DISSEMINATION OF BEST PRACTICE IN TEACHING AND LEARNING RESEARCH

by National Children's Bureau (NCB)

Education & Training

RESEARCH REPORT

Northern Ireland
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Dissemination of Best Practice in Teaching and Learning Research

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Contents

I. Executive Summary

INTRODUCTION

The Department of Education (DE) commissioned the National Children's Bureau (NCB) to conduct research into the dissemination of best practice in teaching and learning Northern Ireland. The objectives of the research are to:

- Identify and assess the effectiveness of current methods of disseminating best practice in teaching and learning by and with schools; and
- Identify alternative methods of disseminating best practice in other education systems and assess their applicability for use in Northern Ireland.

The results will be used to inform a wide range of activity aimed at ensuring effective programmes have a legacy and that there is a high level of awareness of good practice in relation to raising standards and increasing equity.

METHODOLOGY

A mixed-method approach was adopted to deliver this research project, to include: a literature review, key stakeholder consultations with representatives from the statutory and voluntary sectors (n=15), an online survey of schools (n=122), school visits (n=6) and a stakeholder workshop. The project was overseen by a Steering Group comprised of representatives from DE School Improvement Branch, DE Statistics Branch, ETI, CCMS and the Education Authority, who provided strategic direction to the research team and will have a key role to play in critically examining the research findings and implications in terms of potential recommendations.

BACKGROUND CONTEXT

Trends suggest that the performance of post primary pupils in Northern Ireland, relative to other OECD countries, has declined over time[1], highlighting the need to disseminate best practice to help support schools and improved educational outcomes. Whilst good practice is evident and positive outcomes have been achieved by effective programmes, there is inconsistency with regard to the extent to which best practice is reaching all schools. Consequently, there is a need for improved dissemination approaches of best practice to tackle educational underachievement and to raise standards.

KEY FINDINGS - DISSEMINATION METHODS IN THEORY AND PRACTICE

Based on a review of literature and key stakeholder interviews, a tiered system has been adopted to describe the levels of dissemination (as per the table below), reflecting an increasing scale in terms of engagement i.e. transmission for the purpose of raising awareness (low engagement), transfer of knowledge for increasing understanding (medium engagement), and transformation for the purpose of generating action and embedding new practice (high engagement).

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[1] Programme for International Student Assessment (PISA) (2012) Result s in Focus: What 15-year-old s know and what they can do with what they know © OECD 2014. [Online] Available at https://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf

Dissemination Method	Brief Description	Dissemination Activities
Transmission of Information: Awareness	• Involves telling teachers about an initiative/best practice through policy documents or professional development resources.	• Reports /Publications • Training (one-way) • Conferences /Events (one-way)
Transfer of Knowledge: Engagement	• Involves the transfer of knowledge using cascade approaches i.e. key individuals being 'trained' in the matters to be disseminated. Those trained then train others where good practice cascades down from the top. As the word spreads, the practice is adopted by each level in the cascade until it ripples across the final level, the whole community of teachers.	• Coaching/ mentoring • Training (interactive) • Conferences /Events (interactive) • Networking (active participants)
Transformation of practice: Action	• Involves engagement of teachers in the process of transforming their assessment practices, often through action research. It emphasises that for real change, the individuals involved need to take more control of what they are being asked to do. They need to make sense of it through reflection and sharing with others until new ideas and processes become internalised.	• Action research (process of inquiry conducted by and for those taking the action) • Transformative model – combination of methods used in a strategic manner

Transmission efforts are widely used and messages can be circulated quickly and inexpensively. However, engagement is low and limited to the passive form of information gathering - where individuals are 'uncritical consumers of information'. Transfer methods are more engaging than transmission and involve cascading learning via peer-to-peer mentoring and coaching. However, effects can be negatively impacted due to the dilution of learning from person to person. At the other end of the spectrum are transformative methods, which involve active participants engaged in information generation and critical thinking and reflective practice to transform practices, often through action research.

KEY FINDINGS - DISSEMINATION METHODS USED BY SCHOOLS IN NORTHERN IRELAND

Key findings from the school survey and key stakeholders interviews have highlighted the dissemination methods that are currently being used by schools in Northern Ireland as well as describing those dissemination methods that schools are currently aware of, but not using, and those methods that schools are not aware of.

Although 'transmission of information' was a commonly used method by schools to disseminate learning (e.g. reading reports, publications, listening to and receiving information from seminars etc.), only a small minority rated transmission approaches as the most effective method. Results indicate that respondents preferred a more engaged form of dissemination in the form of 'transfer of knowledge' (e.g. cascade methods such as peer coaching) which respondents regard as the most effective dissemination approach. Just over one-third rated 'transformative' methods (e.g. action research) as the most effective dissemination approach. However, as transformative approaches were used by less than half of respondents, it was difficult for those respondents with no experience to conclude whether this is the most effective method.

Other key findings emerging from the survey include:

Motivations for engaging in dissemination activities:

- To improve the educational attainment of our pupils.
- To enhance professional development of teaching staff/build their capacity.
- To promote school improvement.

