both primary and post-primary schools. As part of commitments under the *Action Plan for Education 2016-2019* (DES, 2016a), NEPS are delivering four TPL programmes (*FRIENDS, Incredible Years Teacher Classroom Management, Responding to Critical Incidents,* and *Student Support Teams*).

The *FRIENDS Programme* is offered to all primary and post-primary teachers on an annual basis and teachers in DEIS schools have been prioritised for training over the 3 years of the 2016-2019 *Action Plan for Education*. The *FRIENDS Programme* includes three programmes aimed at children and young people: *FUN FRIENDS* for 4 to 7 year-olds; *FRIENDS for Life* for 8 to 12 year-olds; and, *My FRIENDS Youth* for 12 to 15 year-olds. This programme is a school-based resilience-building and anxiety prevention programme which is recommended by the WHO as an evidence-based anxiety intervention and prevention programme for children (WHO, 2004). The training is delivered over 2 days when psychologists train teachers on social and emotional competence, anxiety, cognitive behavioural theory, effective coping strategies, and problem-solving skills for managing emotional difficulties and promoting resilience. This training then enables teachers to teach these skills to their students as part of the SPHE programme in school.

This evidence-based programme is delivered by NEPS psychologists who have trained with the programme developers, *FRIENDS* Resilience, based in Australia. Each programme is guided by a

highly-structured training protocol and ongoing training and support is available to ensure fidelity of the intervention. Teachers receive a certificate of attendance, issued by NEPS, upon completion of the two-day process and content training. Teachers then register with *FRIENDS* Resilience after completion of the training; to access the materials and to ensure fidelity that this programme is only delivered by trained facilitators/teachers. Programme and teacher satisfaction is also evaluated at the end of each training course and these evaluations are analysed and summarised by NEPS.

The *FRIENDS Programme* is supported by ongoing research with a demonstrated preventative effect. A large body of international peer-reviewed research, including RCTs and longitudinal studies have demonstrated its effectiveness. In 2012/2013 a wait-list control trial of the *FRIENDS Programmes* was carried out by NEPS with 709 primary school pupils in Ireland. The research found significant increases in self-concept, school connectedness, coping skills for all students and significant decreases in anxiety, particularly for students in DEIS schools. The programme, which complements the SPHE programme for primary school, has a high satisfaction rating by students, parents, and teachers. In a post-primary school setting, the National Behaviour Support Service (NBSS) found positive results in reducing anxiety for 244 First-year students. In addition, the *FRIENDS for Life* programme has been recommended as a short course for the Junior Cycle Wellbeing programme.

The *Incredible Years: Classroom Management Programme* is offered to primary teachers on an annual basis, with all teachers in DEIS schools being offered an opportunity to attend this 6 day training over the 3 years of the *Action Plan for Education 2016-2019* (DES, 2016a). The focus of this evidence-based programme is on strengthening teacher classroom management strategies; promoting positive relationships with students and parents; and, on strengthening children's social, emotional, and academic competence. The aim of the programme is to enhance and develop teachers' classroom management skills, promoting children's prosocial behaviour whilst also reducing classroom aggression and disruptive behaviour. This training is delivered over 6 full days spaced approximately 1 month. The programme follows a collaborative model of training that makes extensive use of teacher discussion, role play, and review of vignettes showing teachers in real classrooms and guidance on the development of behaviour plans for individual children. Between sessions, teachers are expected to practise the new skills and concepts in their own classrooms, further develop and implement their behaviour plans for individual children session, reflect on and share experiences at the next session. Throughout the programme, teachers are supported to set and monitor goals for themselves, as well as for the children they teach, and to help each other to achieve their goals.

This evidence based programme is delivered by NEPS psychologists who have been trained by *Incredible Years* Trainers and Mentors, with recognised training accreditation by the programme developer, Dr Carolyn Webster Stratton, based in Seattle, USA. This programme is also guided by a highly-structured training protocol and group leaders are provided with ongoing training, coaching, and support to ensure fidelity of the intervention. Teachers receive a certificate of attendance, issued by NEPS, upon completion of the training.

There have been several independent evaluation of the *Incredible Years: Classroom Management Programme* in different educational jurisdictions including Ireland. For over a decade, NEPS have examined teacher perceptions of the acceptability and usefulness of this training programmes. Data gathered indicated that Irish teachers reported a high level of satisfaction with the programme and year on year have recommended that the training be provided to colleagues. Over the 3 year period of the *Action Plan for Education 2016-2019* (DES, 2016a), NEPS has extensively evaluated the impact of the training with information gathered indicating that the teachers are reporting a significant impact for themselves, their pupils, and their relationship with parents. The training has brought about positive change in an impressive range of areas including changes in teachers' belief in their ability to effectively manage behaviour in the classroom, to engage students, and to use appropriate instructional strategies to bring about change in their students. Teachers who have attended the training have also reported a decrease in their level of distress and emotional exhaustion and an increases in their sense of personal

accomplishment.

NEPS also provide *Critical Incident Training* to school staff on their critical incident publication. This training is informed by up-to-date research, international best practice in the area in critical incident response, and feedback from NEPS psychologists who have responded to a range of critical incidents. The training covers four key areas; namely prevention, preparation, intervention, and follow up. A key focus of the training is on highlighting the importance of wellbeing promotion as a key part of prevention of, and preparation for, a critical incident. During training, school staff are encouraged to proactively plan how to respond to critical incident scenarios and to familiarise themselves with the key resources for prevention, preparation, intervention, and follow up. This training follows a standardised NEPS protocol and is typically delivered over 2 hours, with further within school support available if required. All courses are evaluated by a participant satisfaction survey completed at the end of the training.

NEPS provides training in the development and review of *Student Support Teams*. The SST is part of the student support system in a school and is concerned with promoting a whole school approach to wellbeing. It is the overarching structure for providing for the welfare and wellbeing of all students and through which many of the existing student supports are co-ordinated and planned. The SST plans for the provision of a continuum of support addressing the educational, social, emotional, behavioural, and learning needs of All, Some, and Few. The NEPS SST project 2018/2019 is an extension of an earlier Dublin-based SST pilot project (2014-17). An action to expand the SST project to 20 DEIS post-primary schools in two additional counties was included in the 2018 *Action Plan for Education*.

The SST Development Project 2018/2019 involved 22 post-primary schools in counties Cork, Donegal, and Dublin. The main objective of the project was to develop or enhance existing student support systems in the project schools through the provision of an in-school sustainable support model and needs-led CPD) As part of this project nine CPD sessions were facilitated by NEPS psychologist and outside speakers. These sessions were based on topics identified by participating schools. Each CPD session lasted a full school day and consisted of a presentation/workshop in the morning session and a cluster group meeting in the afternoon session. The cluster meetings were facilitated by NEPS psychologists using an adaptation of a group consultation methodology based on questions raised by the project schools. Schools received four school visits from their NEPS psychologists. During these visits the psychologist attended SST meetings, consulted with the schools identified link teacher, and provided supplementary resources. Schools were required to convene regular SST meetings between the visits of the NEPS psychologist, look critically at their practice and introduce changes accordingly.

During the project quantitative and qualitative data were gathered. A rating scale was used to identify the perspective of school staff about the SST in their school before and after the intervention and to establish where change had occurred throughout the intervention. An open-ended questionnaire, administered to the link teacher and principal together, enabled more discussion around the impact of the project and allowing for the development of a thematic analysis. The overall findings indicated positive change in school structures and supports with school staff identifying the value and importance of structure and procedure and the need to provide support for all.

NEPS also offers training to schools in other NEPS developed wellbeing programmes including the *Praise Project, Get Up, Stand Up* and the *Filling the GAP* Programme. *The Praise Project* is a school-based, 6-week intervention designed to improve pupil engagement in response to positive verbal feedback. The training is evaluated using a set of pre- and post-intervention questionnaires for both pupils and teachers. *Get Up, Stand Up* is a self-contained, seven-session social skills learning programme developed by practising NEPS psychologists. It covers themes such as friendship, dealing with teasing and intimidation, and resilience and coping. Training for teachers consists of a 2 hour workshop which equips them to deliver the 7-week programme to pupils in Sixth class and First year with the aim of enhancing the social interaction skills of students. *Get up, Stand up* is evaluated using pre- and post- rating scales which are administered to students. Several action research studies have

also been conducted on this programme, the most recent of which was carried out in 2018 using 15 primary schools in West Cork. *Filling the Gap* is a universal positive psychology intervention designed to promote happy, affirmative and supportive school environments.

Training for teachers runs over a half day and they then implement GAP (Gratitude, Altruism, and Praise) interventions over a 6-week period. Teachers are provided with lessons, activities, clips, and reading material. Lastly, the *Filling the Gap* programme is evaluated using pre- and post- student questionnaires, specifically a school connectedness questionnaire alongside a questionnaire designed to evaluate the programme. These training programmes incorporate a variety of training methodologies including facilitated meetings, workshops, and presentations.

In addition to delivering the above training programmes, NEPS also responds to school-based concerns by providing a range of bespoke short inputs. All support and development activities and inputs delivered by NEPS psychologists are informed by theory and practice. Examples of topics covered include *social skills, transitions, anxiety, school refusal/avoidance, selective mutism, bullying, nurture attachment aware schools,* and *trauma informed practice including nurture principles*. All NEPS training is evaluated for teacher acceptability and satisfaction using a participant satisfaction survey completed at the end of the training.

Training programmes delivered by NEPS are specifically chosen because they match with students' needs as identified by national and international research and the experience of psychologists working in schools on a daily basis. A primary focus of trainings is on promoting children's academic, social, and emotional development by reducing risk factors and increasing protective factors. Another key focus of any training is to develop the self-esteem of children and young people and to build their resilience and coping strategies. All evaluation data are used by NEPS to assess the fidelity of the TPL programmes and/or to inform future delivery of training programmes.

8.6 HEALTH SERVICE EXECUTIVE (HSE)

The work of the Health and Wellbeing Division of the HSE is focused on helping people to stay healthy and well, reducing health inequalities, and protecting people from threats to their health and wellbeing. The HSE has a regional structure, consisting of nine Community Health Organisations (CHO). TPL is delivered by Health Promotion and Improvement teams based in each CHO. The HSE provides TPL for both primary and post-primary level. Until 2018, TPL provided by the HSE was underpinned by the WHO Health Promoting School Framework, but after the launch of the *Wellbeing Policy Statement and Framework for Practice 2018-2023* (DES, 2018b), the service was aligned to support this framework. The work continues the partnership approach between the HSE, the DES, and the DOH with regard to supporting health, SPHE, and RSE in schools.

The HSE offers whole day TPL courses for both primary and post-primary teachers. Training broadly falls into two categories; supporting schools to take a whole-school approach to a health priority, e.g., healthy eating or physical activity, and supporting schools with the delivery of an evidence-based programme e.g., *Zippy's Friends, MindOut2*. TPL courses include *A Whole School Approach to Food Policy Development* which aims to support schools to either develop and implement or review and improve a healthy eating policy within the school, and *A Whole School Approach to Physical Activity* which aims to support schools in maximising the amount of physical activity that students are undergoing during the school day. *Zippy's Friends (5-7 year olds)* trains teachers to support the emotional wellbeing and mental health of their students. This is done by encouraging them to identify and talk about their feelings and exploring how to deal with these feelings in a constructive manner. Training days for *MindOut2* and *Engaging with Young Men on Wellbeing* aim to enable teachers to support the social and emotional wellbeing of Senior Cycle students whilst *Healthy Food Made Easy* is basic nutrition and cookery course that encourages healthy eating, improves knowledge of nutrition for making easy to cook meals, and teachers the skill of preparing meals on a budget.

The HSE does not use service-wide or standard design and development templates. Programmes are designed to address policy priorities within HSE Health and Wellbeing; mental health and wellbeing, healthy eating and active living, sexual health etc. The programme design reflects best practice for each priority area and the theoretical frameworks underpinning the programmes. At the end of each TPL event, attendees are asked to fill out a satisfaction/experience evaluation questionnaire which the HSE reviews internally. The information gathered from these evaluation questionnaires is then used to inform the topics and structure of future TPL courses offered by the HSE.

8.7 NATIONAL COUNCIL FOR SPECIAL EDUCATION (NCSE)

The NCSE (www.ncse.ie) is an independent statutory body established under the Education for Persons with Special Educational Needs Act 2004 with a wide range of statutory functions. The NCSE promotes a continuum of educational provision which is inclusive and responsive, and provides an appropriate education for children and adults with SENs. The NCSE does this by providing supports to schools; professional learning and support to school personnel; advice to educators, parents, and guardians; undertaking and disseminating research into special education; and, by providing policy advice to the Minister for Education and Skills on special education issues.

The NCSE delivers support services through a regional team structure. Each regional team comprises special educational needs organisers (SENOs) who provide a direct local access to the parents of children with SENs and who advise schools and parents on the facilities, services, and resources available; advisors who provide TPL and in-school support to schools in the area of SENs; and, visiting teachers (VTs) who provide support to children and young people who are deaf/hard of hearing or blind/ visually impaired, their families and teachers. A school inclusion model (SIM) project is currently running in two of the ten NCSE regional teams trialling the inclusion of behaviour practitioners, speech and language therapists, and occupational therapists as part of NCSE support to schools. Funding has been provided to develop nursing provision as part of the SIM.

The aim of the support service is to improve the capacity of schools to meet the needs of students with special educational and additional needs to ensure they are included in mainstream classroom and school life to the maximum extent possible. Many of the TPL courses provided by NCSE focus on enhancing the overall wellbeing of students in mainstream primary and post-primary schools, special classes in mainstream schools, and special schools.

Included in the evidence informed suite of TPL courses offered by NCSE which focus on enhancing wellbeing are the following courses - *Healthy Minds Training* which aims to train teachers, SNAs, school staff etc. to support deaf children in managing their deafness whilst also developing their emotional health and a positive sense of self. *Pathways to Prevention*, a 3-day seminar which aims to equip teachers with the skills to respond to challenging behaviour in a positive and supportive manner. *Autism, Anxiety and Mental Health*, a 2-day seminar which aims to promote positive mental health in students with autism. *Belonging Plus*+ a programme designed to ease the transition from primary into post-primary school. *Check and Connect*, a structured adult mentoring intervention which aims to promote student learning and engagement with school. *Why Try* a structured programme which aims to help students to overcome challenges and improve outcomes in the areas of academics, behaviour, and truancy. *Working Things Out*, an evidence based cognitive behavioural therapy (CBT) programme for adolescents, promoting positive mental health and teaching coping skills to overcome problems.

In addition, NCSE also provides evidence informed TPL programmes and training by occupational therapists and speech and language therapists that includes the following programmes. *The Alert Programme,* which helps students to monitor, maintain, and change their level of alertness so that it is appropriate to the situation or task. *People Skills,* a programme that assists students to develop positive relationships with peers and adults. *Speech, Language, and Communication Needs* (SLCN), which aims to develop an understanding of the impact of SLCN on student learning and wellbeing and

effective strategies to improve student access to leaning and social communication.

The NCSE consistently designs its TPL events according to a specific design and development process. This design process comprises of three stages:

- Stage one consists of the identification of the need to develop or design a new TPL event or resource or the identification of the need to review or improve an existing TPL event or resource.
- Stage two focuses on the designing of the TPL resource by an NCSE appointed design team who review and proof the resource on an ongoing basis throughout the development process. Consultation with numerous external link specialists also takes place at this stage.
- Stage three comprises of the review of the final draft of the TPL resource and NCSE signing off
 on the resource and beginning the roll out process. The design team will also reconvene at this
 stage to review progress following phase one of the roll out.

The NCSE provides certification of attendance for all TPL courses that they provide. The NCSE also evaluates all TPL courses and this evaluation informs future planning and evaluation and redesign of content contained in the TPL events.

NCSE also provides an accredited *Post-Graduate Certificate/Diploma Programme of Continuing Professional Development for Teachers working with Students with Special Educational Needs (Autism Spectrum Disorder)* course in collaboration with St. Angela's College, Sligo (NUIG). The programme aims to develop teachers' knowledge, understanding, and skills in working with students with autism spectrum disorder (ASD) and includes a number of TPL courses incorporating the wellbeing of students with autism. Qualifications are awarded by NUIG to participants who successfully complete the programme. Circular 06/2018, Circular 06/2019, and Circular 29/20 apply.

8.8 EDUCATION AND TRAINING BOARDS IRELAND (ETBI)

ETBI (www.etbi.ie), established in 2013, represents Ireland's 16 Education and Training Boards (ETBs) and promotes the interests of ETBs. On behalf of government agencies, it promotes the development and implementation of appropriate education and training policy for the ETB sector. The 16 ETBs lead and manage 27 community national schools, one of which provides oideachais trí mheán na Gaeilge. In addition, ETBs lead and manage 245 post-primary schools, 47 of which provide oideachais trí mheán na Gaeilge.

ETBI and ETBs develop and implement programmes of professional development for their staff, in response to the needs of the sector. Some of the programmes are educationally based, while others have effective governance procedures at the core. ETBI provide the following TPL opportunities:

- The Instructional Leadership Programme: ETBI facilitates the delivery of the Instructional Leadership Programme (ILP) for post-primary schools across all sectors, i.e., ETBs, Joint Managerial Body for Voluntary Secondary Schools (JMB), and Association of Community and Comprehensive Schools (ACCS). In recent times ETBI has engaged with Education Centres to facilitate the roll-out of the programme at primary level. At post-primary level, the programme is delivered by Professor Barrie Bennett, University of Ontario, and at primary level the programme is facilitated by primary and post-primary teachers who have graduated from the programme. ILP is committed to enhancing teaching, learning, and assessment in classrooms and exploring teacher professional identity through:
 - » supporting teachers to acquire the conceptual awareness and vocabulary by which they can articulate their practice and engage in meaningful professional conversations with colleagues
 - » extending teachers' instructional repertoires of tactics, skills and strategies and deepening

their awareness of how and why they invoke various interventions and actions in the classroom.

Learner Voice Programme: In the context of the revised Junior Cycle, the ETBI is collaborating
with the NCCA on a project focused on *Learner Voice*. This project seeks to identify, support,
and share practices, rooted in the principles of the ILP, that promote students talking about
learning, teaching, and assessment in the classroom, and being empowered through creative
and thoughtful pedagogical practices to use their voice to enhance their own learning.

While the *ILP* and *Learner Voice Programme* do not specifically address student wellbeing, both programmes have an indirect impact on student wellbeing as they aim to enhance the learning opportunities for students and give them a voice in how they learn best. The programmes are not formally evaluated; however, participants are asked to post comments on a Graffiti Wall at the end of the session. Generally, they are asked to identify one idea or learning they took from the session. Participants of the ILP are awarded Certificates of Completion once all four modules have been completed.

In the case of the *Learner Voice Programme*, the SSE process is built in and participants are asked to draft a plan to facilitate learner voice in their school, subsequently reporting on their experiences at cluster meetings. Participants of both programmes are invited to submit articles for the ILP newsletter, which is published bi-annually. Some participants are also invited to facilitate workshops and/or make presentations at the Annual National ILP Conference.

- Take 1 Programme (exploring non-formal wellbeing opportunities): The Take 1 Programme was developed from a desire to support senior leaders, teachers, and students in ETB schools, to embed the sustainable development goals (SDGs) in teaching and learning. The 'five Ps' identified in the preamble to the SDGs (people, planet, prosperity, peace, and partnership) reflect the overall themes of the sustainable agenda and also align with the core values of ETB schools (excellence in education, respect, care, equality, and community). The Take 1 Programme offers training opportunities for teachers, principals, and deputy principals, providing a background to the SDGs and support resource materials for each subject in the new Junior Cycle curriculum. Participants showcase the learning in their respective schools by participating in Take 1 Week, during which teachers teach 1 lesson about 1 SDG to 1 class group over the course of 1 week. Lessons and events are shared on social media using the hashtag ETB SDGS, describing activities and including photos and images. Key to the success of the Take 1 Programme is making the information about the 17 goals available and understandable and offers ETB schools the opportunity to address issues relating to global citizenship, climate justice, and sustainability across the curriculum. As these topics are currently of interest and sometimes a cause of concern for the student cohort, participating in the Take 1 Programme allows schools to demonstrate their support for students' issues while also highlighting collective and informed opportunities for engagement. As we enter a phase of growing activism and commitment to sustainable education, engaging with Take 1 and the SDGs, provides a space for students to explore issues relating to their current and future mental and physical wellbeing, across all of the subjects in the Junior Cycle curriculum.
- Other Teacher Professional Learning Opportunities provided by ETBI include:
 - » Induction Programme for newly appointed principals and deputy principals
 - » Board of Management Training including Child Protection Training and SEN Provision
 - » Annual Education Conference for principals and deputy principals.

In addition to developing and implementing programmes, ETBI and ETBs facilitate and encourage the engagement of their schools with organisations focused on the provision of TPL, e.g., PDST, JCT, and the Teaching Council. ETB schools engage in TPL activities offered by the DES and its support organisations, as well as a variety of external providers (mental health charities, support organisations)

etc.). For the purpose of this report, information on TPL participation was gathered from a sample of ETB schools and reviewed. Sample schools engaged with TPL activities in the area of student wellbeing offered by external providers such as Jigsaw (*One Good School* initiative and youth mental health training), AsIAm (training in the area of *Autism*), Shout Out (training in *LGBTQ*+ issues), BeLong To (training relating to *LGBTI* issues), Foróige, and Tusla (*Meitheal Training*).