The responsibility for disseminating best practice:
- Half of all survey respondents reported that there is a person responsible for disseminating best practice in teaching and learning, with the majority indicating that that person is the Principal, Vice-Principal or Middle Managers.

Barriers inhibiting effective dissemination:
- High workload and subsequent lack of time and lack of funding (e.g. for substitute cover) were reported as the current barriers inhibiting effective dissemination of best practice in Northern Ireland.

Factors leading to effective dissemination:
- School leadership / management support.
- School ethos / culture regarding shared learning.
- Teacher attitude.

So What? Implications for the Education Structures in Northern Ireland

The aim of this research is to provide a comprehensive list of methods that are effective in sharing best practice in teaching and learning by and with schools. Whilst the research found a wide range of methods are being used by schools in Northern Ireland, it also clearly points to the need for more strategic coordination if these methods are to succeed in improving practice. This critical coordinated approach would be achieved through the development of a framework to relate dissemination goals with dissemination methods.

The final chapter presents how such a framework could be established and implemented and the associated implications for the education sector in Northern Ireland, and is structured in the following three parts:

- **Part 1: Establishing a Dissemination Framework for education in NI:** This section draws on the learning from other frameworks identified through the literature and makes recommendations for how a suitable framework should be developed in Northern Ireland.

- **Part 2: Testing the Dissemination Framework**: This section draws on the findings from testing the Dissemination Framework for education in NI with a small selection of schools.

- **Part 3: Implementing the Framework:** This section describes the key implementation drivers to be considered when using the proposed Dissemination Framework for education in NI.

Part 1: Establishing a Dissemination Framework – A Proposed Model

Based on learning from other frameworks and evidence from our online survey of schools and key stakeholder interviews, it is recommended that DE proceeds with establishing a Dissemination Framework for education in NI such as that proposed and outlined overleaf.

This proposed Dissemination Framework for education in NI advocates the need for dissemination to be pre-planned, focused, coordinated and developed in a strategic manner to ensure that effective solutions are identified, disseminated and taken up more widely. The Framework firstly promotes the need to create a climate of readiness for change and considers levels of diffusion of an innovation (innovators, early

adopters, early majority, late majority, and laggards). The Framework purposely aligns dissemination goals to methods, which when used together enhance the extent to which transformation occurs.

The proposed Dissemination Framework for education in NI aims to fit within existing structures i.e. promotes the process of self-evaluation and a culture of reflective practice and continuous improvement, as well as closely aligning with the new Learning Leaders strategy (2016)[2] which seeks to promote the dissemination of good practice and develop 'next practice'.

It is important to note that this proposed Dissemination Framework for education in NI is not designed to be overly prescriptive, but aims to provide guidance for the education sector so they have autonomy to select various methods available to access and disseminate best practice.

Proposed Framework for Dissemination
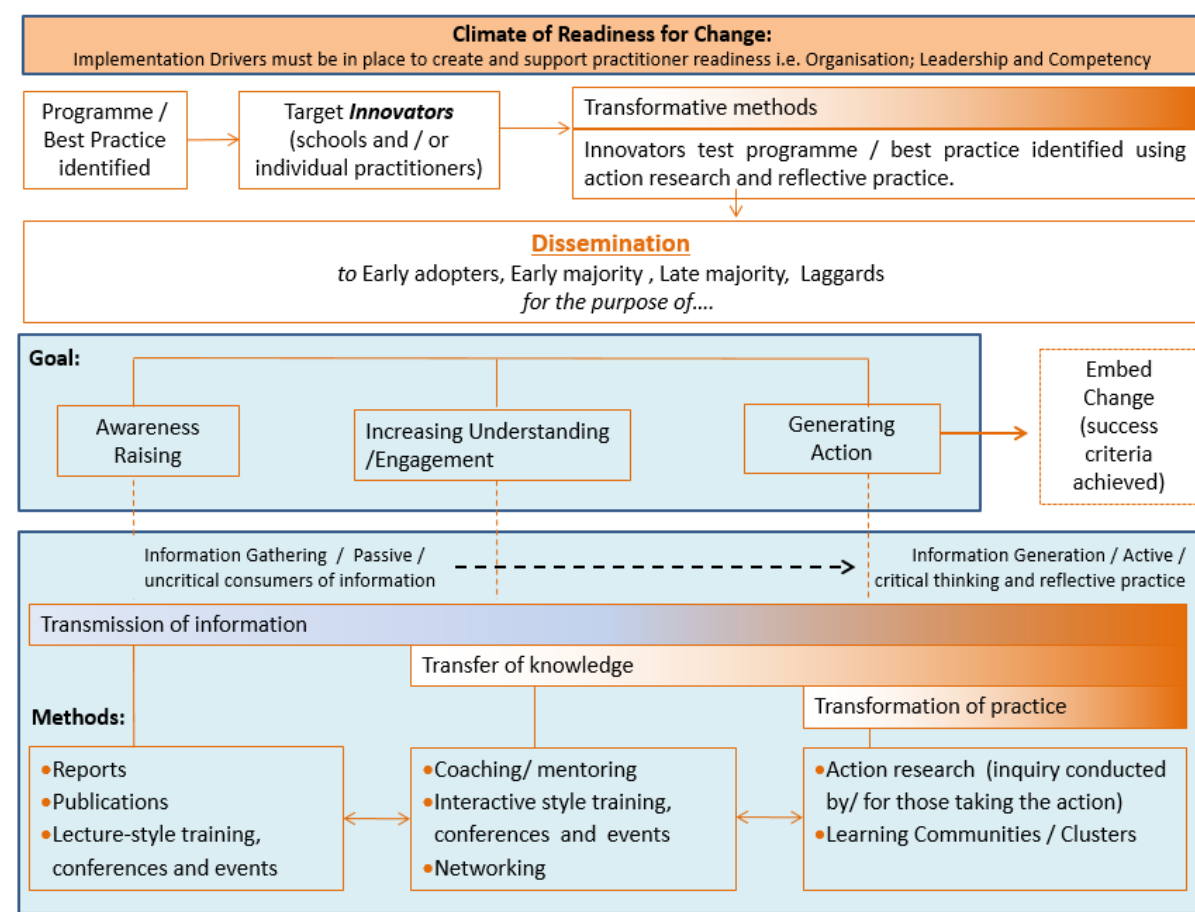
The key elements of the framework are described below:

(1) Identifying Best Practice

Best practice should be identified and endorsed by a credible source and validated before widespread dissemination can be justified. The best practice identified must have relevance to the intended audience, and address a specific school need/ priority.

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[2] Department of Education (2016) Lifelong Learning Leaders - A Strategy For Teacher Professional Learning' [Online] Available from https://www.deni.gov.uk/sites/default/files/publications/de/strategy-document-english.pdf

NB. As per our terms of reference, our research considers the methods used to disseminate best practice and assumes that this best practice has/will be identified by relevant bodies.

(2) Creating a Readiness for change

For an innovation (or best practice) to be adopted systems need to be ready to change and teachers need to be motivated to act in accordance with the change. To achieve this, it is important to be clear about who will benefit from the best practice / programme (end-users) and who would be likely to take up new approaches (potential adopters). End-users (schools/practitioners) should be involved and engaged at the outset, and throughout the process. This active engagement will engender a sense of ownership and uptake of the practice to be widely implemented.

The assessment of the climate of readiness for change is an underpinning feature of the framework and is central to the dissemination process. Three 'Implementation Drivers' must be in place to create and support practitioner readiness i.e. organisation, leadership and competency. It is important to note that the state of readiness may change quickly at any given point, therefore continually scanning and reviewing the climate during the dissemination process is vital.

(3) Target Innovators

The Framework considers end-users i.e. schools and/or individual practitioners as being either innovators and/or adopters of change. Within a school itself, practitioners can be both innovators and adopters of best practice. This is what makes inter-school sharing possible.

- School and/or practitioner as an 'Innovator' using transformation methods (such as action research and reflective practice) to test new ways of working within the school. If positive results ensue, this practice should then be validated and endorsed by Education and Training Inspectorate (ETI), through the inspection process and/or through the Education Authority (EA) School Development Service.

- School and/or practitioner as an 'Adopter' of practice that has been tested by 'Innovators'. This adoption process may involve schools firstly accessing information from EA/DE/ETI via transmission methods and if the best practice addresses a need (via self-evaluation and linked to the School Development Plan) the adopter school should actively engage in transfer and transformative methods.

(4) Select Dissemination Methods & Goals

Dissemination is an active process of transferring knowledge and embedding outcomes. In our Framework, dissemination methods are purposefully aligned with intended goals i.e. transmission approaches for the purpose of raising awareness, transfer approaches for increasing knowledge and promoting greater engagement and transformative approaches to generate an action leading to a change in practice.

(5) Embed Change

Dissemination is a continuous process involving adaptations along the way and the need to allow time for evaluation, reflection, and re-planning. This process will allow for the identified best practice to be adapted to suit the needs of schools and tailored in terms of application. The dissemination approach will be successful if

schools embed the best practice approach to such an extent that it becomes 'normalised' within the schools and encompassed within their daily teaching practice.

Part 2: Testing the Dissemination Framework

The proposed Dissemination Framework for education in NI was tested in six schools to include a spread of various school management types, sector and geography. The purpose of the school visits was to test what has been learnt from the research and to assess the implementation readiness of schools in terms of adopting the proposed framework.

We tested the following resources with the selected schools:

1. The proposed Dissemination Framework for education in NI (Ref: As above).

2. Two existing programmes with proven positive outcomes were mapped to the framework as examples i.e. Literacy & Numeracy KS2/KS3 CPD Project; and Delivering Social Change (DSC) Literacy & Numeracy Signature Programme (Figure 12 and Figure 13).