8.9 EDUCATION SUPPORT CENTRES IRELAND (ESCI)

The ESCI is the umbrella organisation for the National Network of Education (Support) Centres. The ESCI is the policy-making body for the Network and general ESCI policy is decided upon at the Annual General Meeting. The *ESCI Statement of Strategy 2020-2023* (ESCI, 2020, p. 10) sets out the following list of actions under the organisation's capacity:

- Link contemporary education policy and practice
- Understand professional learning priorities at local and national level
- Evaluate performance, quality standards, and professional practice
- Establish, oversee, and maintain procedures, policies, and systems
- Maintain close partnership with DES
- Engage with the Action Plan for Education
- Establish, develop, and disseminate national project and initiatives
- Comply with programmes for national governance
- Enhance knowledge of national and international research
- Link contemporary policy and facilitate school clusters, networks, and collaboration
- Partner with third-level institutes
- Advance knowledge of DES policies, circulars, and operations.

There are 21 full-time and 9 part-time Education Centres across the country. Each Education Centre serves the needs of local teachers and school leaders by hosting and administering numerous TPL courses run by many different organisations including some of the TPL providers included in this chapter, as well as other local agencies and national bodies (listed in the *ESCI Statement of Strategy 2020-2023* but including for example, Mental Health Association of Ireland, the Arts Council, and Concern).

The Education Centres facilitate workshops and seminars throughout the school year which focus on enhancing the wellbeing of both teachers and students. These include evening workshops such as *Tools for Supporting Mental Wellbeing in Teenagers, Emotional Wellbeing in the Classroom, Building Resilience* and *Mental and Emotional Wellbeing in the Classroom*. There are also workshops available in a range of diverse wellbeing activities such as *Yoga Story Time – Using Picture Books in the Classroom* which introduces teachers to 'yoga story time' which involves reading stories to 3 to 6-year-olds whilst acting the story out through yoga poses. *Mindfulness – Coming into the Calm of the Present Moment* a course which focuses on teaching simple techniques for living in the calm of the present moment, lessening stress, and making life more enjoyable. *Introducing Mindfulness to School Age Children* is a programme which takes place over the course of two evenings and aims to equip teachers with a knowledge of mindfulness and meditation, in order to develop teachers' own practice and to allow them to pass these practices on to their students also. *CPR4 Schools* requires teachers to attend a 2 hour CPR 4 Schools workshop in a number of Education Centres around the country, where they are given training using videos, lesson plans, and student certifications via an online portal.

The ESCI have a dedicated sub-committee established to review protocols and procedures pertaining to local course design and for establishing frameworks for tutors. The aim is to provide guidance for quality assurance for local provisions, to assess local and contemporary needs, and also to develop a model of development for teacher leaders and expert tutors at local level. Education Centres periodically conduct needs analysis surveys in their regions to establish priority needs at school level. These needs are considered in the design and planning of local CPD. Each programme is designed in response to a

local need and the programme design is generally based on a theoretical model.

The Education Centres individually evaluate the majority of TPL courses in the form of a written evaluation form and use the outcomes to inform the planning and layout of future courses. Some TPL courses such as *Weaving Wellbeing Positive Psychology & Mindfulness in the Classroom* and *Mindfulness & Meditation for Resilience & Well Being* may also be subject to evaluation by the Inspectorate.

ESCI summer course programmes, (20 hour CPD training workshops), follow a rigorous application framework which is set out by the Inspectorate. Successful applications are approved by the Inspectorate. EPV allowance days are awarded to teachers and school leaders on completion of these training courses. It is intended that these models inform school development planning and school based practices for the upcoming academic year. Participants receive a certificate of attendance and completion for all CPD workshops and training programmes in Education Centres. The evaluation of CPD is a priority for ESCI as evidenced by its participation in the Steering Committee for the current research project and the establishment of a sub-committee for CPD evaluation across the ESCI network.

8.10 SUMMARY AND CONCLUSIONS

The TPL activities of nine organisations in the area of wellbeing were outlined in this chapter and are summarised in Table 8.1. Looking across the provision of the various organisations, it can been seen that the TPL activities have some features in common in that courses are largely optional and uncertified, and participant evaluation on completion of the course is very common (Table 8.1).

However, even within the area of student wellbeing TPL (the focus of this review), a large variation in the design and planning methodologies and evaluation tools and practices is evident. This is not surprising as some of the organisations (e.g., ESCI, NEPS, and NCSE) develop and support TPL on the basis of local need. There is also variation in the extent to which organisations offer TPL in online/blended modes and it may be expected that the balance will shift further in light of physical distancing requirements arising from COVID-19. While there may be merit in critically reviewing the TPL features summarised in Table 8.1 in order to evaluate whether certain elements could benefit from streamlining both within and across organisations, it is important to recognise the wide breadth of TPL activities, ranging from locally developed courses (e.g., by ESCI) to evidence-based programmes with standardised protocols (e.g., by NEPS). While some streamlining within and across organisations may be possible or desirable, it is likely that substantial variation will necessarily remain given the range of activities.

It would also be worthwhile examining the content of courses across organisations in order to identify possible areas of duplication or overlap. The planned national survey of principals and teachers in relation to TPL (of which this review is part) will add to this in that it will provide indications of areas of need or gaps in provision of TPL in this area.

Finally, TPL evaluation practices, though widespread, tend to focus on what would typically be viewed as Level 1 (participants' reaction) in Guskey's (2000, 2002a) five critical levels of evaluating TPL, with some at Level 2 (participants' learning). The planned national survey will add to our information on evaluation practices on the part of school leaders and teachers.

Evaluation activities	Online evaluation issued to all FEILTE attendees. Evaluation issues to webinar attendees to rate how enriching the webinar was as a learning experience.	All NIPT events undergo an evaluation process by participants through online evaluation via the NIPT website www. teacherinduction.ie These evaluations are used for ongoing review of materials to meet participants' needs. This materials review process is undertaken in line with protocols agreed by Teaching Council, TES, Inspectorate, and NIPT.	In-person courses evaluated at end, localised supports evaluated using mixed method longitudinal pre- and post- measures.	
Ēva		Q	In-p e va pos	
Certification	Some, automatic certificate of attendance issues for webinars	Induction Workshop Programme. Those engaging in <i>Droichead</i> , instead receive a Form D stamp.	Certificate of attendance	
Optional/ mandatory	Optional	Mandatory	Optional	
Mode	FEILTE workshops and showcases, one conference, three webinars, and three Ezines	Professional support team (PST) professional learning; shared learning events; focus groups, principals' oversight role events, principals information sessions, NQT voice events. Cluster Meetings 1, 2, and 3. Induction Workshop Programme	Nine in-person, four online, two tailored for local needs 18 in-person, six online, two tailored for local needs	
Content	Conference on wellbeing, webinars and Ezines on wellbeing, inclusion for all, and student engagement	<i>Droichead</i> Induction Workshop Programme School support	 15 distinct courses covering a mixture of physical, emotional and holistic wellbeing 26 distinct courses covering a mixture of physical, emotional and holistic wellbeing as well 	
Design	<i>Cosán</i> Framework for Teachers' Learning	The materials design and review process is undertaken as directed by <i>Droichead</i> Induction Planning Group in line with protocols agreed by Teaching Council, TES, Inspectorate, and NIPT.	Three year planning framework underpinned by theoretical models; courses designed under two models depending on course type. All are informed by PDST conceptual framework for design and related.	
Level	Primary and Post- Primary	Primary and Post- primary	Primary Post- primary	
Organisation	The Teaching Council	NPT	TSO	

Table 8.1: TPL in the area of student wellbeing

JCT	Primary	n/a	n/a	n/a	n/a	n/a	n/a
	Post- primary	TPL courses are developed in line with specified design and development protocols.	26 courses covering a mixture of curriculum subjects and wellbeing related content for teachers and school leaders	22 facilitated workshops and four webinars	Optional	۶	Evaluation survey including an overall rating for the helpfulness of the TPL activity and three open- ended questions. Feedback influences the design of the next day and the fine tuning of the current day.
NEPS	Primary and Post- primary	Evidence-based programme with standardised protocols Standard service wide design Developed in response to need Underpinned by theoretical models	' <i>FRIENDs</i> ' IYTCM Critical incidents Student Support Team Training Praise project 'Get Up Stand up' <i>Filling the Gap</i> range of inputs and workshops based on local identified need	Facilitated workshops	Optional	Yes	Yes
HSE	Primary	No standard design or development protocol used.	Six distinct courses with a focus on physical wellbeing	Facilitated training	Optional	Q	Satisfaction evaluation at end of course
	Post- primary		Six distinct courses with a focus on emotional or holistic wellbeing				
NCSE	Primary	TPL events are designed according to a specific design and development process.	Twelve distinct course/ events addressing inclusive teaching and learning as well as social, emotional, and behavioural issues	Five seminars, four presentations, one conference, and two face-to-face tuition	Optional	Yes, certificate of attendance	Written evaluation form
	Post- primary		Twelve distinct courses/ programmes/events addressing transition to post-primary school, as well as social, emotional, and behavioural issues and including the Friends for Life Programme	Mixture of seminars, presentations, face- to-face training, and in-school training			

Feedback is gathered informally by means of conversations and comment sheets. Reflection sheets used in other instances (upside down T model) The link to an online evaluation is issued before the closing of a conference.	Written evaluation form	
Certificate of participation issued	No Some, most training-oriented courses are certified. Certificate of participation	issued for all.
Optional	Optional	
Residential workshops (2.5 days) One day workshops One day conferences	Most commonly training workshops (44/50) Most commonly training workshops (29/38)	
TPL programmes do not specifically address student wellbeing but have an indirect impact on student wellbeing as they aim to enhance the learning opportunities for students and give them a voice in how they learn best. Conference programmes include presentations from other educational partners/ organisations and have included specific presentations on student wellbeing.	Fifty distinct courses/ events, mainly focused on various aspects of social and emotional wellbeing Thirty eight distinct courses/events, mainly focused on various aspects of social and emotional wellbeing	
TPL programmes are designed with a view to providing the opportunity for modelling and immersion. They also incorporate aspects of education policy, e.g., SSE, professional reflection etc.	No service wide or standard design. Programmes are generally developed in response to local need and are underpinned by a theoretical model.	
Primary and Post- primary	Primary Post- primary	
ETBI	ESCI	



106

Developing an evaluation framework for teachers' professional learning in Ireland: Phase 1 Desk-based research

CHAPTER 9 Summary and conclusions

The current review presented agreed definitions of key concepts in Chapter 1; existing frameworks for the evaluation of teachers' professional learning (TPL) in Chapter 2; an overview of impact assessment and process evaluation methods for TPL in Chapter 3; and, TPL frameworks in the Irish context in Chapter 4. Chapter 5 provided a broad introduction to the wellbeing literature. Findings from national and international research reporting on indices of wellbeing in children and young people were summarised in Chapter 6; an overview of key national policies relating to the wellbeing of children and young people and school evaluation was presented in Chapter 7; and, a summary of the TPL provided in the area of student wellbeing by DES support services and agencies (as well as the Teaching Council, ETBI, and HSE) was provided in Chapter 8.

This chapter provides a summary and further discussion of key issues identified in earlier chapters. Some apparent limitations evident in the TPL evaluation literature are discussed. Key points that TPL evaluators can take from the more general implementation science and evaluation literature are presented. We also consider what TPL providers can learn from research on the wellbeing of children and young people in Ireland that could help teachers and school leaders in the promotion of positive health and wellbeing in schools.

It is acknowledged that informal TPL, professional learning communities, and reflective practice are of central importance to the ongoing professional learning and development of teachers; however, the focus of this report is on more formal opportunities for learning and development. The main rationale for this relates to the greater challenge of evaluating and assessing the impact of highly informal activities. One consequence of focusing on more formal activities and opportunities in this project is that the scope and intended outputs are distinct (although hopefully complementary) from the *Cosán Framework for Teachers' Learning* (The Teaching Council, 2016a).

9.1 KEY DEFINITIONS

Central to the current review are the definitions of TPL and wellbeing. The focus of this research are the various types of continuing professional learning and development activities (for teachers and school leaders) which are funded, facilitated, accredited, or otherwise supported by the Department, its support services, or its agencies (including but not limited to CSL, NIPT, PDST, JCT, NEPS, NCSE, and the Education Centres). Thus, professional learning activities provided by private providers and/or funded by teachers themselves are not within the scope of this project, although activities of the Teaching Council, ETBI, and relevant HSE activities are in scope.

For the purpose of the current study, wellbeing is defined in line with the *Wellbeing Policy Statement and Framework for Practice 2018-2023* (DES, 2018b, p. 10) definition, according to which wellbeing is present when:

"a person realises their potential, is resilient in dealing with the normal stresses of their life, takes care of their physical wellbeing and has a sense of purpose, connection and belonging to a wider community. It is a fluid way of being and needs nurturing throughout life".

9.2 EXISTING TPL FRAMEWORKS

The purpose of the current research is to develop a framework for TPL capable of describing and evaluating TPL provided by the Department and its support agencies and services. As described in Chapter 4 of the current review, the Teaching Council recently developed the *Cosán Framework for Teachers' Learning* (The Teaching Council, 2016a). *Cosán* is a descriptive framework for TPL which provides an account of the various dimensions of teachers' learning, the learning processes that underpin professional learning for teachers, and the standards which guide teachers' learning and reflection. *Cosán* does not contain an explicit evaluative component.

The aim of the systematic review outlined in Chapter 2 was to review and learn from existing frameworks for TPL evaluation, in order to develop an evaluation framework for TPL in Ireland which could also potentially incorporate relevant elements of the Cosán framework. Guskey's (2000, 2002a) framework was used as a starting point by the Steering Committee for this research project when considering evaluation frameworks. In addition to describing Guskey's contributions to the TPL evaluation literature, Chapter 2 outlines work by other researchers who are highly cited in the TPL evaluation literature, including Borko (2004), Desimone (2009), Bubb and Earley (2010), and the work of King (2014). A key feature of Borko's work is the recognition of the importance of socio-cultural features while an important contribution to the field by Desimone is the proposed use of a critical features approach for the evaluation of TPL. Bubb and Earley, for their part, advocate the inclusion of attitudes as an explicit component of an evaluative model. King's (2014) contribution is of particular importance to the current work, given its development in the Irish context. She advocates the addition of systemic factors to the evaluation model and defines the term diffusion in her work as a term to describe "unplanned rippling of practices" (p. 106) as a result of TPL. Chapter 2 also highlights a number of recent review publications on evaluation frameworks, including Compen et al. (2019), Merchie et al. (2018), and Soebari and Aldridge (2015).

In the Irish context, and for the purposes of evaluating their TPL provision, the PDST has given some consideration to the parallels and differences between the models of Guskey (1986) and Desimone (2009). It is recognised that while in Guskey's (1986) model, changes in teacher beliefs and attitudes is the final component of the model, in Desimone's (2009) work, changes in beliefs and attitudes are a precursor to changes in instruction and improved student learning. It was noted in Chapter 2 that Compen et al. (2019) criticise the linear presentation of the model proposed by Merchie et al. (2018). Similar to the criticisms advanced by Compen et al. (2019), the applied work of the PDST underscores how a linear model for evaluating TPL may be problematic (see Chapter 4 for a full description of PDST's conceptual framework for professional development provision). The PDST conceptual model is unique in collectively incorporating CPD design, facilitation, and evaluation, viewing these as iterative and interrelated parts.

The applied work of the CSL is also discussed in Chapter 4. This model of professional learning for school leaders in Ireland presents the six essential elements for effective professional learning for school leaders at each stage of the leadership continuum. The CSL model emphasises that professional learning should be guided by professional standards and references *Looking at our Schools* (DES, 2016b, 2016c).

Findings from the systematic review underscore the importance of focusing an evaluation on the core features of effective TPL, rather than the mode of delivery or type of activity. This is in line with *Cosán*, which recognises the various learning processes that impact on teachers' learning and practice, but does not suggest any hierarchical order of such activities. An alternative to the core features approach is to consider a spectrum of TPL models ranging from transmissive to transformative (Kennedy, 2014). According to Kennedy's classification, training is skills-based, generally delivered by an expert, and its purpose is typically transmission. At the other end of the spectrum, collaborative professional inquiry models are likely to be transformative.

A key strength of the current research is the inclusion of a systematic search as until recently, systematic reviews were comparatively uncommon in the education literature. A rigorous process was applied to searching the three selected databases and screening references for inclusion. Papers published between 2015 and 2019 are included in the review. The inclusion/exclusion criteria were refined a number of times to strengthen the selection process and minimise potential uncertainty around selection. To maximise the potential for all relevant articles to be included, the research team adopted a cautious approach at initial screening stage by creating 'discuss' lists, where references could be reviewed by the wider research team if there was any doubt relating to their suitability for inclusion.

Future research may usefully conduct further analysis of the applied papers identified as part of the current review. The focus in this report is on *theoretical* models so examples of model *application* that were identified in the review have not been fully examined at this stage. It may also be useful for future work to contrast teachers' professional learning with that of other professions with established CPD. Such an exercise was not in scope for the current report.

A challenge to carrying out systematic reviews in the field of education is the lack of controlled vocabulary, e.g., MeSH¹⁵ term equivalents, to guide the process of picking appropriate search terms to use in databases. As previously noted, systematic reviews are less common within the sphere of education than in health, for example, and therefore there are fewer publications to guide the development of a review protocol.

Chapter 2 also outlines some of the barriers and enablers to TPL but notes that most of the currently available evidence in this area is drawn from international (rather than national) literature. Key barriers to TPL that were identified comprise both contextual and practical or logistic factors, and include: the school context (e.g., location, enrolment size, and socioeconomic status); school culture; school leadership; time and resources; identifying the specific needs of staff; and, the availability of suitable opportunities that do not conflict with other responsibilities (e.g., family life and work schedule). Some key challenges for implementation were also noted in Chapter 2 and ensuring inclusivity was also noted as a challenge to TPL provision in the area of student wellbeing. A survey of teachers and principals was conducted in Spring 2020, as a separate strand of the current research. It is hoped that the findings of the survey will help identify barriers and enablers of TPL in the Irish context, as comparatively little is known about specific issues which currently impact teachers' and school leaders' participation in TPL in Ireland.

9.3 METHODS OF IMPACT ASSESSMENT AND PROCESS EVALUATION

Chapter 3 outlined some of the key challenges associated with the evaluation of TPL and considered best practice approaches described in the literature. One challenge relates to the variety of TPL in which teachers participate and the ways in which learning is facilitated (in the Irish context, this variety is illustrated by the range of activities described in Chapter 8). A second challenge relates to determining the anticipated outcomes of a TPL and accounting for unintended consequences (e.g., a greater focus on one area of student learning causing a decline in student scores in another domain). Selecting research methods that allow determination of causality can also be challenging given that randomised controlled trials (RCTs) are costly to establish.

It is noted in the literature that often TPL evaluation is only carried out at the first level of Guskey's five levels of evaluation, something which is also evident in the review of TPL in Chapter 8 of the current report. Teachers and school leaders are often asked to reflect on their satisfaction with the TPL experience, but from the information provided, it is difficult to determine the extent to which (if at all)

¹⁵ MeSH terms are the Medical Subject Headings (MeSH) used by the National Library of Medicine which are frequently referred to in the method sections of systematic reviews in health-related literature. This is a thesaurus of organised vocabulary which are hierarchically-organised under defined subject headings. MeSH terms are used for indexing, cataloguing, and subsequently for searching for biomedical and health-related publications in medical databases.

reflection on the individual TPL experience is accompanied by collective reflection on the impact of TPL on student outcomes. While Guskey argues that it is important to evaluate participants' satisfaction with the TPL experience, this limited approach does not assess if a given TPL activity has had an impact on a teacher's teaching practice or whether the TPL has translated to a measurable change in student learning outcomes. It is important to evaluate TPL outcomes across a number of different levels as change at one level may not necessarily lead to change at another level. It is likely that there is variation across schools in the extent to which a collective approach is used to reflect on TPL experiences and impact. It is hoped that Phase 3 of the current work may shed further light on the evaluation of TPL at school-level.

In conducting the TPL evaluation literature review, it was apparent that with limited exception, it is rare to find linkages between TPL evaluation literature and more general literature on evaluation and impact assessment. It appears comparatively rare to find a TPL evaluation study that explicitly presents a logic model describing the expected causal mechanisms underpinning the TPL. An effective descriptive and evaluative framework for TPL should allow the evaluator to ascertain means of identifying and measuring expected outcomes as a result of a TPL activity and should attempt to allow the evaluator to describe the mechanisms by which changes in teaching practice and student learning outcomes may occur. It should also be noted that TPL participation is unlikely to result in change across *all* potential outcomes and this depends on the nature and scope of the TPL activity. For example, TPL related to child protection is unlikely to directly impact on achievement outcomes for all students; TPL related to literacy is unlikely to direct impact on numeracy outcomes. Again, this highlights the importance of a logic model outlining how and where change is expected.

Also, in the literature review, the intended user of the evaluation models presented was not always evident; i.e., it was not always clear whether the same evaluation framework could appropriately be employed by school leaders, teachers, TPL providers, and the DES (in Ireland) to determine the quality and impact of a TPL. Whether or not the same (single) evaluation model can be employed by all stakeholders deserves further consideration as the TPL provider is likely to focus on potential improvements whereas school leaders and teachers may focus preferentially on changes in student outcomes arising as a result of participation.

Backward planning of TPL evaluation is important in order to determine what outcome is expected and how this outcome will be achieved. In other words, evaluation methods should be embedded from the outset as advocated by Guskey (2003, 2014, 2016), King (2016), and Merchie (2018). Unexpected outcomes should also be considered from the outset of TPL design, along with the expected outcomes.

King (2016) argues that systemic factors (support; initiative design and impact; and, teacher agency) should be considered when planning TPL as these factors may mediate the impact of TPL activities on student learning outcomes. By *support*, King (2016) means the support that teachers may need to engage with a TPL activity and this may come from school leadership. *Initiative design and impact* refers to whether the design of the TPL is structured, feasible, research-based, and focused. *Teacher agency* refers to teacher characteristics which may determine if changes can be facilitated, such as teachers' openness, willingness, and motivation to change.

Aside from those factors described above which have been identified in the literature, it is relevant also to consider the relevance of 'buy-in' from the participants of TPL programmes. This has potential relevance at all stages of TPL but particularly at the pre-design stage (i.e., what purpose the TPL serves and matching that with the needs and motivations of the participants) and also in evaluation (whereby participants' own investment and engagement in the process would appear critical). The broader issue of 'buy-in' (and indeed how it interacts with barriers and enablers of TPL) is one of the themes emerging in the ERC's ongoing evaluation of the Digital Learning Framework (Cosgrove et al., 2019). It is hoped that data gathered as part of the survey of teachers and principals in the current project will provide further insight into teachers' perceptions of the role of contextual factors, teacher characteristics, and

student characteristics in impacting on the effectiveness of TPL.

9.4 THE WELLBEING OF CHILDREN AND YOUNG PEOPLE IN IRELAND

Chapter 5 describes the broader context of student wellbeing and argues that the wellbeing of children and young people cannot be meaningfully measured without taking into account features of the environment which may act as risk or protective factors for wellbeing. As such, it is useful to consider wellbeing in the context of theories such as Bronfenbrenner's (1979) *ecological systems theory* and Vygotsky's (1962) *social learning theory* and to think of how the wellbeing of children and young people may be impacted by the various systems in which they interact, e.g., the school and family/home environments, the policy context, and educational systems.

Chapter 6 presents a review of large-scale national (GUI, MWS) and international (HBSC, PISA, PIRLS, and TIMSS) surveys and assessments which reported findings on the wellbeing of children and young people in Ireland over the past decade. Studies were included in Chapter 6 if they were conducted within the last 10 years and their approach to sampling involved a nationally representative sample of children and young people in Ireland. In some cases, the availability of international data made it possible to report findings from Irish samples in the context of global trends in health and wellbeing (i.e., HBSC, PISA, PIRLS, and TIMSS). While the decision to include findings from surveys and assessments that report data from a nationally representative sample of children and young people in Ireland adds strength to the conclusions that can be drawn from these studies, the requirement for a nationally-representative sample means that some smaller scale studies which may have provided useful findings were excluded, e.g., the *Moving Well - Being Well* study (Behan et al., 2019).

Findings regarding physical wellbeing show that for a minority of children and young people issues with diet, sleep, levels of physical activity, and substance misuse continue to warrant attention. Differences in outcomes associated with socioeconomic status were identified from quite young ages. Turning to mental health, issues were more common amongst girls than boys and the comparatively lower life satisfaction reported by teenagers in Ireland than in other countries in some studies was noted as concerning. A positive finding was that at both primary and post-primary levels, rates of bullying in Ireland are lower than on average internationally.

As outlined in Chapter 6, a growing importance is being placed on the involvement of children and young people in decisions that affect them, including having their voices heard in relation to research and policy that affects them. In Ireland, young people have successfully been involved in (at least) two large-scale surveys to date – one national survey of youth mental health (MWS and MWS 2; Dooley & Fitzgerald, 2012; Dooley et al., 2019) and one international survey of the health behaviours of children and young people (HBSC; Daniels et al, 2014; Kelly et al, 2020). In both cases, young people helped to decide some of the topics that would be covered in the surveys. The issue of children and young people's involvement in decision-making is also highlighted at government level in the DCYA's (2015) *National Strategy on Children and Young People's Participation in Decision-Making 2015-2020*. It is important that children and young people are involved in decision making and that their voices are heard in relation to the issues that impact their lives so that curriculum, and consequently TPL, can be shaped to support children and young people's wellbeing needs in a meaningful way.

Chapter 6 also examines the implications for TPL arising from findings regarding wellbeing. These are:

- Social and financial inequalities in physical, social, and emotional wellbeing outcomes are evident from an early age and may increase over time. These inequalities indicate a highly tailored and targeted approach to supporting and enhancing the wellbeing of children and young people is required which begins early and is built on throughout childhood and adolescence.
- Children and young people with SEN and/or disabilities remains a group in need of early,

targeted, and sustained support for their wellbeing needs. Likewise, the needs of other groups may require further attention to address inclusion and wellbeing needs arising due to migration-induced diversity; ethnic groups, national minorities and Indigenous peoples; and, gender identity and sexual orientation.

- Gender differences also have implications for TPL; for example, targeting social and emotional skills among younger boys, and enhancing self-esteem among older girls.
- Mental health issues are common among adolescents, and more so in girls, and this underlines the need for early and sustained support (incorporating TPL) for the development of protective factors for mental health. TPL which addresses mental health of children and young people was frequently mentioned by support organisations in the list of TPL they provided, e.g., *Building Resilience* for primary teachers and *Mental Health Awareness Initiatives* for post-primary teachers and parents (both offered by the Education Centres).
- Public health issues relating to diet, sleep, physical activity, and substance use are in consistent evidence across many of the studies and indicate an ongoing need for cross-sectoral work including TPL to highlight risk factors for health and to promote healthy behaviours in children and young people.
- International comparative data indicates that young people in Ireland reported comparatively lower life satisfaction (in some studies) and liking of school along with rather high levels of pressure relating to school work. National studies continue to confirm a dip in wellbeing and school engagement in Second year (see e.g., Smyth et al., 2006). These findings have implications for TPL insofar as suggesting a need to build resilience and coping strategies for stress among post-primary students, particularly if one considers the recent results from PISA 2018 and HBSC 2018.
- On a positive note, some data suggest that positive student-teacher relations are associated with lower rates of bullying among students. This finding again suggests the importance of TPL in the area of fostering positive relationships within a whole-school framework.

9.5 POLICY CONTEXT AND TPL IN THE AREA OF STUDENT WELLBEING

Chapter 7 provided an overview of the recent policy developments, initiatives, and frameworks in the area of student wellbeing. There is strong evidence for a recent and growing emphasis on student wellbeing in national policy, and this trend is consistent with international trends (e.g., the OECD's PISA first examined student wellbeing in 2015, see OECD, 2017; a stand-alone wellbeing questionnaire was also included in PISA 2018).

Four areas for whole-school mental health promotion are highlighted across a number of policy documents and these are: culture & environment; curriculum – teaching & learning; relationships & partnerships; and, policy & planning. Additional wellbeing supports are available to those who need them in schools depending on the degree of need. The four areas listed for mental health promotion highlight the micro and macro contexts which may impact wellbeing. These include school culture; educational policies and curriculum; and, relationships between staff, students/pupils, families, and the greater communities in which they live.

The school context is particularly important for students from disadvantaged backgrounds and those with SEN. Internationally, the OECD's *Strength Through Diversity* (OECD, nd) project is exploring how education systems can be more inclusive and equitable by examining the wellbeing needs of specific marginalised groups under six key themes: migration-induced diversity; ethnic groups, national minorities and Indigenous peoples; gender; gender identity and sexual orientation; SEN; and, giftedness. We did not find a strong focus on the specific wellbeing needs of students in these particular groups in the submissions by TPL providers described in Chapter 8 (apart from students with SEN as for teachers of students with SEN there is a variety of relevant TPL such as JCT facilitated workshops focusing on Level 1 and Level 2 Learning Programmes; ESCI Primary SEN support groups; as well as NCSE work focusing on inclusion of students with SEN).

In the context of mental health, a recent Youth Mental Health Task Force Report 2017 (DOH, 2017) highlighted the importance of the school context and appropriate training for teachers in their recommendations. They noted that "training for existing teachers in mental health awareness and knowledge of local services and referral pathways is understood to be a key skill for staff" (p. 14). Two key recommendations were:

- 1. The DES should support teaching professionals in schools and centres for education with the knowledge and skills to understand their role in supporting young people with mental health issues and how to access information about services and supports available to them
- 2. Principals and teachers should be supported to implement the Junior Cycle Wellbeing curriculum.

9.6 TPL PROVIDED IN THE AREA OF STUDENT WELLBEING IN IRELAND

Chapter 8 outlined the TPL activities related to wellbeing provided by nine providers in Ireland (full details are provided in an e-Appendix table available at http://www.erc.ie/TPLwellbeing). Providers were asked to provide information on wellbeing-related TPL provided over a 5-year period. Providers were given the opportunity to review this information prior to publication of the report and to ensure that their work is described using the language of their own organisation.

For the most part, the TPL activities listed by providers in Chapter 8 were optional (for teachers and school leaders) and uncertified, and participant evaluation on completion of the course was found to be very common. A large variation in the design and planning methodologies and evaluation tools and practices was evident. It is clear that a large variety of TPL options are available to teachers and it may be useful for a review to be carried out to identify possible ways in which TPL options in the area of student wellbeing could be streamlined within and across organisations.

It was observed that evaluation of TPL in the area of student wellbeing tends to focus on what would typically be viewed as Level 1(participants' reaction) in Guskey's (2000, 2002a) five critical levels of evaluating TPL, with some at Level 2 (participants' learning). An important exception to this was work by NEPS which carried out an RCT of the *FRIENDS programme* in primary schools in Ireland which found significant increases in coping skills for all participating students and significant decreases in anxiety, particularly for students in DEIS schools. The wait-list control trial method employed by NEPS may be appropriate for the evaluation of other future TPL activities and an important benefit of this approach is the ability to draw causal conclusions about impact.

As outlined in Chapter 8, organisations offering TPL in Ireland vary significantly in their approaches to TPL design, development, facilitation, implementation, and the level of impact assessment they carry out. It is hoped that the framework developed in the current project will cater for the wide range of TPL activities offered by various organisations. Engaging TPL providers in the evaluation process is critical, given that evaluation should be considered from the design phase of TPL and embedded from the outset. A key strength of the current project is the representative nature of the Steering Committee which allows for input from TPL providers ensuring that the development of the TPL evaluation framework is guided by key stakeholders.

Another strength of the project is the combination of desk-based research with a large-scale survey of teachers and principals plus further in-depth work to further explore survey findings. This multi-method approach will allow triangulation of findings and provide ample opportunity to validate the resultant evaluation framework with relevant stakeholders.

9.7 CONCLUSIONS

The current review represents one strand of work in the overall development of a TPL evaluation framework in Ireland. Other sources of information, and in particular the large-scale survey of teachers and principals, will also inform the development of the framework. Although survey data are not yet available, it is useful nonetheless at this stage to establish a set of guiding principles for the evaluation framework that are borne out by the literature:

- 1. The framework should be clearly and explicitly underpinned by a clear conceptual and theoretical rationale.
- 2. The framework should have both descriptive and evaluative strands and each should clearly complement the other.
- 3. The strands may be further split by phases (e.g., development, delivery, review) and distinguishable by level or user (e.g., TPL developer, school leader, teacher, pupil/student) and these distinctions should be enabled by a clear statement of TPL objectives at the outset.
- 4. The framework should incorporate best practice TPL design principles, which in turn should be intrinsically linked to the evaluation of TPL.
- 5. The framework must be sufficiently flexible to meaningfully accommodate TPL in a range of areas (both subject-specific and cross-curricular) as well as a range of levels of the system (i.e., the various stages of primary and post-primary), yet not overly generic, perhaps through the use of concrete examples.
- 6. The framework should include concrete and practical tools and resources such as templates and checklists.
- 7. The framework should make explicit linkages between phases of TPL implementation and evaluation methodologies, providing guidance to permit a good match between TPL phase, content, and evaluation.
- 8. The evaluation component should incorporate a sense of audience and ownership by phase and user and address such questions as: Who leads on this aspect of the TPL? Who is evaluating it? Who is involved in the evaluation? Why? How are evaluation data to be used?
- 9. The evaluation component should include a meaningful consideration of impact assessment which should ideally be guided by logic modelling. Impact assessment within the framework should address the merits of RCTs, while also acknowledging that RCTs are not always feasible, and suggesting appropriate alternatives where this is the case. Further, commentary in the evaluative part of the framework should promote a realistic approach in terms of the time required for learning associated with TPL to become apparent in practice and related outcomes. That is, when considering the timing of impact assessment and evaluation, there should be due consideration given to the time taken for learning from TPL to take effect across the various levels.

REFERENCES

- Amirkhan, J.H. (1990). A factor analytically derived measure of coping: The Coping Strategy Indicator. *Journal of Personality and Social Psychology*, *59*(*5*), 1066–1074.
- Anderson, S.E. (1997). Understanding teacher change: Revisiting the concerns-based adoption model. *Curriculum Inquiry*, 27(3), 331-367.
- Angold, A. & Costello, E.J. (1987). *Mood and Feelings Questionnaire (MFQ).* Durham, NC: Developmental Epidemiology Program, Duke University.
- Armsden, G.C. & Greenberg, M.T. (1987). The Inventory of Parent and Peer Attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth* and Adolescence, 16(5), 427-454.7
- Bailey, B. (2000). The impact of mandated change on teachers. In N. Bascia & A. Hargreaves (Eds). *The sharp edge of educational change: Teaching, leading and the realities of reform.* (pp. 112-128). London: Routledge Falmer.
- Banks, J. & Smyth, E. (2011). *Continuous professional development among primary teachers in Ireland.* Maynooth: The Teaching Council and ESRI.
- Behan, S., Belton, S., Peers, C., O'Connor, N. E., & Issartel, J. (2019). Moving Well Being Well: Investigating the maturation of fundamental movement skill proficiency across sex in Irish children aged five to twelve. *Journal of Sports Sciences*, 37(22), 2604-2612.
- Berk, L.E. & Winsler, A. (1995). *Scaffolding children's learning: Vygotsky and early childhood education. NAEYC research into practice series. Volume 7.* Washington, DC: National Association for the Education of Young Children.
- Berk, L.E. (2000). Child development. Boston MA: Allyn & Bacon.
- Berwick, D.M., Murphy, J.M., Goldman, P.A., Ware, J.E., Barsky, A.J., & Weinstein, M.C. (1991). Performance of a five-item mental health screening test. *Medical Care*, 29(2), 169–176.
- Beswick, K., Anderson, J., & Hurst, C. (2016). The education and development of practicing teachers.
 In K. Makar, S. Dole, J. Visnovska, M. Goos, A. Bennison, & K. Fry (Ed.) *Research in mathematics education in Australasia 2012-2015* (pp. 329-352). Singapore: Springer.
- Beswick, K., Fraser, S., & Crowley, S. (2017). "The best ever": Mathematics teachers' perceptions of quality professional learning. In *Proceedings of the 41st conference of the International Group for the Psychology of Mathematics Education* (Vol. 2, pp. 169-176). Singapore: PME.
- Birman, B.F., Desimone, L., Porter, A.C., & Garet, M.S. (2000). Designing professional development that works. *Educational Leadership*, *57*(8), 28-33.
- Blum, R.W. (2005). A case for school connectedness. The Adolescent Learner, 62(7), 16–20.
- Bobis, J., Kaur, B., Cartwright, K., & Darragh, L. (2020). Teachers' professional learning and development in mathematics education. In J. Way, C. Attard, J. Anderson, J. Bobis, H. McMaster, & K. Cartwright, (Eds). *Research in mathematics education in Australasia 2015-2019*, (pp. 117-146). Singapore: Springer.
- Boer, M., van den Eijnden, R.J.J.M., Boniel-Nissim, M., Wong, S.L., Inchley, J.C., Badura, P., Craig, W.M., Gobina, I., Kleszczewska, D., Klanšček, H.J., & Stevens, G.W.J.M. (2020). Adolescents' intense and problematic social media use and their well-being in 29 countries. *Journal of Adolescent Health, 66*(6, supplement), S89-S99.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, *33*(8), 3-15.

- Boylan, M. & Demack, S. (2018). Innovation, evaluation design and typologies of professional learning. *Educational Research*, *60*(3), 336-356.
- Brennan, A. (2017). Exploring the impact of a professional learning community on teacher professional learning for inclusive practice. Unpublished doctoral thesis. Dublin: DCU.
- Briner, R. & Dewberry, C. (2007). *Staff well-being is key to school success.* London: Worklife Support Ltd/Hamilton House.
- Broderick, N. (2018). Continuous professional development in science education: A reconceptualisation. International Conference: New Perspectives in Science Education, Dublin City University, March 2018. Dublin: DCU.

Bronfenbrenner, U. (1979). The ecology of human development. USA: Harvard University Press.

- Brown, B.B., Clasen, D.R., & Eicher, S.A. (1986). Perceptions of peer pressure, peer conformity dispositions, and self-reported behavior among adolescents. *Developmental Psychology*, 22(4), 521–530.
- Bubb, S. & Earley, P. (2010). Helping staff develop in schools. Thousand Oaks, CA: Sage.
- Buczynski, S. & Hansen, C.B. (2010). Impact of professional development on teacher practice: Uncovering connections. *Teaching and Teacher Education*, *26*(3), 599-607.
- Buhrmester, D., Camparo, L., Christensen, A., Gonzalez, L.S., & Hinshaw, S.P. (1992). Mothers and fathers interacting in dyads and triads with normal and hyperactive sons. *Developmental Psychology*, *28*(3), 500-509.
- Buss, A.H. & Plomin, R. (1984). *Temperament: Early Developing Personality Traits*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- CASEL (2017). Social and emotional learning (SEL) competencies. Retrieved from <u>https://casel.org/</u> wp-content/uploads/2019/12/CASEL-Competencies.pdf
- Catalano, R.F., Haggerty, K.P., Oesterle, S., Fleming, C.B., & Hawkins, J.D. (2004). The importance of bonding to school for healthy development: Findings from the social development research group. *Journal of School Health*, *74*(7), 252–261.
- CDC Division for Heart Disease and Stroke Prevention Program (nd). *Evaluation guide: Developing and using a logic model.* USA: US Department of Health and Human Services.
- Chelimsky, E. (2006). The purposes of evaluation in a democratic society. In I.F. Shaw, J.C. Greene, & M.M. Mark (Eds). *The Sage handbook of evaluation* (pp. 33-55). London: Sage Publications Ltd.
- City, E., Elmore, R., Fiarman, S., & Teitel, L. (2009). *Instructional rounds in education: a network approach to improving teaching and learning.* Cambridge, MA: Harvard Education Press.
- Clarke, D. & Hollingsworth, H. (2002). Elaborating a model of teacher professional growth. *Teaching* and *Teacher Education*, *18*(8), 947-967.
- Clerkin, A. (2013). Teachers and teaching practices. In E. Eivers & A. Clerkin (Eds). *National Schools, international contexts: Beyond the PIRLS and TIMSS test results.* Dublin: Educational Research Centre.
- Clerkin, A., Perkins, R., & Cunningham. R. (2016). *TIMSS 2015 in Ireland: Mathematics and science in primary and post-primary schools.* Dublin: Educational Research Centre.
- Cohen, D.K., Raudenbush, S.W., & Ball, D.L. (2003). Resources, instruction, and research. *Educational Evaluation and Policy Analysis*, *25*(2), 119-142.
- Coleman, J. (1994). Social capital, human capital, and investment in youth. In A. Petersen & J. Mortimer (Eds.), *Youth unemployment and society* (pp. 34-50). Cambridge: Cambridge University Press.

- Compen, B., De Witte, K., & Schelfhout, W. (2019). The role of teacher professional development in financial literacy education: A systematic literature review. *Educational Research Review*, 26, 16-31.
- Conway, P.F. & Murphy, R. (2013). A rising tide meets a perfect storm: New accountabilities in teacher education in Ireland. *Irish Educational Studies*, 32(1), 11–36. (Special Issue. E. Kelly & A. Leavy (Eds.), *Research in education related to teacher accountability*).
- Corcoran, T., Fuhrman, S.H., & Belcher, C.L. (2001). The district role in instructional improvement. *Phi Delta Kappan*, *83*(1), 78-84.
- Cordingley, P., Bell, M., Rundell, B., Evans, D., & Curtis, A. (2003). *The impact of collaborative CPD* on classroom teaching and learning: How does collaborative continuing professional development (CPD) for teachers of the 5-16 age range affect teaching and learning. London: EPPI-Centre.
- Cosgrove, J., Gilleece, L., & Shiel, G. (2011). *International Civic and Citizenship Study (ICCS): Report for Ireland*. Dublin: Educational Research Centre.
- Cosgrove, J., McKeown, C., Travers, J., Lysaght, Z., NiBhroin, Ó, & Archer, P. (2018). *Educational experiences and outcomes of children with special educational needs: Phase 2– from age 9 to 13. A secondary analysis of data from the Growing Up in Ireland study. Research report no. 25.* Trim: NCSE.
- Cosgrove, J., Moran, E., Feerick, E., & Duggan, A. (2019). *Digital Learning Framework (DLF) national evaluation: Starting off Baseline report.* Dublin: Educational Research Centre.
- CSL Centre for School Leadership (nd). A professional learning continuum for school leadership in the Irish context: Consultation paper. Retrieved from: <u>https://cslireland.ie/images/</u> <u>downloads/A_Professional_Learning_Continuum_for_School_Leadership_in_the_Irish_</u> <u>Context.pdf</u>
- CSL (2019). *Endorsement of leadership professional learning.* Retrieved from: <u>https://www.cslireland.</u> <u>ie/endorsement-csl-ireland.html</u>
- Currie, C., Zanotti, C., Morgan, A., Currie, D., de Looze, M., Roberts, C., Samdal, O., Smith, O., & Barnekow, V. (2012). Social determinants of health and well-being among young people. Health Behaviour in School-aged Children (HBSC) study: international report from the 2009/2010 survey. Copenhagen: WHO Regional Office for Europe.
- Daly, D.G. (2006). *Factors associated with formal help-seeking behaviour in Irish adolescents*. Ireland: University College Dublin.
- Daniels, N., Burke, L., O'Donnell, A., McGovern, O., Kelly, C., D'Eath, M., & Nic Gabhainn, S. (2014). Expanding the role of young people in research: towards a better understanding of their lives. *Public Health and Governance*, *12*(1), 36-44.
- Darling, N. & Toyokawa, T. (1997). Construction and validation of the Parenting Style Inventory II (PSI-II). Unpublished manuscript.
- Darling-Hammond, L. & Richardson, N. (2009). Research review/teacher learning: What matters. *Educational Leadership, 66*(5), 46-53.
- Darling-Hammond, L., Hyler, M.E., & Gardner, M. (2017). *Effective teacher professional development*. Palo Alto, CA: Learning Policy Institute.
- DCYA Department of Children and Youth Affairs (2014). *Better Outcomes, Brighter Futures: The national policy framework for children and young people 2014-2020.* Dublin: The Stationary Office.
- DCYA (2015). National strategy on children and young people's participation in decision making, 2015-2020. Dublin: Government Publications.