The proposed Dissemination Framework for education in NI was well received, highlighting that the framework provides a helpful 'logic' when considering the various dissemination methods available to schools. Encouragingly, some of the schools commented that this framework reinforces what they are already doing and fits with the school development plan process.

The mapping of two existing programmes identified that extensive dissemination activities are already being carried out. However, these activities are not carried out in a coordinated or consistent way across schools, therefore strengthening the case for a framework by which dissemination activities would be planned and coordinated, to generate the greatest impact. Discussions during school visits indicated that schools would welcome an applied version of the framework - to list the various dissemination activities planned for a particular programme at the outset of such a programme. It was agreed that, if issued by DE at the pre-planning stage of a programme, this would generate increased awareness of the various dissemination activities available to schools to engage in the learning and to help embed a new practice.

Part 3: Implementing the Framework

Implementation focuses on how to use innovations as intended and achieve the promised results in typical practice settings i.e. to bridge the gap between 'research/innovations' and 'practice'.

The implementation drivers, i.e. organisation, leadership and competency, underpin the success of the proposed Dissemination Framework for education in NI and represent systems that must be in place to effect and embed change. It is encouraging to note that DE's 'Learning Leaders' strategy reflects elements of these drivers. Given the importance of this strategy each of the implementation drivers have been mapped to the 'policy commitments' in the strategy (refer to shaded boxes). Therefore, **DE's 'Learning Leaders' strategy presents the vital <u>policy vehicle</u> to enable the proposed Dissemination Framework for education in NI**.

Key Recommendations and Next Steps

- The proposed Dissemination Framework for education in NI was well received by schools, highlighting that the framework provides a useful structure in the form of the '3T' approach (Transmission, Transfer and Transformation) when considering the various dissemination methods available.

- The proposed Dissemination Framework for education in NI reflects the research evidence which advocates creating a climate of readiness for change and the alignment of dissemination goals to methods which when used together enhance the extent to which transformation of practice occurs.

- DE should lead and support the Dissemination Framework, using the Learning Leaders strategy as the **policy vehicle** in which to enable the Framework.

- DE should coordinate with other relevant bodies (e.g. EA, ETI, CCEA, CCMS, CnaG, NICIE, and GTCNI) to help identify best practice in teaching and learning that exists in the education system and to promote the use of the Dissemination Framework to encourage knowledge transfer and collaboration between schools.

- Three implementation drivers **must be in place** to successfully embed the proposed Dissemination Framework for education in NI. These include: **organisation, leadership and competency**. Implementation drivers are integrated and compensate for one another i.e. weaknesses in one driver can be overcome by strengths in other components. However, if all three drivers are weak this will adversely affect the success of the dissemination framework. Implementation of the framework will, therefore, require the support and coordinated effort of all relevant bodies to ensure that organisation roles and functions are aligned to the identified best practice, that leaders fully support the process and incorporate the necessary implementation supports, and that staff competencies are developed to aid the uptake and dissemination of best practice.

- Implementation drivers are integrated and compensate for one another i.e. weaknesses in one driver can be overcome by strengths in other components. However, if all three drivers are weak this will adversely affect the success of the dissemination framework. Consequently, the framework will require a concentrated effort by all relevant education bodies and schools.

- The development of a future School Development Service within the Education Directorate of the EA provides the **operational vehicle** to support the implementation of the proposed Dissemination Framework for education in NI. As the new Service evolves, the coordination of dissemination activities and training in dissemination methods (e.g. peer-to-peer mentoring/coaching and team teaching strategies) should be an important role of the service.

1.Introduction and Background

This chapter describes the rationale for the research project, the strategic policy context and the environmental context within which the research took place. In doing so, it initially outlines the key trends within educational attainment in Northern Ireland in recent years and the key objectives of the research.

KEY TRENDS

Trends suggest that the performance of post primary pupils in Northern Ireland, relative to other OECD countries, has declined over time, highlighting the need to disseminate best practice to help support schools and improved educational outcomes.

In 2000 and 2003 Northern Ireland students had a score that was significantly higher than the OECD average in both literacy and numeracy. However results reported in 2006 and 2009 indicated that Northern Ireland's ranking had fallen and results in literacy and numeracy are not statistically different to the OECD average.

This trend is continuing, with results from the most recent PISA[1] survey (2012) suggesting that 15 year olds in Northern Ireland are being outperformed in international tests in mathematics, reading and science. In Northern Ireland the mean score for mathematics in 2012 was 487 compared to 494 in 2009, and lower than the OECD average of 494. Furthermore, only 10.3% of 15 year olds are performing at the highest level. This lags behind the OECD average of 13% and below the attainment level in some countries. Shanghai in China, the world's top performing education system, scored 613.

In terms of reading, Northern Ireland's pupils achieved a mean score of 498 – one point lower than in 2009, which was slightly higher than the OECD average of 496. Shanghai again came top with 570. In science Northern Ireland pupils achieved a score of 507, which is similar to 2009 results (511) and slightly higher than the OECD average of 501.