- DCYA (2017). *Children First: National guidance for the protection and welfare of children.* Dublin: Government Publications.
- DCYA (2018). *Mid-term review of Better Outcomes Brighter Futures: The national policy framework for children and young people 2014-2020.* Dublin: Government Publications.
- De Nobile, J. (2008). *Communication: Its importance for teacher well-being. Education Connect: Occasional Papers about Social and Emotional Wellbeing in Education, 13,* 11–13. Australia: Hunter Institute of Mental Health.
- DePaoli, J.L., Atwell, M.N., & Bridgeland, J. (2017). *Ready to lead: A national principal survey on how social and emotional learning can prepare children and transform schools. A report for CASEL.* Washington, D.C.: Civic Enterprises.
- DES Department of Education and Science (1999a). *Primary school curriculum: Social, personal & health education*. Dublin: The Stationary Office.
- DES (1999b). Primary school curriculum: Introduction. Dublin: The Stationary Office.
- DES Department of Education and Skills, HSE, & DOH (2013). *Well-being in post-primary schools: Guidelines for mental health promotion and suicide prevention.* Dublin: NEPS/DOH/DES/HSE.
- DES (2014). Student support teams in post-primary schools. Dublin:DES.
- DES (2015a). Junior cycle framework. DES: Government Publications.
- DES, HSE, & DOH (2015b). *Well-being in primary schools. Guidelines for mental health promotion.* Dublin: NEPS/DES/DOH/HSE.
- DES (2016a). Action plan for education 2016-2019. Dublin: Government Publications.
- DES (2016b). Looking at our school 2016: A quality framework for primary schools. Dublin: The Inspectorate.
- DES (2016c). Looking at our school 2016: A quality framework for post-primary schools. Dublin: The Inspectorate.
- DES (2016d). School self-evaluation guidelines 2016-2020, primary. Dublin: The Inspectorate.
- DES (2016e). School self-evaluation guidelines 2016-2020, post-primary. Dublin: The Inspectorate.
- DES (2017a). *DEIS Plan 2017: Delivering equality of opportunity in schools*. Dublin: Government Publications.
- DES (2017b). *Child protection procedures for primary and post-primary schools.* Dublin: Government Publications.
- DES (2018a). Action plan for education 2018. Dublin: Government Publications.
- DES (2018b). *Wellbeing policy statement and framework for practice 2018-2023.* Dublin: Government Publications.
- DES (2019a). *Cumasú empowering through learning: Action plan for education 2019*. Dublin: Government Publications.
- DES (2019b). *Cumasú empowering through learning: Statement of strategy 2019-2021.* Dublin: Government Publications.
- DES (2019c). *Directory of wellbeing CPD September 2019 to June 2020.* Dublin: Government Publications.
- Department for International Development (2014). *How to note: Assessing the strength of evidence.* U.K.: Gov.UK. Retrieved from <u>https://www.gov.uk/government/publications/how-to-note-assessing-the-strength-of-evidence</u>

- Desimone, L. (2002). How can comprehensive school reform models be successfully implemented? *Review of Educational Research*, 72(3), 433-479.
- Desimone, L.M., Porter, A.C., Garet, M.S., Yoon, K.S., & Birman, B. F. (2002). Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. *Educational Evaluation and Policy Analysis*, 24(2), 81–112.
- Desimone, L.M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, *38*(3), 181-199.
- Desimone, L., Smith, T.M., & Phillips, K. (2013). Linking student achievement growth to professional development participation and changes in instruction: A longitudinal study of elementary students and teachers in Title I schools. *Teachers College Record*, *115*(5), 1-46.
- Dishion, T. J. (1990). The family ecology of boys' peer relations in middle childhood. *Child Development*, *61*(3), 874-892.
- DOH Department of Health (2013). *Healthy Ireland. A framework for improved health and wellbeing 2013-2025.* Dublin: Department of Health.
- DOH (2017). National youth mental health task force report 2017. Dublin: Government Publications.
- Dooley, B.A. & Fitzgerald, A. (2012). *My Word Survey: The national study of youth mental health in Ireland.* Dublin: Headstrong/UCD School of Psychology.
- Dooley, B., O'Connor, C., Fitzgerald, A., & O'Reilly, A. (2019). *My World Survey 2: The National Study* of Youth Mental Health in Ireland. Dublin: Jigsaw/UCD School of Psychology.
- Driskell, S.O., Bush, S.B., Ronau, R.N., Niess, M.L., Rakes, C.R., & Pugalee, D.K. (2016). *Mathematics education technology professional development.* Pennsylvania: IGI Global.
- Durlak, J.A., Weissberg, R.P., Dymnicki, A.B. Taylor, R.D., & Schellinger, K.B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, *82*(1), 405-432.

Education Support Centres of Ireland (2020). ESCI statement of strategy 2020-2023. Dublin: ESCI.

- Eivers, E., Gilleece, L., & Delaney, E. (2017). *Reading achievement in PIRLS 2016: Initial report for Ireland.* Dublin: Educational Research Centre.
- El Afi, A.D. (2019). The impact of professional development training on teachers' performance in Abu Dhabi Cycle Two and Three schools. *Teacher Development*, *23*(3), 366-386.
- Ferris, J. & Wynne, H. (2001). *The Canadian Problem Gambling Index*. Retrieved from: <u>https://www.greo.ca/Modules/EvidenceCentre/files/Ferris%20et%20al(2001)The_Canadian_Problem_Gambling_Index.pdf</u>
- Fishman, B.J., Marx, R.W., Best, S., & Tal, R.T. (2003). Linking teacher and student learning to improve professional development in systemic reform. *Teaching and Teacher Education*, *19*(6), 643-658.
- Franko, D.L., Jenkins, A., Roehrig, J.P., Luce, K.H., Crowther, J.H., & Rodgers, R.F. (2012). Psychometric properties of measures of eating disorder risk in latina college women. *International Journal of Eating Disorders*, *45*(4), 592–596.
- Fraser, B.J., Fisher, D.L., & McRobbie, C.J. (1996). Development, validation and use of personal and class forms of a new classroom environment instrument. *Paper presented at the annual meeting of the American Educational Research Association*. New York.
- Fraser, C., Kennedy, A., Reid, L., & McKinney, S. (2007). Teachers' continuing professional development: Contested concepts, understandings and models. *Journal of In-service Education*, 33(2), 153-169.

- Furman, W. & Buhrmester, D. (2008). *The Network of Relationships Inventory: Relationship qualities version.* Unpublished measure, University of Texas at Dallas.
- Garet, M., Porter, A., Desimone, L., Birman, B., Yoon, K. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, *38*(4), 915–945.
- Garet, M.S., Cronen, S., Eaton, M., Kurki, A., Ludwig, M., Jones, W., Uekawa, K., Falk, A., Bloom, H., Doolittle, F., Zhu, P., Sztejnberg, L., & Silverberg, M. (2008). *The impact of two professional development interventions on early reading instruction and achievement (NCEE 2008-4030)*. Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
- Gavin, A., Keane, E., Callaghan, M., Molcho, M., Kelly, C. & Nic Gabhainn, S. (2015). *The Irish Health Behaviour in School-aged Children (HBSC) Study 2014.* Dublin: Department of Health & Galway: Health Promotion Research Centre, NUI Galway.
- Gilleece, L., Shiel, G., Perkins, R., & Proctor, M. (2009). *Teaching and learning international survey* (2008): National report for Ireland. Dublin: Educational Research Centre.
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A research note. *Journal of Child Psychology and Psychiatry, 38*(5), 581-586.
- Goodman, R., Ford, T., Simmons, H., Gatward, R., & Meltzer, H. (2000). Using the Strengths and Difficulties Questionnaire (SDQ) to screen for child psychiatric disorders in a community sample. *The British Journal of Psychiatry*, 177(6), 534-539.
- Green, J., Roberts, H., Petticrew, M., Steinbach, R., Goodman, A., Jones, A., & Edwards, P. (2015). Integrating quasi-experimental and inductive designs in evaluation: a case study of the impact of free bus travel on public health. *Evaluation*, *21*(4), 391-406.
- Greene, S., Williams, J., Layte, R. Doyle, E., Harris, E., McCrory, C., Murray, A., O'Dowd, T., Quail, A., Swords, L., Thornton, M., & Whelan, C.T. (2010). *Growing Up in Ireland: Background and conceptual framework. (Literature review series No.1).* Dublin: ESRI/TCD/OMCYA.
- Gresham, F. M. & Elliott, S. N. (2008). Social skills improvement system: Rating scales manual. NCS Pearson.
- Griffin, C. (2006). A clinic-based evaluation of the Parents Plus Early Years Programme. Dublin: University College Dublin.
- GUI Study Team (2016a). Key findings: Child Cohort at 17/18-years, Health, weight, physical activity and diet (No.2). Dublin: ESRI/TCD/DCYA.
- GUI Study Team (2016b). Key findings: Child Cohort at 17/18-years, Life satisfaction, relationships and mental health (No.3). Dublin: ESRI/TCD/DCYA.
- GUI Study Team (2017a). *Key findings: Infant Cohort (at 7/8 years), Health and development (No. 2).* Dublin: ESRI/TCD/DCYA.
- GUI Study Team (2017b). Key findings: Infant Cohort (at 7/8 years), Socio-emotional development, relationships and play (No. 3). Dublin: ESRI/TCD/DCYA.
- GUI Study Team (2017c). *Key findings: Infant Cohort (at 7/8 years), School and learning (No. 1).* Dublin: ESRI/TCD/DCYA.
- GUI Study Team (2018a). *Key findings: Cohort '08 at 9 years old, Health and physical development (No. 3).* Dublin: ESRI/TCD/DCYA
- GUI Study Team (2018b). Key findings: Cohort '08 at 9 years old, Relationships & socio-emotional well-being (No. 4). Dublin: ESRI/TCD/DCYA.

- Gullone, E. & Robinson, K. (2005). The Inventory of Parent and Peer Attachment—Revised (IPPA-R) for children: A psychometric investigation. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice*, *12*(1), 67-79.
- Guskey, T.R. (1986). Staff development and the process of teacher change. *Educational Researcher*, *15*(5), 5-12.
- Guskey, T.R. (1999). Apply time with wisdom. Journal of Staff Development, 20(2), 10-15.
- Guskey, T.R. (2000). *Evaluating professional development*. Thousand Oaks, California: Corwin Press.
- Guskey, T.R. (2002a). Does it make a different? Evaluating professional development. *Educational Leadership*, *59*(6), 45-51.
- Guskey, T.R. (2002b). Professional development and teacher change. *Teachers and Teaching*, *8*(3), 381-391.
- Guskey, T.R. (2003). What makes professional development effective? *Phi Delta Kappan*, *84*(10), 748-750.
- Guskey, T.R. & Yoon, K.S. (2009). What works in professional development? *Phi Delta Kappan*, 90(7), 495-500.
- Guskey, T.R. (2012). The rules of evidence. JSD, 33(4), 40-43.
- Guskey, T.R. (2014). Planning professional learning. Educational Leadership, 71(8), 10-16.
- Guskey, T.R. (2016). Gauge impact with 5 levels of data. JSD, 37(1), 32-37.
- Guyadeen, D. & Seasons, M. (2018). Evaluation theory and practice: Comparing program evaluation and evaluation in planning. *Journal of Planning Education and Research*, *38*(1), 98-110.
- Hairon, S., Goh, J.W.P., Chua, C.S.K., & Wang, L.Y. (2017). A research agenda for professional learning communities: Moving forward. *Professional Development in Education*, *43*(1), 72-86.
- Hall, G.E., & Hord, S.M. (1987). Change in schools: Facilitating the process. New York: Suny Press.
- Halverson, R.R. (2003). Systems of practice: How leaders use artifacts to create professional community in schools. *Education Policy Analysis Archives*, *11*, 37.
- Harding, S., Morris, R., Gunnell, D., Ford, T., Hollingsworth, W., Tilling, K., Evans, R., Bell, S., Grey, J., Brockman, R., Campbell, R., Araya, R., Murphy, S., & Kidger, J. (2019). Is teachers' mental health and wellbeing associated with students' mental health and wellbeing? *Journal of Affective Disorders, 242*, 180-187.
- Harris, A. & Jones, M. (2010). Professional learning communities and system improvement. *Improving Schools, 13*(2), 172-181.
- Hattie, J. (2009). *Making learning visible: A synthesis of over 800 meta-analyses relating to achievement*. London: Routledge.
- Heller, J.I., Daehler, K.R., Wong, N., Shinohara, M., & Miratrix, L. W. (2012). Differential effects of three professional development models on teacher knowledge and student achievement in elementary science. *Journal of Research in Science Teaching*, 49(3), 333-362.
- Hjemdal, O., Friborg, O., Stiles, T. C., Martinussen, M., & Rosenvinge, J. H. (2006). A new scale for adolescent resilience: Grasping the central protective resources behind healthy development. *Measurement and Evaluation in Counseling and Development*, 39(2), 84–96.
- Holmes, E. (2005). *Teacher well-being: Looking after yourself and your career in the classroom*. London: Psychology Press.

- Inchley, J., Currie, D., Young, T., Samdal, O., Torsheim, T., Augustson, L., Mathison, F., Aleman-Diaz, A., Molcho, M., Weber, M., & Barnekow, V. (eds) (2016). Growing up unequal: gender and socioeconomic differences in young people's health and well-being. *Health Behaviour in School-aged Children (HBSC) study: international report from the 2013/2014 survey.* Copenhagen: WHO Regional Office for Europe.
- Inchley, J., Currie, D., Budisavljevic, S., Torsheim, T., Jåstad, A., Cosma, A. et al. (eds) (2020a). Spotlight on adolescent health and well-being. Findings from the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey in Europe and Canada. International report. Volume 1. Key findings. Copenhagen: WHO Regional Office for Europe.
- Inchley, J., Currie, D., Budisavljevic, S., Torsheim, T., Jåstad, A., Cosma, A. et al., (eds) (2020b). Spotlight on adolescent health and well-being. Findings from the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey in Europe and Canada. International report. Volume 2. Key data. Copenhagen: WHO Regional Office for Europe.
- Ingvarson, L., Meiers, M., & Beavis, A. (2005). Factors affecting the impact of professional development programs on teachers' knowledge, practice, student outcomes & efficacy. *Education Policy Analysis Archives, 13*(10).
- INVOLVE (2019). Involving children and young people in research: top tips and essential key issues for researchers. Southampton: INVOLVE.
- Karcher, M.J. (1999). *The Hemingway Measure of Adolescent Connectedness: A manual for interpretation and scoring*. U.S.A.:University of Wisconsin-Madison.
- Keane, E., Gavin, A., Perry, C., Molcho, M., Kelly, C., & Nic Gabhainn, S. (2017). Trends in health behaviours, health outcomes and contextual factors between 1998-2014: Findings from the Irish Health Behaviour in School-aged Children study. Dublin: Department of Health & Galway: Health Promotion Research Centre, National University of Ireland, Galway.
- Kelleher, I., Harley, M., Murtagh, A., & Cannon, M. (2011). Are screening instruments valid for psychotic-like experiences? A validation study of screening questions for psychotic-like experiences using in-depth clinical interview. *Schizophrenia Bulletin*, *37*(2), 362–369.
- Kelly, C., Gavin, A., Molcho, M., & Nic Gabhainn, S. (2012). The Irish Health Behaviour in School-aged Children (HBSC) Study 2010. Ireland: Department of Health and National University of Ireland, Galway.
- Kelly, C., Branquinho, C., Dzielska, A., Gaspar de Matos, M., Melkumova, M., Pavlova, D., & Nic Gabhainn, S. (2020). Youth participation in the Health Behaviour in School-aged Children study. *Journal of Adolescent Health*, 66(6), 1-108.
- Kennedy, M. (1998). *Form and substance in inservice teacher education*, Research monograph 13. U.S.A: National Institute for Science Education, University of Wisconsin–Madison.
- Kennedy, A. (2005). Models of continuing professional development: a framework for analysis. *Journal* of *In-service Education*, *31*(2), 235–250.
- Kennedy, A. (2014). Understanding continuing professional development: the need for theory to impact on policy and practice. *Professional Development in Education*, *40*(5), 688-697.
- Kennedy, Y., Flynn, N., O'Brien, E., & Greene, G. (2020). *Exploring the impact of classroom management training on primary teacher psychological outcomes.* Presentation at Educational Studies Association of Ireland, Dublin, Ireland.
- King, F. (2014). Evaluating the impact of teacher professional development: an evidence-based framework. *Professional Development in Education*, *40*(1), 89-111.
- King, F. (2016). Teacher professional development to support teacher professional learning: Systemic factors from Irish case studies. *Teacher Development*, 20(4), 574-594.

- King, F., Ní Bhroin, Ó., & Prunty. A. (2018). Professional learning and the individual education plan process: Implications for teacher educators. *Professional Development in Education 44*(5), 607–621.
- Kirkpatrick, D.L. (1994). *Evaluating training programs: The four levels*. San Francisco, CA: Berrett-Koehler.
- Kirkpatrick, D.L. (1998). *Evaluating training programs: The four levels (2nd ed.).* San Francisco, CA: Berrett-Koehler Publishers.
- Knight, J.R., Shrier, L., Bravender, T., Farrell, M., Vander Bilt, J., & Shaffer, H. (1999). A new brief screen for adolescent substance abuse. Archives of Pediatrics and Adolescent Medicine, 153(6), 591-596.
- Knight, J.R., Sherritt, L., Shrier, L.A., Harris, S.K., & Chang, G. (2002). Validity of the CRAFFT Substance Abuse Screening Test among adolescent clinic patients. *Archives of Pediatrics and Adolescent Medicine*, 156, 607-614.
- Knight, P. (2002). A systemic approach to professional development: Learning as practice. *Teaching* and *Teacher Education*, 18(3), 229-241.
- Költő, A., Gavin, A., Molcho, M., Kelly, C., Walker, L., & Nic Gabhainn, S. (2020). *The Irish Health Behaviour in School-aged Children (HBSC) Study 2018.* Dublin: Department of Health & Galway: Health Promotion Research Centre, NUI Galway.
- Kwakman, K. (2003). Factors affecting teachers' participation in professional learning activities. *Teaching and Teacher Education*, *19*(2), 149-170.
- Labone, E. & Long, J. (2016). Features of effective professional learning: A case study of the implementation of a system-based professional learning model. *Professional Development in Education*, 42(1), 54-77.
- Ladwig, J.G. & King, M.B. (2003). *Quality teaching in NSW public schools: An annotated bibliography.* Sydney, NSW: professional Support and Curriculum Directorate.
- Lloyd, M., & Davis, J. P. (2018). Beyond performativity: a pragmatic model of teacher professional learning. *Professional Development in Education*, *44*(1), 92-106.
- Loh, E.K. & Tam, L C. (2017). The role of emotionality in teacher change: the case of Chinese language teachers in Hong Kong. *Teacher Development*, *21*(3), 462-479.
- Loveless, B. (nd). *Strategies for building a productive and positive learning environment*. Retrieved from: <u>https://www.educationcorner.com/building-a-positive-learning-environment.html</u>
- Lovibond, P.F. & Lovibond, S.H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy, 33(3), 335–343.*
- Lundy, L. (2007) "Voice" is not enough: conceptualising Article 12 of the United Nations Convention on the Rights of the Child. *British Educational Research Journal*, 33(6), 927-942.
- Martin, M.O., Mullis, I.V.S., Foy, P., & Stanco, G.M. (2012). *TTIMSS 2011 international results in science*. Lynch School of Education, Boston College, USA: TIMSS & PIRLS International Study Center.
- Marzano, R.J. (2003). What works in schools: Translating research into action. Virginia: ASCD.
- Mathison, S. (1992). An evaluation model for inservice teacher education. *Evaluation and Program Planning*, *15*(3), 255-261.
- McKeown, C., Denner, S., McAteer, S., & Shiel, G., & O'Keeffe, L. (2019). *Learning for the Future: The performance of 15-year-olds in Ireland on reading literacy, science and mathematics in PISA 2018*. Dublin: Educational Research Centre.