A priority for the Northern Ireland Executive, set out in the Programme for Government (PfG) (2011-2015), was to address the issue of persistent underachievement, particularly in areas of social disadvantage. Under Priority 2, '*Creating Opportunities, Tackling Disadvantage and Improving Health and Wellbeing*', the government outlines commitments to closing the gap in educational underachievement between those who are least and most disadvantaged, improving the participation of young people in education, employment and training and to improve literacy and numeracy levels among all school leavers. Additional support is targeted at underachieving pupils by developing proposals to significantly improve literacy and numeracy levels and thereby contribute to addressing multi-generational disadvantage.

The draft Programme for Government (PfG) for 2016-2021 is currently out for consultation, it is likely that DE will take the lead on the following four indicators; Improve educational outcomes; Reduce educational inequality; Improve the quality of education; and Improve child development.

RATIONALE FOR THE RESEARCH AND RESEARCH OBJECTIVES

A 2013 report from the Public Accounts Committee expressed concern in relation to these trends, and made the following recommendation:

> "While schools that serve disadvantaged areas face considerable challenges in raising attainment, some are clearly meeting these challenges more effectively than others. The Department should identify those activities that are specifically resulting in marked improvements in the progress of pupils from disadvantaged backgrounds. It should support the dissemination of these effective practices to those schools which are doing less well for their pupils."

In response to this the Department of Education (DE) commissioned the National Children's Bureau (NCB) to conduct research into the dissemination of best practice in Northern Ireland. The aim of the research assignment was to provide DE with a comprehensive list of methods that are effective in sharing best practice by and with schools.

The objectives of the research were to:

- identify and assess the effectiveness of current methods of disseminating best practice by and with schools; and
- identify alternative methods of disseminating best practice in other education systems and assess their applicability for use in Northern Ireland.

It is anticipated that the results from this research will be used to inform a wide range of activity aimed at ensuring effective programmes have a legacy and that there is a high level of awareness of good practice in relation to raising standards and increasing equity.

STRATEGIC POLICY CONTEXT

In 2013, the Public Accounts Committee report on **'Improving Literacy and Numeracy Achievement in Schools'[2]** emphasised the need to ensure systematic dissemination of best practice. A number of recommendations were outlined within this report, those specific to this research include:

- Recommendation: The large and persistent gap in literacy and numeracy attainment between pupils who receive free school meals and those who do not must not be allowed to continue. We recommend that the Department addresses this gap with greater urgency.

  DE response/action plan: Future programmes will focus on disseminating good practice identified by the Education and Training Inspectorate (ETI) in the teaching of literacy and numeracy and supporting pupils from disadvantaged backgrounds. *NB. ETI published its findings in its Survey of Best Practice in English and Mathematics in Post-primary Schools (October 2013) and organised two well-attended dissemination events. The report included case studies presented by the schools themselves with the aim of gaining the highest level of engagement. In addition, the following programmes have contributed to meeting the Committee's recommendation: the Education Authority (EA)'s CPD Project, which identifies leading practice in Literacy and Numeracy and Transition between Key Stage 2 and Key Stage 3; the EA's Delivering Social Change (DSC) Literacy & Numeracy Signature Programme which identifies leading practice to support pupils at risk of underachievement; and the ETI Promoting Improvement in English and Maths (PIEM) project which also identifies exemplars of good practice.*

- Recommendation: While the Committee acknowledges the work of ETI in the dissemination of good practice on literacy and numeracy, the continuing long tail of under-performance among pupils shows that the reach of good practice could be improved. The Committee recommends that consideration is given to improving the link between the findings from school inspection and the dissemination of good practice. In the Committee's view this would help to better equip our schools to deliver a quality service to its pupils and would add value by improving the educational outcomes of our pupils.

  DE response/action plan: DE and the EA have already extended the remit of ESaGS.tv[3] to include examples of good practice, not just in schools with high capacity for sustained improvement, but in any school or groups of schools where such practice is identified. *NB. Rather than focus on one specific school, programmes and case studies are now collated and developed on a theme basis related to ESaGS policy (e.g. effective use of data, school improvement journey). Good practice is described based on a wide range of schools – providing increased opportunities for Principals/teachers to identify what is suitable for their school and adapt accordingly.*

- Recommendation: In the Committee's view it is frustrating that good practice is already in operation in our schools but is not being shared for the maximum benefit of all schools and all pupils. The Committee recommends that the Department develops a more strategic, focused and coordinated approach to ensure that effective solutions are identified, disseminated and taken up more widely. In particular, it needs to do more to encourage and support local experimentation and innovation and to systematically identify and scale up effective models of teacher and school practice.

  NB. It is important to note that 'dissemination of good practice' is one of the five key actions identified in DE's recently published Learning Leaders - A Strategy for Teacher Professional Learning' (2016). Furthermore, recommendations emanating from this DE commissioned research advocate the need for a Dissemination Framework to be put in place which will provide a more strategic, focused and coordinated approach to disseminating best practice. This Framework must be supported by key implementation drivers i.e. organisation, leadership, and competency – described in Chapter 5.