- Merchie, E., Tuytens, M., Devos, G., & Vanderlinde, R. (2018). Evaluating teachers' professional development initiatives: towards an extended evaluative framework. *Research Papers in Education*, 33(2), 143-168.
- Michie S. & Cockcroft, A. (1996). Overwork can kill. British Journal of Medicine, 312 (7036), 921–922.
- Moir, T. (2018). Why is implementation science important for intervention design and evaluation within educational settings? *Frontiers in Education, 3*(61), 1-9.
- Muijs, D. & Lindsay, G. (2008). Where are we at? An empirical study of levels and methods of evaluating continuing professional development. *British Educational Research Journal*, 34(2), 195-211.
- Mullis, I.V.S., Martin, M.O., Foy, P., & Drucker, K.T. (2012). *PIRLS 2011 international results in reading.* Lynch School of Education, Boston College, USA: TIMSS & PIRLS International Study Center.
- Mullis, I.V.S., Martin, M. O., Foy, P., & Hooper, M. (2016). TIMSS 2015 international results in mathematics. School of Education, Boston College, USA: TIMSS & PIRLS International Study Center.
- Mullis, I.V.S., Martin, M. O., Foy, P., & Hooper, M. (2017). *PIRLS 2016 international results in reading*. Lynch School of Education, Boston College, USA: TIMSS & PIRLS International Study Center.
- Murray, A., McCrory, C., Thornton, M., Williams, J., Quail, A., Swords, L., Doyle, E. & Harris, E. (2010). Growing Up in Ireland: Design, instrumentation and procedures for the Child Cohort (aged 9 years). (Child Cohort Technical Report No.1). Dublin: ESRI/TCD/DCYA.
- Murphy, D., Williams, J., Murray, A. & Smyth E. (2019) *Growing Up in Ireland: Design, instrumentation and procedures for Cohort '98 at 17/18 years of age. (Technical Series No. 2019-5).* Dublin: ESRI/TCD/DCYA.
- Murray-Harvey, R. (2010). Relationship influences on students' academic achievement, psychological health and well-being at school. *Educational and Child Psychology*, *27*(1), 104–113.
- Murray, A., McNamara, E. Williams, J., & Smyth, E. (2019). *Growing Up in Ireland: The lives of 5-year*olds. (Infant Cohort Research Report No. 9). Dublin: The Stationery Office.
- NCCA National Council for Curriculum and Assessment (2009). *Aistear: The Early Childhood Curriculum Framework*. Dublin: NCCA.
- NCCA (2011). Social personal and health education: Curriculum framework. Senior cycle. Dublin: NCCA.
- NCCA (2015a). Level 1 learning programmes. Background paper. Dublin: NCCA.
- NCCA (2015b). Level 1 learning programmes. Guidelines for teachers. Dublin: NCCA.
- NCCA (2015c). Level 2 learning programmes. Guidelines for teachers. Dublin: NCCA.
- NCCA (2017a). Junior cycle wellbeing guidelines. Dublin: NCCA.
- NCCA (2017b). Physical education framework. Senior cycle. Dublin: NCCA.
- NCCA (2019a). Primary curriculum review and redevelopment. Dublin: NCCA.
- NCCA (2019b). Report on the review of RSE in primary and post-primary schools. Dublin: NCCA.
- NCGE National Centre for Guidance in Education (2017). *A whole school guidance framework*. Dublin: NCGE Publications.
- Ní Bhroin, Ó. (2017). Inclusion in context: Policy, practice and pedagogy. Oxford: Peter Lang.

- Ní Bhroin, Ó. & King, F. (2020). Teacher education for inclusive education: a framework for developing collaboration for the inclusion of students with support plans. *European Journal of Teacher Education*, *43*(1), 38-63.
- Noble. T. & McGrath, H. (2012). Well-being and resilience in young people and the role of positive relationships. In S. Roffey (Ed.), *Positive relationships: Evidence-based practice across the world*. The Hague: Springer.
- OCEBM Levels of Evidence Working Group (2016). *The Oxford levels of evidence 2.* University of Oxford: Oxford Centre for Evidence-Based Medicine.
- OECD (nd). Strength Through Diversity: Education for inclusive societies. Retrieved from: <u>http://www.oecd.org/education/strength-through-diversity/STD-2nd-Phase-BrochureENG.pdf</u>
- OECD (2001). The well-being of nations: The role of human and social capital. Paris, France: OECD.
- OECD (2009). Creating effective teaching and learning environments: First results from TALIS. Paris, France: OECD Publishing.
- OECD (2010). *Glossary of key terms in evaluation and results based management*. Paris, France: Organisation for Economic Co-operation and Development – Development Assistance Committee (OEDC-DAC).
- OECD (2013a). *PISA 2012 results in focus: What 15-year-olds know and what they can do with what they know.* Paris, France: OECD Publishing.
- OECD (2013b). *PISA 2012 results: Ready to learn: Students' engagement, drive and self-beliefs* (*Volume III*). Paris, France: OECD Publishing.
- OECD (2017). PISA 2015 results (Volume III): Students' well-being. Paris, France: OECD Publishing.
- OECD (2018). PISA 2015 Results in focus. France: OECD Publishing.
- OECD (2019a). *TALIS 2018 results (Volume I): Teachers and school leaders as lifelong learners.* Paris, France: OECD Publishing.
- OECD (2019b). *PISA 2018 results (Volume III): What school life means for students' lives.* Paris, France: OECD Publishing.
- OECD (2020). *Education in Ireland. An OECD assessment of the senior cycle review.* Paris, France: OECD Publishing.
- O'Gorman, E. & Drudy, S. (2010). Addressing the professional development needs of teachers working in the area of special education/inclusion in mainstream schools in Ireland. *Journal of Research in Special Educational Needs*, *10(1)*, 157–167.
- Opfer, V.D. & Pedder, D. (2011). Conceptualizing teacher professional learning. *Review of Educational Research*, *81*(3), 376-407.
- O'Sullivan, H. (2011). Leading and managing professional learning in schools. In H. O'Sullivan & J. West-Burnham (Eds.), *Leading and managing schools* (pp. 111- 125). London: Sage.
- Parker, M., Patton, K., & O'Sullivan, M. (2016). Signature pedagogies in support of teachers' professional learning. *Irish Educational Studies, 35*(2), 137-153.
- Pavot, W. & Diener, E. (2008). The satisfaction with life scale and the emerging construct of life satisfaction. *The Journal of Positive Psychology*, *3*(2), 137-152.
- PDST Professional Development Service for Teachers (2017). CPD Support for schools: PDST policy statement, design conventions and evaluative frameworks. Dublin: PDST.
- PDST (2019). Restorative Practice Phase 1: An evaluation of PDST CPD provision. Dublin: PDST.
- Peersman, G. (2015). *Impact evaluation. Better Evaluation.* Retrieved from <u>http://www.betterevaluation.</u> org/themes/impact_evaluation

- Perkins, R., Shiel, G. Meriman, B., Cosgrove, J., & Moran, E. (2013). *Learning for life: The achievements of 15-year-olds in Ireland on mathematics, reading literacy and science in PISA 2012.* Dublin: Educational Research Centre.
- Peterson-DeLuca, A. (2016). *Top five qualities of effective teachers, according to students*. Retrieved from: <u>https://www.pearsoned.com/top-five-qualities-effective-teachers/</u>
- Petticrew, M. & Roberts, H. (2003). Evidence, hierarchies, and typologies: horses for courses. *Journal* of Epidemiology & Community Health, 57(7), 527-529.
- Pianta, R. C. (1992). Child-parent relationship scale. *Unpublished measure, University of Virginia*, *11*, 39-41.
- Piers, E.V., Harris, D.B., & Herzberg, D.S. (2002). *PHCSCS-2: Piers-Harris Children's Self-concept Scale*. Western Psychological Services.
- Porter, A.C., Garet, M.S., Desimone, L.M., & Birman, B. F. (2003). Providing effective professional development: Lessons from the Eisenhower program. *Science Educator*, *12*(1), 23.
- Pozzi, F., Persico, D., & Sarti, L. (2018). Evaluating innovation injection into educational contexts. *Journal of e-Learning and Knowledge Society*, *14*(1).
- Quinn, F., Charteris, J., Adlington, R., Rizk, N., Fletcher, P. Reyes, V., & Parkes, M. (2019). Developing, situating and evaluating effective online professional learning and development: A review of some theoretical and policy frameworks. *The Australian Educational Researcher*, 46, 405–424.
- Reeves, J. & Fox, A. (2008). *Practice based learning: Developing excellence in teaching.* Edinburgh: Dunedin Academic Press.
- Reynolds, C.R. & Kamphaus, R.W. (2004). *Behavior assessment system for children* (2nd ed.). Circle Pines, MN: American Guidance Service
- Rhew, I.C., Simpson, K., Tracy, M., Lymp, J., McCauley, E., Tsuang, D., & Vander Stoep, A. (2010). Criterion validity of the Short Mood and Feelings Questionnaire and one-and two-item depression screens in young adolescents. *Child and Adolescent Psychiatry and Mental Health*, *4*(1), 8.
- Roffey, S. (2012). Pupil wellbeing-teacher wellbeing: Two sides of the same coin? *Educational and Child Psychology.* 29(4), 8-17.
- Rosenberg, M. (1965). Society and the adolescent self-image. New Jersey: Princeton University.
- Rowe, F., Stewart, D., & Patterson, C. (2007). Promoting school connectedness through whole school approaches. *Health Education*, *107(6)*, 524–542.
- Saderholm, J., Ronau, R.N., Rakes, C.R., Bush, S.B., & Mohr-Schroeder, M. (2017). The critical role of a well-articulated, coherent design in professional development: an evaluation of a state-wide two-week program for mathematics and science teachers. *Professional Development in Education*, *43*(5), 789-818.
- Sallis, J.F., Owen, N., & Fisher, E.B. (2008). Ecological models of health behavior. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health behavior and health education: Theory, research, and practice* (p. 465–485). San Francisco, CA: Wiley & Sons, Inc.
- Santrock, J.W. (2017). Life-span development (16th ed.). New York: McGraw-Hill Education.
- Saunders, J.B., Aasland, O.G., Babor, T.F., De La Fuente, J.R., & Grant, M. (1993). Development of the Alcohol Use Disorders Identification Test (AUDIT): *WHO collaborative project on early detection of persons with harmful alcohol consumption-II. Addiction, 88*(6), 791–804.
- Saunders, S.M., Resnick, M.D., Hoberman, H.M., & Blum, R.W. (1994). Formal Help-Seeking Behavior of Adolescents Identifying Themselves as Having Mental Health Problems. *Journal of the American Academy of Child & Adolescent Psychiatry*, *33(5)*, 718–728.

- Saunders, R. (2012). Assessment of professional development for teachers in the vocational education and training sector: An examination of the concerns-based adoption model. *Australian Journal of Education*, *56*(2), 182-204.
- Scheier, M.F. & Carver, C.S. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, *4*(3), 219–247.
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A re-evaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, *67*, 1063-1078.
- Seligson, J.L., Huebner, E.S., & Valois, R.F. (2003). Preliminary validation of the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS). *Social Indicators Research*, *61(2)*,121–145.
- Sherrington, T. (2014). What's the incentive? Systems and culture in a school context. In A. Hallgarten, L. Bamfield, & K. McCarthy (Eds.), *Licensed to create: Ten essays on improving teacher quality* (p. 79). London: RSA Action Research Centre.
- Shulman, L.S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, *15*(2), 4-14.
- Smyth, E., Dunne, A., McCoy, S., & Darmody, M. (2006). Pathways through the junior cycle: the experience of second year students. *Economic and Social Research Institute (ESRI) Research Series*. Dublin: ESRI.
- Smyth, E. (2015). Learning in Focus. *Wellbeing and school experiences among 9- and 13-year-olds: Insights from the Growing Up in Ireland study.* Dublin: ESRI.
- Soebari, T.S. & Aldridge, J.M. (2015). Using student perceptions of the learning environment to evaluate the effectiveness of a teacher professional development programme. *Learning Environments Research*, *18*(2), 163-178.
- Southwest Educational Development Laboratory, George, A. A., Hall, G. E., & Stiegelbauer, S. M. (2006). *Measuring implementation in schools: The Stages of Concern Questionnaire*. Southwest Educational Development Laboratory.
- Spillane, J.P., Halverson, R., & Diamond, J.B. (2001). Investigating school leadership practice: A distributed perspective. *Educational Researcher*, *30*(3), 23-28.
- Spillane, J.P. (2006). Distributed leadership. San Francisco, CA: Jossey-Bass.
- Spilt, J.L., Koomen, H.M., & Thijs, J.T. (2011). Teacher wellbeing: the importance of teacher-student relationships. *Educational Psychology Review*, 23(4), 457–477.
- Stake, R. E. (1967). *The countenance of educational evaluation*. Department for Exceptional Children, Gifted Children Section.
- Stoll, L., Fink, D., & Earl, L.M. (2003). *It's About Learning (and It's About Time): What's in it for Schools?* London: Routledge Falmer.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7(4), 221-258.
- Stufflebeam, D. L. (1983). The CIPP model for program evaluation. In *Evaluation models* (pp. 117-141). Springer, Dordrecht.
- Supovitz, J. A. (2002). Developing communities of instructional practice. *Teachers College Record*, *104*(8), 1591-1626.
- Sylva, K. (1994). School influences on children's development. *Journal of Child Psychology and Psychiatry*, *35*(1), 135-170.

- The Teaching Council (2011). *Policy on the continuum of teacher education*. Kildare: The Teaching Council.
- The Teaching Council (2016a). Cosán framework for teachers' learning. Kildare: The Teaching Council.
- The Teaching Council (2016b). Code of professional conduct for teachers. Updated second edition 2016. Kildare: The Teaching Council.
- The Teaching Council (2017). *Droichead: The integrated professional induction framework.* Kildare: The Teaching Council.
- Timperley, H., Wilson, A., Barrar, H., & Fung, I. (2007). *Teacher professional learning and development: Best evidence synthesis iteration*. New Zealand: Ministry of Education.
- Timperley, H., & Alton-Lee, A. (2008). Reframing teacher professional learning: An alternative policy approach to strengthening valued outcomes for diverse learners. *Review of Research in Education*, *32*(1), 328-369.
- Tooley, M. & Connally, K. (2016). *No panacea: Diagnosing what ails teacher professional development before reaching for remedies.* New America.
- Tschannen-Moran, M. (2009). Fostering teacher professionalism in schools: The Role of leadership orientation and trust. *Educational Administration Quarterly, 45*(2), 217-247.
- TUI (2019). '99% of schools experiencing recruitment difficulties' survey confirms crisis in Irish schools. Retrieved from: <u>https://www.tui.ie/press-releases/99-of-schools-experiencing-recruitment-difficulties-survey-confirms-crisis-in-irish-schools-.13404.html</u>
- United Nations (2016). *Report on the Committee on the Rights of the Child. (CRC/C/IRL/3-4).* Retrieved from: <u>https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?</u> <u>symbolno=CRC/C/IRL/CO/3-4&Lang=En</u>
- Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24(1), 80-91.
- Vygotsky, L. S. (1962). Thought and language. Cambridge, MA: MIT Press.
- Walker, L., Gavin, A., Kelly, C., Molcho, M., Awobiyi, D. & Nic Gabhainn, S. (2012). Health Behaviour in School-aged Children (HBSC) Ireland 2010: Socio-demographic patterns in health behaviours, risk behaviours, health outcomes and social contexts of young people's health. Galway: Health Promotion Research Centre, NUI Galway.
- Wayne, A.J., Yoon, K.S., Zhu, P., Cronen, S., & Garet, M. S. (2008). Experimenting with teacher professional development: Motives and methods. *Educational Researcher*, 37(8), 469–479.
- Weiss, C.H. (1998). Have we learned anything new about the use of evaluation? *American Journal of Evaluation*, *19*(1), 21-33.
- Wentzel, K.R. (1991). Social competence at school: Relation between social responsibility and academic achievement. *Review of Educational Research*, *61*(1), 1-24.
- Williams, J., Greene, S., Doyle, E., Harris, E., Layte, R., McCoy, S., McCrory, C., Murray, A., Nixon, E., O'Dowd, T., O'Moore, M., Quail, A., Smyth, E., Swords, L., Thornton, M. (2009). *Growing Up in Ireland: The lives of 9-year olds. (Child Cohort Research Report No. 1).* Dublin: The Stationary Office.
- Williams, J., Thornton, M., Morgan, M., Quail, A., Smyth, E., Murphy, D., O'Mahony, D. (2018). Growing Up in Ireland: The lives of 13-year olds. (Child Cohort Research Report No. 6). Dublin: The Stationary Office.
- Williams, J., Thornton, M. Murray, A. & Quail, A. (2019). Growing Up in Ireland: Design, instrumentation and procedures for Cohort '08 at wave three (5 years). (Technical series No. 2019 - 2). Dublin: ESRI/TCD/DCYA.

- World Health Organization (1998). *Info package: Mastering depression in primary care (version 2.2).* Frederiksborg: WHO Regional Office for Europe, Psychiatric Research Unit.
- World Health Organization. (2001). *The world health report 2001: Mental health: new understanding, new hope*. World Health Organization.
- World Health Organization Report on Prevention of Mental Disorders. (2004). *Effective interventions and policy options summary report*. Department of Mental Health and Substance Abuse in collaboration with the Prevention Research Centre of the Universities of Nijmegen and Maastricht.
- Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects student achievement (Issues & Answers Report, REL 2007–No. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest.
- Zee, M. & Koomen, H.M.Y (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational Research*, *86*(4), 981-1015.
- Zimet, G.D., Dahlem, N.W., Zimet, S.G., Farley, G.K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment, 52*(1), 30-41.

APPENDIX 1 Review/conceptual papers retrieved in the systematic review

Author(s)	Year	Theoretical basis (if applicable)	Components of framework/What is evaluated Plus other components evaluated
Compen, De Witte,	2019	Desimone (2009)	Participants' reactions – N
Schelfhout		Merchie et al. (2016)	 Participants' learning – Y
		Timperley (2008)	 Organisational support and change – N
			 Participants' use of new knowledge and skills – Y
			 Student learning outcomes – Y
			 Features of the intervention – y
			Contextual factors – Y
			Other: Main contribution is placing components in circles.
El Afi	2019	Desimone (2009)	 Participants' reactions – Y
			 Participants' learning – Y (Desimone's 'content focus' –
			pedagogical knowledge of teachers)
			 Organisational support and change – N
			 Participants' use of new knowledge and skills – Y (classroom
			observations conducted)
			 Student learning outcomes – N
			 Features of the intervention – Y (duration)
			 Contextual factors – Y (discussion of appropriateness of
			Western-style training in Arabic context)
			Other: Other features or components of the TPL that were evaluated: teacher leadership and innovation.
Hairon, Goh, Chua,	2017	Guskey (2002a)	Participants' reactions – Y
& Wang			 Participants' learning – Y
		Darling-Hammond et al.	 Organisational support and change – Y
		(2009)	 Participants' use of new knowledge and skills – Y
			 Student learning outcomes – Y
			 Features of the intervention – N
			Contextual factors – Y
			Other: "development of teacher knowledge in five aspects:
			curriculum content; pedagogy (theory of teaching); instruction (practic
			of teaching); assessment; and student learning" (p. 80). Proposed
			model also indicates that contextual factors such as school culture
			should be considered. Individual teacher characteristics are also proposed.
abone & Long	2016	Desimone (2009)	 Participants' reactions – Y
abone a cong	2010	Opfer & Pedder (2011)	 Participants' learning – Y
			1 0
		Inguaroon at al. (2005)	 Organisational support and change – N Darticipante' use of new knowledge and skille. X
		Ingvarson et al. (2005)	 Participants' use of new knowledge and skills – Y Student learning outcomes
		for DD evelvetier	Student learning outcomes – Y
		for PD evaluation	Features of the intervention – Y
			Contextual information – N
		Quality Teaching	
		Framework (Ladwig &	Other: A systems-based professional development model was used t
		King, 2003; New South Wales Dept of Education,	implement to QTF; Principal leadership was integral to the success of the programme (Timperley, 2008).

Loh & Tam	2017	Guskey (1986)	 Participants' reactions – N
			 Participants' learning – Y
			Organisational support and change – N
			 Participants' use of new knowledge and skills – Y
			 Student learning outcomes – Y
			 Features of the intervention – N
			Contextual factors – N
			Other: Other features or components of the TPL that were evaluated: Emotionality.
			Adapted version of the model
			Adapted version of the model:
			Professional development -> Demonstration of teaching -> change in students' learning outcome -> change in teachers' classroom practices -> change in teachers' beliefs and attitudes. Arrows also included from 'change in teachers' beliefs and attitudes' to 'collective lesson', and from there back to 'change in teachers' classroom practices'.
Merchie, Tuytens,	2018	Guskey (2005)	Participants' reactions – Y
Devos, &	2010	Desimone (2009)	 Participants' learning – Y
Vanderlinde			Organisational support and change – Y
			 Participants' use of new knowledge and skills – Y
			 Student learning outcomes – Y
			 Features of the intervention – Y
			Contextual information – Y
			Other: Extended evaluative framework for mapping the effects of professional development initiatives:
			Features of the intervention: core features & structural features
			features Teacher quality: cognitive goals (knowledge), skills and
			affective goals (attitude/beliefs)
			 Teaching behaviour: instructional strategies/practice,
			interaction patterns
			 Student results: domain specific knowledge and skills,
			domain general knowledge and skills
			Contextual factors
			 Teachers' personal characteristics
			Student's personal characteristics
Pozzi, Persico, &	2018	Kirkpatrick (1994)	Participants' reactions – Y
Sarti	_0.0	Guskey (2005)	Participants' learning – Y
Jan		Cuskey (2005)	 Organisational support and change – Y
			o 11
		Led to development of	 Participants' use of new knowledge and skills – Y
		the T&EAM approach to	 Student learning outcomes – Y
		evaluation by the authors	 Features of the intervention – Y
			Contextual information – N
Quinn, Charteris,	2019	Desimone (2009)	Participants' reactions – Y
Adlington, Rizk,	2010	Guskey (2014)	 Participants' learning – Y
-			
Fletcher, Reyes, &			Organisational support and change – Y
Parkes			 Participants' use of new knowledge and skills – Y
			 Student learning outcomes – Y
			 Features of the intervention – Y
			Contextual information – Y
			Other: This paper proposes a heuristic framework for planning and evaluating online teachers' professional learning and development. The framework is based on Desimone (2009) with consideration of features of online learning design and the challenges of the online learning environment. The authors suggest that in order for online professional learning and development to be effective – relevant, collaborative, and future focused – attention must be paid to the above issues as well as how evidence to examine efficacy is generated and collected. The framework considers critical features of online delivery

Saderholm, Ronau, Rakes, Bush, & Schroeder	2017	Driskell et al. (2016)	 Participants' reactions – Y Participants' learning – Y Organisational support and change – Y Participants' use of new knowledge and skills – Y (not explored in application of the framework because of budgetary constraints but is provided for in the framework) Student learning outcomes – Y (again, provided for in the framework proposed but not examined in the evaluation of the framework due to budgetary constraints) Features of the intervention – Y Contextual factors – N (not examined in evaluation although framework for evaluation includes 'embeddedness in situated context'). Other: Other features or components of the TPL that were evaluated: To what extent did the PD curriculum align with the CCSS and NGSS content and practice standards? Strong focus on 'challenge space'- at evaluation stage, revisit the PD challenge space to address potential obstacles to achieving the target outcomes that were not originally identified.
Soebari & Aldridge	2015	Mathison (1992) Guskey (2000) Fishman et al. (2003)	 Participants' reactions – Y Participants' learning – Organisational support and change – (not in framework specifically but could be considered to be covered under contextual factors. Mentioned in context of leadership support in interviews.) Participants' use of new knowledge and skills – Y Student learning outcomes – Y Features of the intervention – N (not in framework model) Contextual factors – Y Other: Other features or components of the TPL that were evaluated: student perceptions of the learning environment.

APPENDIX 2 Key research findings on the wellbeing of children and young people in Ireland

Table 1: Key findings from national research in the area of wellbeing

Age group	Key relevant indicators	Key findings: physical	Key findings: social and emotional
GUI Infa	ant Cohort Wave 3		
5 years old	Questionnaire Indices (Parent Report), Objective measures of height and weight	The majority of 5-year-olds were in good health as reported by their mothers (77% were described as 'very healthy'). Boys were more likely than girls to attend a sports club or group. One in five 5-year-olds were overweight or obese. Those from disadvantaged backgrounds were found to consume more calories. Household socio-economic status was associated with more screen time. Children whose mothers had lower educational attainment and children from lower income households were more likely to engage in more screen time.	The most common stressful event that 5-year- olds had experienced was the death of a family member (21%) followed by moving house (20%). Just under half of 5-year-olds had experienced a stressful life event.
	Pianta Child-Parent Relationship Scale (CPRS) and Discipline Strategies		Most parents reported having a positive relationship with their 5-year-olds characterised by high levels of closeness and low levels of conflict. Parents were more likely to have a closer relationship with girls than boys and more likely to report conflict with boys. Also, parents were more likely to discuss bad behaviour, explaining why the behaviour was wrong, than to smack or shout.
	Social Skills Improvement System Rating Scales (SSIS_RS)		There were few differences in social skills development seen as a result of differences in socio-economic background. Instead the biggest differences were a result of gender and family type. In the four areas of social skills competencies, girls were more likely to be in the top quartile than boys. The biggest difference was observed in relation to empathy with 29% of girls in the top quartile compared to just 20% of boys. Only children living with two parents were the most likely to be in the highest scoring quartile, whilst children who lived with siblings and one parent were in the highest scoring quartile for each of the four areas of social skills competencies least often.

	Strengths and Difficulties Questionnaire (SDQ), Parent ratings		Most mothers who reported concerns about their child's behaviour, concentration, or sociability reported only minor concerns. A small percentage (4%) of 5-year-olds were reported by their mothers to have 'definite' or 'severe' difficulties with 'emotions, concentration, behaviour or being able to get on with other people' and 15% had minor difficulties in this area. 39% of children who had been in the 'problematic' range at 3 years of age, were again in the 'problematic' range at 5. Children who had longer periods of screen time were more likely to have behavioural issues.
GUI Inf	ant Cohort Wave 4		
7/8 years old	Questionnaire Indices (Parent Report, Self- Report), Objective measures of height and weight	80% of 7/8-year-olds were 'very healthy' as reported by their mothers. Almost three- quarters of mothers reported that their child was developing normally. Most children had relatively good diets, although diet quality was again linked to socio-economic status, with those from lower social classes consuming a lower quality diet. One in five 7/8-year-olds were overweight or obese. Children from higher income families were reported to be overweight or obese less frequently.	Reading, 'make believe' and playing on a tablet/computer were 7/8-year-olds favourite leisure activities. Children spent 1 to 2 hours on average on a screen per day during weekdays and up to 3 hours a day at the weekend. Most children were reported to have adjusted well to school. In general girls adjusted to school better than boys and about three quarters of 7/8-year-olds felt positive about school.
	Pianta Child-Parent Relationship Scale (CPRS)		Mothers tended to report high levels of closeness with their child and low levels of conflict. Over a quarter of mothers who reported a less close relationship with the child at 5 years of age, also reported a less close relationship with the child at 7/8 years of age.
	Social Skills Improvement System Rating Scales (SSIS_RS)		Most children were doing well with their socio-emotional development. Regarding their social skills development, parents were more likely to give high ratings on the empathy and responsibility scales. Boys were more likely to be in the lowest scoring decile group on all four skills (assertion, responsibility, empathy, self- control).
	Strengths and Difficulties Questionnaire (SDQ), Parent ratings		Boys were much more likely than girls to have a high 'total difficulties' score with 15% of boys being in the top decile compared with 8% of girls. 17% of children from low-income families had a high 'total difficulties' score compared with 8% in high-income families. Half of the children who had a 'problematic' score at age 5, had a 'problematic' score again at age 7. Both girls (8.7) and boys (8.1) scored quite highly for 'prosocial behaviours', with girls scoring slightly higher. There were no significant differences in 'prosocial behaviour' measures depending on socio-economic background.

GUI Infa	I Infant Cohort Wave 5		
9 years old	Questionnaire Indices (Parent Report), Objective measures of height and weight	Most children were rated as 'very healthy' by their mothers (79%). More than one in five were overweight or obese. Those in the highest income families were less than half as likely to be overweight/obese than those in the lowest income families. Lower income and lower maternal education were associated with a higher level of consumption of unhealthy foods.	Most 9-year-olds had four or more close friends. Over one-third had experienced the death of a family member since age 5. Majority said they 'always' or 'sometimes' liked school and school subjects. Most read for fun at least once a week, with girls reading for fun more often than boys.
	Pianta Child-Parent Relationship Scale (CPRS)		Mothers reported high levels of closeness and low levels of conflict with their 9-year-olds. Mothers reported conflict levels with sons and daughters which were very similar but reported closeness did tend to differ between sons and daughters. Only 41% of mothers reported the highest possible closeness score for them and their sons compared to 49% for daughters.
	Strengths and Difficulties Questionnaire (SDQ), Parent ratings		Most 9-year-olds were doing well in terms of their socio-emotional and behavioural wellbeing. Mothers were more likely to report behavioural problems for sons than for daughters. Children in lower income families were more likely to be in the group with the most socio-emotional and behavioural difficulties compared to those in higher income families on at least one of three time-points (age 3, 5, 9 years). Daughters were more likely than sons to be rated higher for 'prosocial behaviour' such as showing consideration and sharing.

GUI Child Cohort Wave 1

9 years old	Questionnaire Indices (Parent Report, Self- Report), Objective measures of height and weight	Most 9-year-olds were in good health according to their parents (99%). One in 10 had a chronic illness or disability. Respiratory problems accounted for half of all chronic illnesses. Almost all children practiced good oral health, with (95%) of respondents indicating that they brushed their teeth at least daily. One in four were overweight and 7% were obese. One in four (26%) 9-year- olds said they had engaged in the recommended amount of physical exercise over the past week (60 minutes per day). Boys were more physically active than girls. Most children ate well overall (77% of children had eaten at least one portion of fruit and 73% had eaten at least one portion of cooked vegetables in the preceding 24-hour period) but they also ate a lot of high calorie unhealthy snacks.	Most 9-year-olds (82%) lived with two parents. A large majority of children liked school at least 'sometimes' (93%). Mothers of over half the children worked outside the home (53%). Hanging out with friends was their number 1 pastime (35%). Sport was their favourite activity or hobby (65%). Family (24%), friends (22%), and sport (20%) were what made 9-year-olds most happy. Most 9-year-olds (over 80%) got on 'very well' with their parents and had frequent contact with extended family.
	Parenting Styles Inventory II (PSI II)		Most 9-year-olds endorsed a parenting style which was characterised by both high levels of support and high levels of control (authoritative parenting) for their mothers (77%) and fathers (68%). The most frequently used form of discipline in the home was 'discussing, explaining why behaviour was wrong'.
	Piers Harris Children's Self- Concept Scale		Girls had a higher average score (51) than boys (48) on the behavioural adjustment subscale and a lower score on average (48) than boys (51) on the freedom from anxiety subscale.
	EAS Temperament Questionnaire		9-year-olds were not particularly shy or emotional, however they were quite active and moderately social. Mothers rated boys as being more active than girls and girls as being more shy, emotional, and sociable than boys.
	Strengths and Difficulties Questionnaire (SDQ), Parent ratings		85% of 9-year-olds were classified as 'normal', with 8% classified as 'borderline', and 7% classified as 'abnormal' on the SDQ. For 'total difficulties', only 4% of 9-year-olds in the highest income families were classified as 'abnormal' whilst 12% of their peers in the lowest income families were classified as 'abnormal'.

GUI Child Cohort Wave 2

13 years old	Questionnaire Indices (Parent Report, Self- Report), Objective measures of height and weight	Boys and those from a higher social class were more likely to exercise. One in four participants were still overweight or obese. A strong relationship was found between amount of exercise and weight status. Over half of 13-year- olds thought that they were 'just the right size' (55%), however, dieting behaviours were already prevalent at 13 years of age. Girls were more likely than boys to want to lose weight, whilst boys were more likely to want to gain weight. Only 15% of 13-year-olds had tried alcohol. 91% of 13-year-olds said they had never smoked a cigarette.	Nearly all of 13-year-olds get on 'well' or 'very well' with their parents (99% mothers, 98% fathers). Mothers and friends were the most likely sources of support for relationship advice.
	Parenting Styles Inventory II (PSI II)		Authoritative parenting was still the most common style.
	Pianta Child-Parent Relationship Scale (CPRS)		Being in a highly conflictive parent-child relationship at age 13 was significantly associated with being at risk for behavioural and emotional difficulties.
	Piers Harris Children's Self- Concept Scale II		Boys generally had a more positive self-concept than girls, with a significantly higher percentage of girls (35%) compared to boys (24%) reporting lower self-concepts overall. Those who were bullied were also substantially more likely to have lower self-concepts.
	Short Mood and Feelings Questionnaire (SMFQ)		One in 10 participants reported depressive symptoms. Boys were significantly less likely (9%) compared to girls (12%) to report depressive symptoms. 13-year-olds in the most disadvantaged social class (parent never employed) were also significantly more likely to display depressive symptoms than their peers (17% vs 9-12% for those in higher social classes).
	Strengths and Difficulties Questionnaire (SDQ), Parent ratings		Less than half of participants who were rated 'at risk' at 9 years of age were still 'at risk' at 13. Girls were significantly more likely to fall into the 'at risk' category for emotional wellbeing than boys (13 compared to 10%), whilst boys were significantly more likely to fall into this range for hyperactivity (18 compared to 11%).

GUI Child Cohort Wave 3

17/18 years olds	Questionnaire Indices (Parent Report, Self- Report), Objective measures of height and weight	The vast majority of 17/18-year-olds were in good health. 28% were overweight/obese. The majority exercised regularly but there were differences with weight status and gender. Boys and those with lower weight status were more likely to engage in more regular exercise. Activity levels were also significantly higher among those whose parents had higher levels of education and in higher-income families. Diet varied according to mother's education, with those whose mothers had attained a higher level of education having a healthier and more nutritious diet. Screen time differed widely by gender (with boys having more than girls), mothers' education, and weight class. Most drank alcohol monthly or less, but a small proportion drank 2-3 times a week. A fifth smoked occasionally or daily. Only 2% used cannabis more than once a week.	17/18-year-olds were generally quite satisfied with their lives. Family and health were rated as the most important things in life. Most reported a positive relationship with their parents, but quite a few reported never sharing private things with them. Just under a third of 17/18-year-olds had a boyfriend or girlfriend. Friends are an important source of support for young people, and friends featured in four of the top five coping strategies. Typically, 17/18-years-olds reported having three to five friends.
	Coping Strategy Indicator (CSI)		Coping strategies related to friends made up four of the top five coping strategies used by 17/18-year-olds. Around a quarter of participants said they would very often or always go to friends for advice. Other popular coping strategies related to planning a solution. The means for the problem solving and support- seeking subscales of the CSI were similar to those reported in MWS 2 but the mean for avoidance was lower.
	Inventory of Parent and Peer Attachment (IPPA), Network of Relationships Inventory		Females were much more likely than males to have positive relationships with their peers in term of 'total attachment' and on the trust and communication subscales. Males were more likely to be in the most favourable (i.e. lowest) quintile on alienation.
	Short Mood and Feelings Questionnaire (SMFQ)		One in 10 had been diagnosed with depression, anxiety, or both. Females (25%) were significantly more likely than males (16%) to be in the top 20% for depressive symptoms. Females were significantly more likely than males to have been diagnosed with a mental health condition (13% compared to 8%). Most young people who had been diagnosed had received treatment (40% currently and 44% in the past).
	Strengths and Difficulties Questionnaire (SDQ), Parent ratings		Females had higher (worse) scores in terms of 'emotional symptoms' but higher 'prosocial' scores. 17/18-year-olds who came from less advantaged backgrounds were more likely to be rated as 'problematic'. 18% of young people from the most socially disadvantaged background (parent never employed) were rated as 'problematic', compared to just 7% of those from a professional/managerial background.

Alcohol Use Disorders Identification Test (AUDIT)	79% of adolescents fell into the normal drinking range, 15% were classified as problem drinkers, 3% as harmful and hazardous drinkers.	
CRAAFT Substance Abuse Test	Over 25% of adolescents scored a two or higher on the CRAAFT scale which indicates a high level of substance misuse.	
Behavioural Adjustment Scale (BAS)		Almost 10% reported that they felt angry a l with 43% reporting they felt angry sometime and 45% reporting that they did not feel ang a lot.
Brief Multidimensional Student Life Satisfaction Scale (BMSLSS)		Males were significantly more satisfied with lives than females. Life satisfaction decreas with age.
Coping Strategy Indicator (CSI-15)		Almost half of respondents reported that the coped well with problems, with males more to report this than females. 48% of respond reported that they coped well with problems 46% sometimes coped well, and 5% did no cope well. Whilst 58% of males reported co well, only 40% of females did so.
Depression, Anxiety, Stress Scale (DASS), Support about your Mental Health		12% reported having a parent who has had mental health issues. Approximately 11% ha seen a mental health professional, with Sixt years being much more likely to have seen one than First-years. 70% of respondents w classified as having normal levels of depres 68% were in the normal range for anxiety. Depression and anxiety increased across s years. Also, school, family, and friends were the three biggest stressors in the lives of 12 19-year-olds.
Formal and Informal Help Seeking Behaviour - Adapted for MWS		Doctors/GPs were the most likely source of formal support with 44% reporting this, follo by psychologists, counsellors, and teachers Only 11% reported that they would be likely use a helpline. Friends, parents, the interne and relatives were the most likely sources of informal support.
Hemingway Measure of Adolescent Connectedness (MAC) - Three subscales used		'One Good Adult' was associated with connectedness to family and friends. Almos 70% 'enjoyed family life' with First-years mo likely to report this than Sixth-years.
Life Orientation Test Revised (LOT_R)		Males reported higher levels of optimism (M=14.62) than females (M=13.09), First-ye displayed significantly higher levels than the in later years, whilst Fourth-years and Sixth years displayed the lowest levels.
Multidimensional Scale of Social Support (MSPSS)		Females reported a significantly higher level perceived social support than males.

APPENDIX 2 Key research findings on the wellbeing of children and young people in Ireland

Pupils Experience of Bullying Scale (PEBS)	 40% had been bullied at some point, over 30% of the bullying had occurred in the past year, 14% in the last month, and 7% on a weekly (4%) or daily (3%) basis. Males had significantly higher levels of self-esteem (M=30.31) than females (M=27.13), as did First-years compared to all other year groups. 27% of students ranked themselves as being 'top of the class' in schoolwork. First-years and males were more likely to report this than 	
Rosenberg's	esteem (M=30.31) than females (M=27.13),	
Self-Esteem Scale	as did First-years compared to all other year	
(RSE)	groups. 27% of students ranked themselves as	

MWS 2 Adolescent Sample

•	Alcohol Use Disorders Identification Test (AUDIT)	57% of the sample reported never having drank alcohol, 22% reported doing it less than monthly, 16% monthly, 4% weekly, and less than 1% daily. Whilst 92% of First-years reported having never drank alcohol, this had fallen to only 13% by Sixth-year. Of those who did drink alcohol, 65% fell into the low risk drinking range, 28% were classified as problem drinkers, 4%as harmful or hazardous drinkers, and 3% as potentially alcohol dependent.	
	Adapted Coping Strategy Indicator (CSI - 15)		41% reported coping well with problems, 8% did not cope well. Males (51%) were more likely to report coping well than females (33%). Friends, music, and sport/exercise were the most used methods of coping.
	Body Esteem Scale for Adolescents and Adults (BESAA) - Appearance Subscale		Adolescents scored just above the midpoint of 20 for body esteem. Males reported significantly higher levels of body esteem than females and First-years were also significantly higher than Sixth-years.
	Brief Multidimensional Student Life Satisfaction Scale (BMSLSS)		Adolescents scored much higher than the midpoint of 24. Males were more satisfied with their lives overall than females and First-years and Second-years were significantly more satisfied with their lives than older years.
	Depression, Anxiety, Stress Scale (DASS), Suicidality, Psychotic-like Experiences		60% were classified as being in the normal range for depression, 11% were in the mild range, 15% in the moderate, and 15% in the severe (6%) or very severe (9%). Males were more likely to be in the normal range, whilst females were much more likely to be in the severe or very severe ranges. 51% were in the normal range for anxiety and one-fifth were in the severe or very severe range. Males were more likely to fall in the normal range than females. 41% of respondents had thought about taking their own life but only 6% had attempted to take their own life. Females scored significantly higher on the psychotic-like experiences measure than males.
	Hemingway Measure of Adolescent Connectedness (MAC) - Three subscales used, Network of Relationships Inventory - Relationship Qualities Version		Adolescents scored above the midpoint of 18 for school and peer connectedness. Females had a slightly higher level of school connectedness than males. Also, First-years showed significantly higher levels of both school and peer connectedness than other years.
	Informal and Formal Help Seeking Behaviour		The most reported informal sources of social support were parents (68%), friends (68%), relatives (37%), and online (20%). The most reported forms of formal support included GPs (21%), teachers/guidance counsellors (20%), and phone helplines (7%).

Adolescents scored above the midpoint on the measure of optimism. Males reported higher optimism than females, and there was a gradual decrease in optimism levels across school year, with older years displaying significantly less optimism.
Adolescents scored well above the midpoint of 48 for overall social support, which indicated that they had a good level of social support available to them. Adolescents scored above the midpoint for family support, friend support, and adult support. Females also reported a higher level of overall perceived social support than males. First-years also had the highest level of perceived social support.
Of the Senior Cycle students who answered the PGSI, 88% were non-gamblers, 7% were low- risk gamblers, 3% as moderate-risk gamblers, and 1% as problem gamblers. Females were more likely than males to be classified as non- gamblers.
Adolescents scored above the midpoint of 24 on the personal competence resilience subscale, with males and First-years displaying significantly higher levels of personal competence than females and older years.
Adolescents scored two points above the midpoint of 25, indicating average levels of self- esteem. Males scored significantly higher than females.
55% of the sample had experienced someone close to them dying. Those who reported this were more likely to be in the very severe category for anxiety. 6% of adolescents had experienced violence in the home and 32% reported conflict between parents.