DE's Corporate Plan (2012-2015) mirrors the PfG as it also reflects, in its two corporate goals, commitments to: 'Raising Standards for All' and 'Closing the performance gap'. The associated enabling goals are: developing the education workforce, improving the learning environment, transforming the governance and management of education.

In terms of collaboration and sharing good practice, the Corporate Plan specifically references the key action to *"Explore the opportunity to expand area learning communities to include primary schools and possibly also nursery schools"* and under Addressing Barriers to learning, one of the key actions relates to sharing best practice - *"Work with DES [The Department of Education and Skills[4]] to support specific programmes in support of literacy and numeracy, and share experience and develop good practice in addressing education underachievement in the context of the NSMC Literacy and Numeracy and Educational Underachievement Working Group"*.

DE's Every School a Good School (ESaGS): A Policy for School Improvement (2009) aims to raise the quality of pupils' achievements and standards so that every child will leave compulsory education with appropriate standards of literacy and numeracy. A key element of ESaGS is to identify more consistently the excellent

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[3] DE's ESaGS.tv (www.ESaGS.tv), driven by 'Every School a Good School' Northern Ireland's regional policy for school improvement, is a web based platform which is used to link all phases, sectors and library boards across Northern Ireland and as a tool used to share outstanding or very good practice highlighted in ETI reports and identified by other means.
[4] In the Republic of Ireland

practice that exists in schools, then to disseminate and embed it to raise standards in all schools and states that '*dissemination of good practice is the key to improvement and will be a central focus of policy on professional development*'.

DE's 'Count, Read: Succeed: A Strategy to Improve Outcomes in Literacy and Numeracy' (2011) aims to support teachers and school leaders, including governors, in their work to raise overall levels of attainment in literacy and numeracy among young people and narrow the current gaps in educational outcomes. The role of sharing best practice in raising standards of literacy and numeracy is evident throughout this strategy, to include the following commitments:

- To promote the effective sharing and embedding of excellent practice in literacy and numeracy across all schools by making this a central element of the support provided to schools for the raising of literacy and numeracy standards.

- Identifying, acknowledging and disseminating best practice that exists in so many schools, while ensuring that schools with less effective practice deliver improvements.

- To help schools raise standards in literacy and numeracy, guidance and support materials will be reviewed and updated to use developments in research and pedagogy to identify and disseminate best practice and use best practice to inform professional development and support.

- Guidance for teachers on a broad and balanced range of best-practice, evidence based approaches to teaching literacy and numeracy will be produced, disseminated and kept updated.

- Support will be provided for teachers that equips them with knowledge of a range of evidence based, best practice teaching approaches for developing literacy and numeracy.

- Schools will need to support the development of their staff, including sharing best practice within and beyond the school.

- Through the ETI inspections, DE will report upon successful approaches to enable best practice to be identified and shared and work closely with providers of initial teacher education and the statutory education bodies to disseminate good practice.

There have been a number of initiatives to raise the standards achieved by pupils in literacy and numeracy, such as the current Literacy & Numeracy KS2/KS3 CPD Project; DSC Literacy & Numeracy Signature Programme, Promoting Improvement in English and Maths (PIEM) project, Achieving Belfast & Achieving Derry Bright Futures; Extended Schools Programme; and Pupils Emotional Health and Wellbeing Programme. The delivery of these programmes has been instrumental in highlighting some good practices to tackle educational underachievement in a number of schools. The challenge remains to ensure the widespread dissemination of best practice approaches and the uptake of these to enable schools to improve their performance and help pupils reach their full potential.

In **2015**, DE issued a **briefing paper to the Committee for Education** (in advance of the oral briefing on 14 October 2015) which identified a number of issues regarding good practice i.e. existing good practice is not being fully utilised and potential partnerships and links between professionals are not utilised to their full potential. Furthermore, it was reported that excellent practice is not always accessible and is not shared widely enough for the benefit of the system as a whole. The Committee asserted that the primary focus of teacher professional learning for the next ten years should be on a collaborative approach to the

development and delivery of training which is practice-led, builds capacity and expertise across the system and makes best use of increasingly limited resources.

In response to this, DE's new strategy *Learning Leaders - A Strategy for Teacher Professional Learning'* *(2016)[3]*, identifies the following key elements of a teacher professional learning system:

- Development of a coherent career-long framework for teacher professional learning underpinned by revised teacher competences;

- Planned opportunities for teachers to work collaboratively to share best practice through learning networks; and

- Nurturing and building leadership capacity at all levels starting at initial teacher education.

The strategic vision for teacher professional learning is: *"Every teacher is a lifelong learning leader, accomplished in working collaboratively with all partners in the interests of children and young people"*

One of the five key actions arising from this strategy is a focus on dissemination of good practice i.e.

- **Development and dissemination of good practice** - supporting the identification and harnessing of innovative practice in professional learning already in the system in order to effect improvement and develop 'next' practice.