Table 2: Key findings from international research in the area of wellbeing

Age group	Key relevant indicators	Key findings: physical	Key findings: social and emotional
HBSC 20	10		
10-17 year olds	Questionnaire indices (Student Report)	33% reported excellent health, 50% feeling very happy, and 76% high life satisfaction. Younger children and boys were more likely to report positive health. 12% currently smoked, older children and those from a lower social class were more likely to report having ever smoked. 21% were current drinkers. 20% of children had fruit and/or vegetables more than once a day, with younger children, girls, and those from a higher social class more likely to report this. 51% reported exercising four or more times a week with boys, younger children, and those from a middle-class background reporting the highest levels of physical activity.	27% of 15 to 17-year-olds reported ever having sex, with boys (31%) more likely to report this than girls (23%), and those from lower social classes more likely to report this than those from a higher social class. Overall, 24% of children reported ever having been bullied. 26% of boys compared to 23% of girls, and younger children were more likely to report being bullied than older children. 35% of children reported having been in a physical fight in the past 12 months, with boys (48%) compared to girls (20%) and children from lower social classes significantly more likely to report this. Overall, 17% of children admitted to bullying others, with boys and older children more likely to report this than girls and younger children.
	International Comparison	How does Ireland compare to other countries? Physical activity measures compare favourably with those in other countries. Children aged 11-15 years in Ireland reported physical activity levels (at least 60 minutes a day in Ireland) which were above the HBSC average. A lower percentage of 10-17 year old girls reported engaging in vigorous exercise four or more times per week. Overall, 15-year-olds in Ireland ranked first on this indicator out of all 41 countries.	How does Ireland compare to other countries? 15-year-olds in Ireland were below the international average for 'bullying others' in 2010 (20.2%). 15-year-olds in Ireland were below the HBSC international average for 'liking school' (59.8%). 15-year-olds in Ireland were ranked 10th overall for 'feeling pressured by schoolwork'.
HBSC 20)14		
10-17 year olds	Questionnaire indices (Student Report)	Reports of general health remained stable between 2010 and 2014, with 34% of children remaining in excellent health. 76% of children reported high life satisfaction, which again remains unchanged from 2010. There was a decrease in reported levels of drunkenness (21% vs 31% in 2010) and smoking (16% vs 28% in 2010), and an increase in the level of children reporting having never drank alcohol (58% vs 52% in 2010). Levels of fruit and vegetable consumption had increased since 2010. Girls, younger children, and those from higher social classes were more likely to report higher levels of fruit and vegetable consumption. Consumption of sweets and soft drinks had decreased (27% vs 37% and 13% vs 21% in 2010). There was an increase in the proportion of children currently dieting (16% vs 13% in 2010). Reported levels of physical activity remained stable since 2010 (52%) as did self-care reports.	Overall, 29% of children reported having been in a physical fight in the last 12 months (a decrease from 2010). There was a decrease in the number of children reporting that they had ever bullied others from 2010 (13% vs 16%), but the proportion of children that reported that they had ever been the victim of bullying remained stable (25%). The proportion of children who reported that they had ever had sex remained stable (27%).
	International Comparison	How does Ireland compare to other countries? In 2014, 15-year-olds in Ireland were above the HBSC average for self-rated health (29.2% vs HBSC average of 28.9%). However, 15-year-olds were below the HBSC average for life satisfaction (68.3% vs HBSC average of 70.3%). Ireland ranked fourth out of all 42 countries for physical activity levels in 15-year- olds (a drop from first place in 2010).	How does Ireland compare to other countries? 15-year-olds in Ireland were below the international average for 'bullying others' (16.3% vs HBSC average 26.4%). 15-year-olds were below the HBSC average for 'liking school (63.5% vs HBSC average 68.9%). 15-year-olds also felt very pressured by their schoolwork, as Ireland was ranked third out of all 42 participating countries for this indicator. This is a large jump from 10th place in 2010.

HBSC 2018			
10-17 year olds	Questionnaire indices (Student Report)	In 2018, 33% of boys and 25% of girls reported excellent health, with younger children and those from higher social class groups more likely to report this. 47% of boys and 40% of girls reported feeling very happy with their life at present. Younger children were more likely to report this than older children. Boys (77%) were significantly more likely than girls (70%) to report high life satisfaction, with younger children and those from higher social classes being again more likely to report this. Five percent of respondents were current smokers and only 17% of respondents had had an alcoholic drink in the past 30 days. Boys (8%) were more likely than girls (6%) to have used cannabis in the last 12 months. Girls (25%) were more likely than boys (20%) to report consuming fruit and vegetables more than once a day, with younger children and those from a higher social class more likely to report this also. Around 20% of respondents reported consuming sweets at least once a day, and around 7% reported consuming soft drinks daily or more. Boys (57%) were significantly more likely than girls (42%) to exercise four or more times a week.	In 2018, 47% of boys and 40% of girls reported feeling very happy with their life at present. Younger children were more likely to report this than older children. Boys (77%) were significantly more likely than girls (70%) to report high life satisfaction, with younger children and those from higher social classes being again more likely to report this. Boys (17%) were more likely to report this. Boys (17%) were more likely than girls (10%) to report bullying others in the past couple of months, whilst 30% of both boys and girls reported being bullied in school over the past couple of months. 15 to 17-year-old boys (28%) were more likely than 15 to 17-year-old girls (20%) to report having had sexual intercourse. Girls scored significantly worse in the Mental Health Inventory, and the WHO-Five Well-Being Index than their male counterparts.
	International Comparison	How does Ireland compare to other countries? Children in Ireland were more likely to engage in the recommended amount of daily vigorous physical activity than children from other countries.	How does Ireland compare to other countries? At age 15 years, Irish adolescents reported high levels of problematic social media use. For 15-year-olds who felt pressured by schoolwork, Ireland was ranked 12th highest out of the 45 participating countries.
PISA 201	2		
15 year olds	Questionnaire indices (Student Report)		Four out of five students in participating OECD countries agreed or strongly agreed that they feel 'happy at school' or that they feel like they 'belong in school'. Similar results were observed in the Irish sample. 78% of disadvantaged and 85% of advantaged students agreed or strongly agreed with the statement 'I feel like I belong at school'. Socio-economically disadvantaged students reported lower levels of engagement, drive, motivation, and self-belief. Better student- teacher relationships were strongly associated with greater student engagement with and at school in the majority of countries, including Ireland.
	International Comparison		How does Ireland compare to other countries? Ireland was above the international average regarding how happy students felt in school and ranked 36th out of all OECD countries on this indicator. The mean score for students' sense of belonging in school was in line with those across all OECD countries, but the scores for Irish students showed a small but significant decline between 2003 and 2012.

15-year- olds	Questionnaire indices (Student Report)	Across participating OECD countries, 43% of students practiced sports before school, 66% exercise or practice sports after school. In Ireland, 78.6% of students reported that they exercise or practice sports before or after school. Boys were more likely than girls to report exercising both before and after school, those who came from higher social classes were also more likely to report engaging in moderate to vigorous physical activity. Across participating countries, 26% of boys and 18% of girls indicated that they had skipped breakfast on the most recent day that they had attended school, with girls being more likely than boys to have skipped breakfast. In Ireland, 82.9% of students reported eating breakfast before school.	PISA 2015 showed that many students were very anxious about schoolwork and tests. This was not related to the number of school hours, or the frequency of tests, but rather the level of support students felt from teachers. Girls had higher levels of schoolwork-related anxiety than boys and schoolwork-related anxiety was negatively related to performance at school. Bullying was an issue in Irish schools with 14.7% as many students reported that they were a victim of bullying at least a few times a month. PISA data showed that bullying was lower in schools where students reported more positive relationships with their teachers. Most 15-year-olds were found to be satisfied with their lives. However, girls and disadvantaged students were more likely than boys and advantaged students to be dissatisfied with their lives. One in five students reported that they received some form of unfair treatment from a teacher (they were harshly disciplined or felt offended or ridiculed in front of others) at least a few times in each month.
	International Comparison	How does Ireland compare to other countries? Ireland was ranked second out of all OECD countries for 'exercise or practice sports after school'. Ireland was above the OECD average for the percentage of students who reported that they exercised before or after school (78.6% vs. 69.8%). Ireland was also above the OECD average for percentage of students who reported eating breakfast before school (82.9% vs 78%). Ireland was well below the OECD average for skipping meals. With regards to boys who skipped dinner on the most recent day they had attended school, Ireland was ranked the lowest out of all OECD countries.	How does Ireland compare to other countries? Students were above the international average for schoolwork related anxiety (63.2% vs. 55.5% for test anxiety). Students' sense of belonging at school in Ireland was not significantly different to the OECD average (73.3% vs 73%), and below the international average for bullying (14.7% vs 18.7% for any type of bullying act occurring at least a few times a month) across all OECD countries. Overall, Ireland was slightly below the international average for life satisfaction (32.4% vs 34.1%).

PISA 20	PISA 2018			
15-year- olds	Questionnaire indices (Student Report)		27% of 15-year-olds reported that they 'always' put pressure on themselves to do well on tests, 24% 'always' felt pressure from their parents to do well on tests, and 22% felt pressure from their teachers to do well. 51.6% of students worried 'often' or 'always' about what would happen if they failed an exam or test and 43.1% reported 'often' or 'always' feeling nervous and stressed when thinking about or doing exams and tests. 61% of students reported that they were satisfied with their life, with significantly less females in Ireland reporting that they were satisfied with their life (55.5%) compared to their male peers (67.3%). Just over 45% of Irish students reported that they fell happy 'always' feeling cheerful. In comparison with these positive feelings, only 5% of Irish students reported 'always' feeling sad, and only 3% reported feeling afraid.	
	International Comparison		How does Ireland compare to other countries? In 2018, Irish students scored significantly lower than the overall OECD average for life satisfaction (61% vs 66.9%). Irish students also reported 'always' feeling cheerful (32%) and 'always' feeling joyful (27.3%) significantly less than other OECD countries (approximately 41% of students on average). However, Irish students also reported 'always' feeling sad (5%) or 'always' feeling afraid (3%) significantly less than students in other OECD countries (6.5% and 10.3% respectively).	
PIRLS 2	011			
Fourth- class	Questionnaire indices (Pupil and Teacher Reports)	Teachers reported that their instruction was 'not at all' limited by lack of proper nutrition in 78% of their pupils, whilst their instruction was limited 'some or a lot' by lack of proper nutrition for 22% of their pupils. Teachers also reported that their instruction was 'not at all' limited by the pupils not getting enough sleep for 38% of their pupils, whilst their instruction was limited 'some or a lot' by the pupils not getting enough sleep in 62% of their pupils.	64% of pupils reported that they experienced bullying 'almost never', 25% experienced bullying 'about monthly', and 12% experienced bullying 'about weekly'.	
	International Comparison	How does Ireland compare to other countries? Ireland was below the international average for teacher instruction being hindered 'some or a lot' due to lack of proper nutrition in their pupils (22% vs 27% international average). Ireland was above the international average for teacher instruction being hindered 'some or a lot' due to lack of proper sleep in their pupils (62% vs 49% international average).	How does Ireland compare to other countries? Ireland was above the international average for pupils who were bullied 'almost never' (64% vs 47% international average), and below the international average for pupils bullied 'about weekly' (12% vs 20% international average).	

PIRLS 2016			
Fourth- class	Questionnaire indices (Pupil and Teacher Reports)	Teachers reported that their instruction was limited 'very little' by a number of different pupil attributes including lack of proper nutrition and not getting enough sleep for 47% of their pupils, 'some' for 52% of their pupils, and 'a lot' for 1% of their pupils.	74% of pupils reported that they experienced bullying 'almost never', 20% experienced bullying 'about monthly', and 5% experienced bullying 'about weekly'. 61% of pupils reported having a 'high sense of school belonging', 31% reported having 'some sense of school belonging', and 8% had 'little sense of school belonging'.
	International Comparison	How does Ireland compare to other countries? Ireland was below the international average for teacher instruction being hindered 'a lot' by pupil attributes (1% vs 4% international average), and teacher instruction being hindered 'some' by pupil attributes (52% vs 63% international average). Ireland was above the international average for teacher instruction being hindered 'very little' by pupil attributes (47% vs 34% international average).	How does Ireland compare to other countries? Ireland was above the international average for pupils who were bullied 'almost never' (74% vs 57% international average), and below the international average for pupils bullied 'about weekly' (5% vs 14% international average). Ireland was also above the international average for pupils who had a 'high sense of school belonging' (61% vs 59% international average).
TIMSS 2	2011		
Fourth- class	Questionnaire indices (Pupil and Teacher Reports)	Teachers reported that their instruction was 'not at all' limited by lack of basic nutrition in 79% of their pupils, whilst their instruction was limited 'some or a lot' by lack of basic nutrition for 21% of their pupils. Teachers also reported that their instruction was 'not at all' limited by the pupil not getting enough sleep for 38% of their pupils, whilst their instruction was limited 'some or a lot' by the pupil not getting enough sleep in 62% of their pupils.	64% of pupils reported that they experienced bullying 'almost never', 25% experienced bullying 'about monthly', and 12% experienced bullying 'about weekly'.
	International Comparison	How does Ireland compare to other countries? Ireland was below the international average for teacher instruction being hindered 'some or a lot' due to lack of basic nutrition in their pupils (21% vs 29% international average). Ireland was above the international average for teacher instruction being hindered 'some or a lot' due to lack of proper sleep in their pupils (62% vs 47% international average).	How does Ireland compare to other countries? Ireland was above the international average for students who were bullied 'almost never' (64% vs 48% international average), and below the international average for students bullied 'about weekly' (12% vs 20% international average).
TIMSS 2	2015		
Fourth- class	Questionnaire indices (Pupil Report)	Teachers reported that their teaching was 'not limited' by a number of different pupil needs including lack of proper nutrition and not getting enough sleep for 48% of their pupils, 'somewhat limited' for 48% of their pupils, and 'very limited' for 4% of their pupils.	73% of pupils reported that they experienced bullying 'almost never', 20% experienced bullying 'about monthly', and 6% experienced bullying 'about weekly'. 73% of pupils had a 'high sense of belonging at school', 23% had a 'sense of school belonging', and 4% had 'little sense of school belonging'.
	International Comparison	How does Ireland compare to other countries? Ireland was below the international average for teaching being 'very limited' by pupil needs (4% vs 8% international average), and teaching being 'somewhat limited' by pupil needs (48% vs 58% international average). Ireland was above the international average for teaching being hindered 'very little' by pupil needs (48% vs 34% international average).	How does Ireland compare to other countries? Ireland had one of the lowest levels of bullying present out of all participating countries, ranked third lowest. Ireland was above the international average for students who had a 'high sense of school belonging' (73% vs 66% international average).

Second- year	Questionnaire indices (Student Report)	Teachers reported that their teaching was 'not limited' by a number of different student needs including lack of proper nutrition and not getting enough sleep for 41% of their students, 'somewhat limited' for 53% of their students, and 'very limited' for 6% of their students.	75% of students reported that they experienced bullying 'almost never', 22% experienced bullying 'about monthly', and 4% experienced bullying 'about weekly'. 42% of students had a 'high sense of school belonging', 48% had a 'sense of school belonging', and 10% had 'little sense of school belonging'.
	International Comparison	How does Ireland compare to other countries? Ireland was below the international average for teaching being 'very limited' by student needs (6% vs 11% international average), and teaching being 'somewhat limited' by student needs (53% vs 62% international average). Ireland was above the international average for teaching being hindered 'very little' by student needs (41% vs 27% international average).	How does Ireland compare to other countries? Again, Ireland had one of the lowest levels of bullying present, ranked eighth lowest. Ireland was below the international average for 'high sense of school belonging' (42% vs 44% international average), and above the international average for 'little sense of school belonging' (10% vs 9% international average).

APPENDIX 3 Wellbeing measures used in GUI, MWS, and MWS 2

GROWING UP IN IRELAND (GUI)

Emotionality, Activity, and Sociability Temperament Questionnaire (EAS)

The EAS (Buss & Plomin, 1984) contains 20 items and is designed to measure heritable aspects of temperament that are associated with developmental differences in both personality and behaviour. Scores are produced by the EAS for four different subscales, each comprised of 5 items: *Emotionality, Activity Level, Sociability, and Shyness.* The subscale of *Emotionality* measures the intensity of the participant's emotional reactions and the negative quality of their emotional style. *Sociability* measures the participant's tendency to prefer the company of others to being alone and is associated with positive emotionality. The *Activity Level* subscale the speed of the participant's actions and preferred activity levels. *Shyness* refers to the participant's tendency to be awkward and inhibited in new social situations. Respondents can rate their agreement to each item on a 5-point scale which ranges from *not characteristic* to *very characteristic*. The EAS can be used with children from 1 to 9 years of age.

A higher score on the *Emotionality* subscale indicates a negative and emotional temperament, a higher score on the *Activity Level* measure indicates a more active temperament, a higher score on the *Shyness* subscale indicates a reserved and awkward temperament and a higher score on the *Sociability* subscale refers to a more sociable and personable temperament. This scale has a satisfactory level of reliability with a mean Cronbach's alpha of 0.71 for the parental ratings version of the instrument, as reported by GUI (Murray et al., 2010).

Inventory of Parent and Peer Attachment (IPPA)

The IPPA (Armsden & Greenberg, 1987), is a tool used to measure adolescents' perceptions of various qualities of their relationships with their parents and close friends. The IPPA also focuses on how well these relationships can serve as sources of psychological security for the adolescent, and is suitable for use with young people between the ages of 9 and 15 years. The IPPA contains three subscales each with 25 items (mother, father, peer). These 25 items can be answered on a 5-point Likert scale. Respondents can choose to respond to each statement with *almost never or never true, not very often true, sometimes true, often true, almost always or always true.*

Three main dimensions of parent and peer relationships are examined: degree of mutual trust, quality of communication, and extent of anger and alienation. An acceptable level of internal reliability has been reported by Gullone and Robinson (2005) for the subscales of *Peer Trust* (0.86) and *Alienation* (0.68). In terms of validity, they also reported that Alienation was negatively associated with self-esteem, whilst *Peer Trust* was positively associated with self-esteem.

The IPPA is scored by reverse coding the negatively worded items before summing the response values in each section. The point values for each response are as follows: *almost never* or *never true* = 1, *not very often true* = 2, *sometimes true* = 3, *often true* = 4, *almost always* or *always true* = 5.

Individuals who score highly on the Trust dimension and low on the Alienation dimension are categorised

as having high psychological security in their relationships (secure attachment), whilst those who score highly on the Alienation dimension and low on Trust are categorised as having low psychological security (insecure attachment). A high level of reliability was reported by GUI for each of the three subscales with a Cronbach's alpha of 0.72 for alienation, 0.88 for communication, and 0.91 for trust (Murphy et al., 2019).

Network of Relationships Inventory – Relationship Qualities Version (NRI-RQV)

The NRI-RQV examines supportive and discordant relationships between children, adults and adolescents. It is a mixture of the Network of Relationships Inventory (Furman & Buhrmester, 2008) and a family relationships measure created by Buhrmester, Camparo, & Christensen (1991). The NRI-RQV is a 30-item self-report measure, which contains 10 scales, each with three items. This scale examines five positive relationship features (*Companionship, Disclosure, Emotional Support, Approval, and Satisfaction*), and five negative relationship features (*Conflict, Criticism, Pressure, Exclusion, and Dominance*), and is suitable for use with children aged 11 years and older. Participants answer various questions about their relationships using a 5-point, Likert-style scale.

All questions are asked separately for each relationship being measured. An important feature of the NRI-RQV is the fact that young people use the same set of features to describe their relationship with several different people in their relationship network. This results in a matrix of scores that allows the average differences between each type of relationship the young person holds to be described, whilst also allowing the qualities of each individual relationship to be examined. These scores also allow researchers to examine how individual differences in relationship qualities are associated with other individual outcomes (e.g., loneliness, depression) and relationship outcomes (e.g., stability of relationships).

The NRI-RQV subscales are scored by averaging the three items which make up each scale. Separate scores are calculated for each relationship. Scores are not calculated for any subscale missing more than 1 item. Scores can range from 1-5, where higher scores indicate a higher level of the dimension being examined. This scale has an adequate level of reliability for both mothers and fathers, with a Cronbach's alpha of between 0.64 and 0.84 for each of the five subscales reported for mothers and a Cronbach's alpha of between 0.63 and 0.87 for each of the five subscales reported for fathers, as reported by GUI (Murphy et al., 2019).

Parenting Styles Inventory II (PSI II)

The Parenting Styles Inventory II (Darling & Toyokawa, 1997) was developed to assess the construct of parenting style independently of parenting practice. Parenting style refers to the overall emotional climate present when parent-child interactions occur. Three subscales, of five items each, based on three aspects of maternal parenting style; *Responsiveness, Psychological-Autonomy Granting*, and *Demandingness* are completed by the young person taking part in the study. The questions on the *Responsiveness* subscale reflects positive, warm parent-child interactions, including discussing problems, doing things together and being praised. The questions on the *Demandingness* subscale reflect on the setting on, and enforcement of family rules and discipline.

Respondents can answer on a 3-point scale; *Always, Sometimes, Never*, for each of the five questions contained in each of the three subscales. Depending on the scores received parenting style could be categorised as either *Authoritarian, Authoritative, Neglectful, or Dismissive*. This scale has a less than adequate level of reliability on the closeness sub-scale (Cronbach's alpha = 0.58-0.63) and an adequate level of reliability on the conflicts subscale (Cronbach's alpha = 0.82-0.85), as reported by GUI (Murray et al., 2010).

Pianta Child-Parent Relationship Scale (CPRS)

The Pianta Child-Parent Relationship Scale (short form) looks at both the positive and negative aspects of the child parent relationship for children aged between 3 and 12 years (Pianta, 1992). The short form contains 15 items for the parent/primary caregiver to complete, all of which are part of one of three subscales; *Conflicts, Positive Aspects of Relationship (Closeness), and Dependence.* Respondents indicate the applicability of certain statements to the child taking part in the study on a 5-point scale; *definitely does not apply, not really, neutral/not sure, applies somewhat, definitely applies.*

Each question can be assigned a score between 1 (*definitely does not apply*) and 5 (*definitely applies*), and a total and mean score for each subscale can then be calculated, where higher scores indicate higher levels of conflict, closeness, and dependence and vice versa. This scale has an adequate level of reliability for both the *Conflicts* and *Positive Aspects* subscales, with a Cronbach's alpha of 0.83 and 0.72 respectively. However, it has a less than adequate level of reliability for the dependence subscale, with a Cronbach's alpha of 0.50, as reported by GUI (Williams et al., 2019).

Piers-Harris 2 Children's Self-Concept Scale

The Piers-Harris 2 Children's Self-Concept Scale (Piers, Harris, & Herzberg, 2002) is a self-report scale which contains 60 items. It is designed to assess self-concept in children and adolescents between the ages of 7 and 18 years (who have at least a 2nd Grade reading ability). Self-concept is defined by the authors as a set of relatively stable attitudes which reflect both the evaluation and description of an individual's own attitudes and behaviours.

Each of the 60 items on the Piers Harris 2 are statements about how the individual feels about themselves. Each can be answered with either *yes* or *no*. The subscales included in this measure are as follows: *Behavioural Adjustment* – 14 items which measure denial or admission of problematic behaviours; *Intellectual and School Status* – 16 items referring to the participants own abilities with respect to academic and intellectual tasks, general satisfaction with school and perception of their future achievements; *Physical Appearance and Attributes* – 11 items which refer to the participants perceptions of their physical appearance and other attributes such as their leadership abilities and ability to express ideas; *Freedom from Anxiety* – 14 items relating to fear, unhappiness, nervousness, shyness, and feeling left out, Popularity – 12 items about the participants satisfaction with life. Higher scores achieved on each of the scales indicates more a positive self-evaluation in that domain. This scale has a high level of reliability with a Cronbach's alpha of 0.91 for the total scale, as reported by GUI (Murray et al., 2010).

Short Mood and Feelings Questionnaire (SMFQ)

The SMFQ (Angold & Costello, 1987) is a brief, self-report, 13-item measure of childhood and adolescent depression, suitable for use with young people between the ages of 6 and 17 years. It contains descriptive statements and phrases about how the respondent has been acting or feeling lately. The 13 items contained in the SMFQ focus on cognitive and affective symptoms of depression and come from the original Mood and Feelings Questionnaire (MFQ). One of the items is concerned with low mood (I felt miserable or unhappy) and one of the items pertains to anhedonia (I didn't enjoy anything at all). The young person can rate each statement as *true, sometimes true*, or *not true* over the past two weeks. Good internal reliability has been reported by the developers of the 13-item SMFQ (0.87), and Rhew et al. (2010) who used a sample of 521 11 to 13 year olds (0.84).

The score for depression can be calculated by summing together the point values for the responses on

each item. Scores on the short version can range from 0 to 26, and the point value for each response is as follows: *not true* = 0 points, *sometimes true* = 1 point, *true* = 2 points. Higher scores of the SMFQ are suggestive of more severe depressive symptoms. Scoring 12 or above on the SMFQ could be an indicator of depression in the respondent. A high level of internal reliability has been reported by GUI for this scale, with a Cronbach's alpha of 0.91 (Murphy et al., 2019).

Social Skills Improvement System Rating Scales (SSIS_RS)

The SSIS_RS (Gresham & Elliot, 2008) assesses social skills, problem behaviours, and academic performance in young people aged 3 to18 years. There are separate forms for students, parents, and teachers. On the student form, students rate how true they consider various sentences to be about themselves on a 4-point scale; *not true, a little true, a lot true, very true*. Teachers and parents rate the frequency with which the students exhibit certain behaviours on a four-point scale; *never, seldom, often, almost always*.

Specific performance and social behaviour acquisition deficits can be identified by the seven subscales contained in the SSIS_RS. These subscales include *Communication, Cooperation, Assertion, Responsibility, Empathy, Engagement,* and *Self-control.* Internal reliability for the SSIS_RS reported by the authors is moderate to high and the validity of the measure has been demonstrated by many correlational studies with other well-known measures such as the Behavioural Assessment System (BASC-2; Reynolds & Kamphaus, 2004).

The SSIS_RS can be hand scored or scored by a computer. Reports are then generated from the scoring software. For each of the subscales relating to social skills, problem behaviours and academic competence the young person can score either *below average, average, or above average*. This scale has a relatively high level of internal reliability, with a Cronbach's alpha of between 0.73 and 0.94 for each of the subscales, as reported by GUI (Williams et al., 2019).

Strengths and Difficulties Questionnaire (SDQ)

The Strengths and Difficulties Questionnaire (SDQ) is a short behavioural screening tool for children and adolescents between the ages of 3 and 17 years (Goodman et al., 1997, 2000). Positive and negative psychological attributes are assessed across social, emotional, and behavioural domains. Teacher/ educator and parent/caregiver versions are available (3-17 year olds) alongside self-report versions (11-17 year olds) and informant reports (ages 18+). All versions contain at least two of the following. An adequate level of reliability has been reported for the SDQ (0.73), by GUI (Murray et al., 2010).

A. 25 items on psychological attributes

All versions of the SDQ ask about 25 attributes which can be grouped into five subscales:

- 1. Emotional Symptoms (5 items)
- 2. Conduct Problems (5 items)
- 3. Hyperactivity/Inattention (5 items)
- 4. Peer/Relationship Problems (5 items)
- 5. Prosocial Behaviour (5 items).

Items one to four are subsequently added together to create a 'total difficulties score' (out of 20). The self-completed questionnaires for adolescents ask questions about the same 25 traits but they are worded differently. All questions on the SDQ refer to the last 6 months or the last school year.

B. An impact supplement

An optional impact supplement is offered alongside the 25 questions, which asks whether the respondent believes the young person has a problem and if so asks for details about their distress, social impairment, and burden to others.

C. Follow up questions

The SDQ follow-up survey includes the same 25 questions, the same impact supplement and two further questions which ask whether an intervention has reduced problems and whether the intervention has helped in other ways in the last month to assess change over time.

Scoring

When using the SDQ for screening and progress monitoring, it is scored out of a total of 40. A total score, scores for each subscale and a total difficulties score can be calculated either electronically or manually. An impact score can be calculated by summing the scores for items assessing "distress" and "interface". Scores can range from "very low" to "close to average" to "very high" for each individual. In the parent completed version for four-17 year olds, a total difficulties score of 0-13 is considered normal, 14-16 is considered borderline, and 17-40 is considered abnormal. In the self-completed version

for 4-17 year olds, a total difficulties score of 0-15 is normal, 16-19 is borderline, and 20-40 is abnormal.

MY WORLD SURVEY (MWS) AND MY WORLD SURVEY 2 (MWS 2)

Alcohol Use Disorders Identification Test (AUDIT)

The World Health Organisation (WHO) developed the AUDIT as a screening tool for dangerous alcohol consumption (Saunders et al., 1993). This test consists of 10 different items which measure three content domains: 1) alcohol consumption, 2) signs of alcohol dependence, 3) alcohol-related harm. According to the recommended cut-offs indicated by the WHO, participants can be classified as being within 1) normal drinking range, 2) problem drinking range, 3) harmful and hazardous drinking range and 4) having a possible alcohol dependence. The AUDIT is suitable for use with any adolescent, young adult or adult.

The AUDIT contains 10 items, each of which can be answered on a 5-point Likert-type scale: e.g. *never, monthly or less, 2-4 times monthly, 2-3 times a week, 4 or more times a week.* Each response has a score which ranges from 0-4 (e.g. *never* = 0, 4 or *more times a week* = 4). Scores can then be added together to create a total score. Scores of 8 or more are indicative of harmful or hazardous drinking alongside possible alcohol dependence. The AUDIT has an adequate level of overall reliability (0.82) as reported by the MWS (Dooley & Fitzgerald, 2012).

Behavioural Adjustment Scale (BAS)

A shortened version of the 'Self-Reported Behaviour Index' (Brown, Clasen, & Eicher, 1986), was used in the MWS to assess the frequency of substance misuse and school misconduct over the past month. Participants were asked how many times over the previous month they had partaken in harmful substancerelated behaviours (drinking alcohol, smoking, taking cannabis, taking other drugs), misbehaved at school (cheated in an exam, talked back to teachers), and been punished for their misbehaving in school (receiving a detention or being kicked out of class). The BAS has a high level of internal consistency, with a Cronbach's alpha of 0.86, as reported by the MWS (Dooley & Fitzgerald, 2012).

Body Esteem Scale for Adolescents and Adults (BESAA)

The BESAA is a 23-item scale consisting of three subscales which aim to measure general feelings about appearance, weight satisfaction, and judgements of how others view one's appearance (attribution) (Franko et al., 2012). The MWS 2 used the Appearance subscale. This subscale consists of 10 items which assess participants' feelings and attitudes towards their looks. Participants can indicate the level to which they agree with each statement on a 5-point Likert scale which ranges from '*never (0*)' to '*always (4)*'. Negative items are reverse scores on the BESAA. Higher scores indicate higher body esteem and scores for the BESAA can range from zero to 40. This scale has a high level of internal consistency with a Cronbach's alpha of 0.81, as reported by the MWS 2 (Dooley et al., 2019).

Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS)

The BMSLSS (Seligson, Huebner, & Valois, 2003) is a self-report measure containing 6 items which require the adolescent to indicate on a 5-point Likert-style scale the degree to which they are *very dissatisfied* to *very satisfied* with their family life, school experience, friends, themselves, where they live, and with their overall life. The BMSLSS is suitable for use with youth ages between 11 and 18 years. Scores on each of the 6 items summed to create a total score, such that higher scores indicate a greater level of life satisfaction in the adolescent. The authors have reported that the BMSLSS has adequate test-retest reliability (with an alpha coefficient of between 0.76 and 0.85), as reported by the MWS (Dooley & Fitzgerald, 2012).

Coping Strategy Indicator (CSI)

The CSI (Amirkhan, 1990) is a 33-item, 3-point, self-report measure which aims to assess three basic coping styles; support seeking, problem solving and avoidance. Respondents choose and describe a stressful life event which took place in the last 6 months and is considered by them to be important. Then, whilst keeping this stressful event in mind, subjects must respond to the 33 items. This should demonstrate whether they generally employ problem-solving, seeking social support or avoidance when trying to cope with a problem. Respondents respond on a 3-point Likert scale: *a lot, a little, not at all.* Each subscale contains 11 items and is scored by summing the responses to appropriate items. Higher scores on each of the three subscales indicate greater use of this coping strategy. This scale has an acceptable level of reliability with a Cronbach's alpha of 0.74 as reported by the MWS (Dooley & Fitzgerald, 2012).

CRAFFT Substance Use Screening Scale

The CRAFFT (Knight et al., 1999, 2002), has been reported as a valid measure to detect substance problem use, abuse and dependence in adolescents aged between 12 and 18 years old (Knight et al., 2002). The CRAAFT consists of a 6-item scale which asks the adolescent if they have ever experienced various problems because of alcohol or drugs in the past 12 months e.g. been in a car driven by someone who has been using alcohol or drugs. CRAFFT stands for the key words of the six scale items which are assessed: *car, relax, alone, forget, friends, trouble*.

Each question answered yes is scored as 1, whilst each question answered no is scored as 0. A total score of 2 or higher out of a possible 6 indicates a need for further assessment. (Dooley & Fitzgerald, 2012). The CRAFFT has a high level of test-retest reliability as reported by the authors.

Depression, Anxiety, and Stress Scale (DASS-21)

The DASS-21 (Lovibond & Lovibond, 1995) is a set of three self-report scales, designed to assess the

emotional states of the respondent. This scales require participants to rate the severity and frequency of any negative emotions they have experienced over the past week. Each of these three scales contains 7 items which are divided into subscales measuring the same concept. Respondents are required to answer on a 4-point Likert-type scale which ranges from did not apply to me at all =0, to applied to me very much or all the time = 3. The scale for Depression measures dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia, and inertia. The scale for Anxiety measures autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The scale measuring Stress assesses levels of chronic nonspecific arousal. It looks at difficulty relaxing, nervous arousal, and being easily upset/agitated, irritable/over-reactive, and impatient. Scores on each item are summed to create a total score such that higher scores indicate more severe symptoms of depression, stress, or anxiety. Using the recommended cut-off scores, adolescents are categorised as exhibiting normal (zero-9), mild (10-13), moderate (14-20), severe (21-27), or extremely severe (28+) symptoms of depression anxiety or stress. The DASS-21 is suitable for use with adolescents between the ages of 13 and 18 years. The three subscales contained in the DASS-21 each have a high level of reliability, with a Cronbach's alpha of 0.93, as reported by the MWS (Dooley & Fitzgerald, 2012).

Formal and Informal Health Seeking Behaviour

The formal and informal health seeking behaviours of young adults and adolescents was assessed in the MWS using a slightly adapted measure (see Saunders, Resnick, Hoberman, & Blum, 1994), which had also already been used on a sample of Irish adolescents (Daly, 2006). In this measure, in order to assess formal help-seeking respondents were asked Have you had any serious problems in the past year?, e.g. emotional, personal, or behavioural problems that caused a lot of stress and which you feel you could have benefitted from professional help to overcome (e.g. counsellor, psychologist, psychiatrist, GP). Respondents could choose from I have few or no problems, I have had some problems but I did not feel I needed professional help, I have had some problems but I did not seek professional help although I thought I needed it, and I have had some problems and I did seek professional help. To assess informal help-seeking respondents were asked to answer eight items adapted from Saunders et al. (1994). Participants were firstly required to respond to two general questions: When you have problems, do you talk about them with anyone? If yes, who would you talk to... family, friend, no-one? Participants were then asked Who would you talk to first, if you had problems with 1) your family, 2) a friend, 3) a romantic relationship, 4) school, 5) depression, 6) alcohol and drug use?. The formal helpseeking scale has a Cronbach's alpha of 0.74, whilst the informal help-seeking scale has a Cronbach's alpha of 0.73, s reported by the MWS (Dooley & Fitzgerald, 2012).

Hemingway Measure of Adolescent Connectedness (HMAC)

The HMAC is suitable for use with children aged 11 years and up. Three of the subscales from the Hemingway Measure of Adolescent Connectedness (Karcher, 1999) were used in the MWS. Each of the three subscales contained 6 items designed to measure the participants level of caring for and involvement in relationships with 1) peers, 2) teachers, 3) involvement in school.

The full version of this measure contains 15 subscales which measure on three different dimensions of connectedness: the self, others, and society. Each of the subscales contain items pertaining to knowledge, caring, and conduct for the construct being measured.

Participants can respond to each item using a 5-point Likert scale which consists of: *not at all, not really, sort of, true, very true.* Negatively worded statements need to be reverse coded. Averages for each subscale can then be calculated. A higher score on any given subscale indicates a greater level of connectedness. The MWS has reported a satisfactory level of reliability for this measure, with a Cronbach's alpha of between 0.72 and 0.92 reported for each of the subscales in Caucasian adolescents, (Dooley & Fitzgerald, 2012).

Life Orientation Test Revised (LOT_R)

The LOT_R (Scheier et al., 1985, 1994) was designed to measure individual differences in dispositional optimism versus pessimism. This is a 10-item, self-report measure. Of these 10 items, three items measure optimism, three items measure pessimism, and the remaining four items are fillers. Participants rate each of the 10 items on a 4-point Likert-type scale: *0=strongly disagree, 1=disagree, 2=neutral, 3=agree, 4=strongly agree.*

The LOT_R is suitable for use with adolescents and adults aged 13 years and upwards. For scoring of the LOT_R, items 3, 7, and 9 are reverse coded. Items 1, 3, 4, 7, 9, and 10 are summed to obtain a total score. A total score of between 0-13 is categorised as low optimism, a score of between 14 and 18 is categorised as moderate optimism, and a score of between 19 and 24 is considered high optimism. Items 2, 5, 6, and 8 are fillers and therefore are not scored. This scale has an acceptable level of reliability with a Cronbach's alpha of 0.74, as reported by the MWS (Dooley & Fitzgerald, 2012).

Multidimensional Scale of Perceived Social Support (MSPSS)

The MSPSS (Zimet et al., 1988), measures perceived social support from three main sources: family, friends and significant other. It is suitable for adolescents and young people. The MSPSS contains three subscales (family, friends, and significant other) each with 4 items, creating a 12 item measure. Each item requires the participant to indicate how strongly they agree or disagree with a given statement on a 7-point scale which ranges from *very strongly agree* to *very strongly disagree*. Statements include: *There is a special adult who is around whenever I am in need and my friends really try to help me*.

Each of the three subscales can range in score from 4 to 28. Items are then summed, and a total score is calculated which can range from 12 to 84. Higher subscale and total scores indicate a higher level of perceived social support. This scale has a high level of internal reliability, with a Cronbach's alpha of 0.94, as reported by the MWS (Dooley & Fitzgerald, 2012).

Problem Gambling Severity Index (PGSI)

The PGSI (Ferris & Wynne, 2001) is a nine-item scale which measures at-risk behaviour in problem gambling. This tool is based on research surrounding the common signs and consequences that arise due to problematic gambling. The PGSI identifies four types of gamblers: non-problem, low-risk, moderate-risk, and problem gamblers. The PGSI does this by asking participants to self-assess their gambling behaviours over the past 12 months by scoring themselves against nine questions. The four-point rating scale which is used in the PGSI is as follows: *never=0, rarely=1, sometimes=1, often=2, always=3*. Items are summed and scores can range from zero to 27. A score of zero means a participant is a 'non-problem gambler', a score of one to two means a participant is a 'low-risk gambler', a score of three to seven means a participant is a 'moderate-risk gambler', and a score of eight or above means a participant is a 'problem gambler'. This scale has a high level of internal reliability with a Cronbach's alpha of 0.84 as reported by the MWS 2 (Dooley et al., 2019).

Psychotic-like Experiences

The MWS 2 used a shortened version of the Adolescent Psychotic-like Symptom Screener (APSS; Kelleher, Harley, Murtagh, & Cannon, 2011). This shortened version contained three items and was used to screen young people for psychotic experiences. The three items that were selected are the ones which are most likely to predict psychotic-like experiences in an Irish sample. Response options ranged from *yes definitely* (1), *maybe* (0.5), and *no* (0) (Dooley et al., 2019).

Pupils Experience of Bullying (PEBS)

In the MWS experiences of bullying were assessed with items that have been used previously in research (Griffin, 2006). The participant was asked whether they have seen anyone bullied, if they themselves have been bullied and, if so, how recently (from daily to within the last 4 to 5 years) and in what way they were bullied (e.g. physical, verbally, emotionally, via the internet, by text) and where they were most frequently bullied (e.g. at home, the internet, by text, in school etc.) (Dooley & Fitzgerald, 2012).

Resilience Scale for Adolescents (READ)

The READ (Hjemdal, Friborg, Stiles, Matinussen, & Rosenvinge, 2006) is a self-report scale which consists of 28 items assessing adolescent resilience. This scale measures how the adolescent relates to both family and friends, alongside how goal-oriented to adolescent is and their ability to handle stress and unpleasant life events. It is suitable for use with adolescents and young adults aged between 13 and 21 years. The 28 items contained in the READ scale are exclusively positively formulated and form five partial scales: *personal competence, social competence, social support, family cohesion, and personal structure*, which map onto three salient domains of resilience: *individual, family, and external environment.* Each item can be answered on a 5-point Likert-style scale, which ranged from *totally disagree = 1* to *totally agree = 5*. Scores for each of the 28 items are summed to create a total score, such that a higher total score is indicative of a higher level of overall resilience in the adolescent. This scale has a relatively high level of reliability with a Cronbach's alpha of 0.91, as reported by the MWS (Dooley & Fitzgerald, 2012).

Rosenberg's Self-Esteem Scale (RSE)

The RSE (Rosenberg, 1965) is a 10-item, self-report measure which examines both positive and negative feelings about the self to get an overall measure of self-worth. All 10 items can be answered on a 4 point Likert-type scale which ranges from strongly disagree to strongly agree. This scale is suitable for use with adolescents and young people aged 12 and up.

Statements which are negatively worded are reverse scored. Point values for each answer are as follows: *strongly disagree* = 1, *disagree* = 2, *agree* = 3, *strongly agree* = 4. Scores on each of the 10 scale items are then summed. Higher scores indicate a higher level of global self-esteem. Scores of 15 to 25 are classified as being within normal range. Scores of 15 or less are indicative of low self-esteem. This scale has a relatively high level of reliability, with a Cronbach's alpha of 0.89, as reported by the MWS (Dooley & Fitzgerald, 2012).

Satisfaction with Life Scale (SWLS)

The SWLS (Pavot & Diener, 2008) is a self-report, 5-item scale which aims to measure an individual's global cognitive judgements of their own life satisfaction (it does not measure either positive of negative affect), suitable for use with adolescents aged 17 years and upwards. Participants rate the level to which they agree or disagree with each of the five items on a 7-point, Likert-style scale which ranges from *strongly disagree* = 1 to *strongly agree* = 7. Scores on each item are summed to produce a total score. Cut offs for this total score are as follows: *extremely dissatisfied* = 5-9, *dissatisfied* = 10-14, *slightly dissatisfied* = 15-19, *neutral* = 20, *slightly satisfied* = 21-25, *satisfied* = 26-30, *extremely satisfied* = 31-35. This scale has been reported to have an acceptable level of reliability, with a Cronbach's alpha of between 0.79 and 0.89 being reported by the MWS (Dooley & Fitzgerald, 2012).

Suicidal Behaviour

In order to examine suicidal behaviour, four questions on self-harm, suicidal ideation, and suicide attempts were asked. The questions were: *Have you ever thought that your life was not worth living?, Have you ever deliberately hurt yourself without wanting to take your life?, Have you ever thought about taking your life, even though you would not do it?, Have you ever made an attempt to take your life?* Each of these questions also asked about the frequency of these behaviours in the last year (i.e. within the last 9 months, within the last month). Participants were also asked whether they had managed to access support or help after a suicide attempt, how easy or hard it was to access this support, who they went to for support, and whether they felt that the support they had accessed had helped them in any way (Dooley & Fitzgerald, 2012).

Support for Mental Health

Participants were asked to answer to questions 1) what sources young people are likely to use and 2) what sources they actually have used to acquire information and support surrounding their mental health. The list of sources that were named by participants included: relative, parents, internet, friends, phone helpline, teacher/guidance counsellor, doctor/GP, and psychologist/counsellor/therapist (Dooley & Fitzgerald, 2012).