The remaining related actions include:

- **Teacher Professional Learning Framework** - empowering teachers to build on their strengths and access additional support, through combinations of learning approaches geared towards personal learning and career preferences and reflecting the needs of their pupils.

- **Building Professional Learning Communities** - supporting closer collaboration between practitioners, schools and school clusters and professional learning providers.

- **Building Leadership Capacity -** strengthening the current support and professional learning for school leaders

- **Engagement -** engaging with practitioners and other stakeholders across the system on the actions arising out of this strategy.

THE CONTEXT WITHIN WHICH THE RESEARCH TOOK PLACE

This research took place at a time of flux and uncertainty with regard to government and education structures, as summarised below. This may determine the extent to which the results of this research and its recommendations regarding the implementation of the proposed Dissemination Framework can be taken forward.

- The Northern Ireland Assembly Elections took place in May 2016 with the appointment of a new Minister later that month.

- A new draft Programme for Government (PfG) 2016-21 is currently being consulted upon. This will outline priority areas and resources and set the direction of travel for the Executive.

- The EA has come to the end of its first year of operation and is undergoing a period of significant structural review which is impacting the extent to which external facilitation for disseminating best practice is currently provided. For example the former five Curriculum Advisory and Support Services and the Regional Training Unit have been replaced by an interim single School Development Service with reduced resources available. Consultation is imminent regarding development of a future enduring School Development Service within the Education Directorate of the EA.

The remainder of this report is structured as follows:

- Chapter 2 outlines the methodology used to conduct the research

- Chapter 3 presents the findings from the literature review and key stakeholder interviews in relation to the theory and practice of dissemination methods

- Chapter 4 explores dissemination methods in Northern Ireland, drawing on the findings from the key stakeholder interviews and the school survey

- Chapter 5 describes the implications and recommendations of this research in three parts: part 1 proposes establishing a framework for dissemination of best practice, part 2 presents findings from the testing of the framework on a small sample of schools, whilst part 3 outlines considerations in relation to the implementation of the proposed framework.

2. Methodology

This chapter outlines the methodological approach used to conduct this research, detailing the methods used at various phases and the participants involved.

NCB's APPROACH

A mixed-method approach was adopted to deliver this research project, as per Figure 1 below. The project was overseen by a Steering Group, including representatives from: Standards and Improvement Team, DE; Analytical Services Unit, DE; Education and Training Inspectorate (ETI); Council for Catholic Maintained Schools (CCMS); and the Education Authority (EA). This group provided strategic direction to the research team and had a key role to play in critically examining the research findings and implications in terms of potential recommendations.

Figure 1: Overview of Methodology
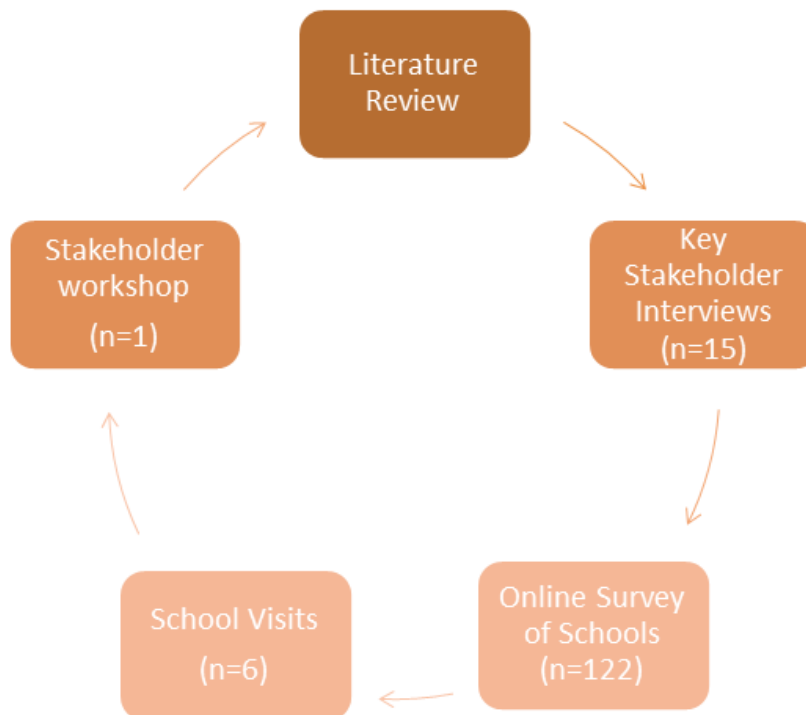
A brief description of the methodology employed to undertake this research project is provided overleaf.

Table 1: Summary of Methodology

Research Activity	Approach
Literature Review	Our approach involved investigating dissemination methods identified by DE and other key stakeholders, reviewing academic reports and carrying out simple and advanced web searches – all to help identify dissemination methods and their implementation. **Output:** A total of 50+ web sources, research and policy documents were reviewed and included within the scope of the literature review.
Key Stakeholder Consultations	DE identified a number of key stakeholders to be consulted as part of the research project. The topic guide was semi-structured to allow for a more open and in-depth exploration of various dissemination methods used by and with schools. **Output:** The interviews took place between January and March 2016 to include 15 stakeholders, representing the following eleven organisations. 1. Comhairle na Gaelscolaiochta (CnaG) x1 2. Council for Catholic Maintained Schools (CCMS) x2 3. Council for the Curriculum, Examinations and Assessment (CCEA) x1 4. Department of Education, Standards and Improvement Team x1 5. Department of Education, Statistics and Research Team x1 6. Education and Training Inspectorate (ETI) x1 7. Education Authority (EA), School Development Service x3 8. General Teaching Council for Northern Ireland (GTCNI) x1 9. DSC Signature Programme for Literacy and Numeracy x2 10. Northern Ireland Council for Integrated Education (NICIE) x1 11. Ulster Teachers' Union (UTU) and NI Teachers Council (NITC) x1
Online Survey of Schools	Based on the findings from the literature review and the key stakeholder consultations, an online questionnaire for schools was devised. The Steering Group members worked closely with the researchers to agree the structure and wording of the survey. The survey was piloted with a small number of schools. The final survey link was emailed to *all* nursery, primary, post primary schools and special schools. Respondents were asked to complete the online survey from a whole school perspective and encouraged to discuss the questions with other staff. **Output:** The survey was issued to all schools (n=1,179) in Northern Ireland, generating a response rate of 10% (n=122) with a representative sample gained. The survey captured an overview of current practice, the extent to which various dissemination methods are adopted by schools and the effectiveness of methods.
School Visits	As part of the online survey, schools were asked if they would be willing to take part in a follow-up visit. The purpose of the school visits was to assess the 'real-world' impact of adopting methods that are effective in sharing best practice by and with schools. This involved testing what has been learnt from the research and putting this into practice to assess the implementation readiness of schools. **Output:** Based on those that 'opted-in' to the school visit, a total of six schools were selected to include a spread of various school management types, sector and geography.
Stakeholder Workshop	Steering Group members and key stakeholders consulted were invited to take part in a workshop. The workshop presented key research findings and tested the proposed implementation process for the dissemination of best practice in the form of a Dissemination Framework. **Output:** A total of 9 stakeholders actively engaged in the workshop discussions.

For the purpose of this report, the terminology 'best practice' is used. It is understood that practitioners may also be refer to this as 'good practice', 'effective practice', 'leading practice', 'innovative practice' and/or 'next practice'.

3. Key Findings: Dissemination Methods in Theory and Practice

Based on the literature review and key stakeholder consultations, this chapter presents a definition of dissemination and outlines the various methods used to identify and disseminate best practice.

The approach used involved the alignment of dissemination methods according to the intended outcomes, which reflect an increasing scale in terms of engagement i.e. transmission for the purpose of raising awareness (low engagement), transfer of knowledge for increasing understanding (medium engagement), and transformation for the purpose of generating change and embedding new practice (high engagement).

DISSEMINATION THEORY & PRACTICE

Dissemination Defined

Dissemination is the act of spreading information knowledge and opinions widely.

The BIG Lottery Fund's definition of dissemination introduces the concept of dissemination for the purpose of leading change: *"…the process of communicating your research findings to stakeholders so that the evidence can be used to lead change"*.

The Australian Learning and Teaching Council (ALTC) emphases the importance of a planned and strategic approach to dissemination and have put forward the following definition: *"Dissemination is the planned process of understanding potential adopters and engaging with them throughout the life of the project to facilitate commitment to sustained change".*

Dissemination has also been described by authors as "*an active approach of spreading evidence-based interventions to the target audience via determined channels using planned strategies"* (Rabin et al, 2008)[4].

The ultimate purpose of dissemination is for the intended audience or target users to take up or adopt an innovation, information, or resources (Fincher, 2000[5]).

DE is committed to ensuring effective programmes have a legacy, consequently there is a need for a more coordinated, systematic and strategic approach to dissemination.

Identifying Best Practice

Important note: As per the terms of reference for this research, best practice is not identified. It considers the methods used to disseminate best practice and assumes that this best practice has/will be identified and endorsed by relevant bodies.

Prior to a strategic dissemination effort, new teaching practices and initiatives that constitute best practice must be identified and based on robust evidence (tried, tested and evaluated) before widespread dissemination and full implementation can be justified. The emphasis should be on the dissemination of practice where it informs changes to pedagogy around the engagement of the pupil to improve outcomes.

> *"We need to make sure that it is tested practice that we are looking at, not just kneejerk reaction to the latest phase or the latest flame"* [Key Stakeholder]

"Getting programme authenticity [is important]… getting the best and making sure then that the best is disseminated. We shouldn't be peddling anything that doesn't have a proven impact" [Key Stakeholder]

"Sometimes practitioners will feel that they have got something that is good. It may feel right intuitively but it doesn't actually measure up when assessed or evaluated. So I think that practitioner views of what works are important but I think that is to be counterbalanced by what does research indicate, what is the empirical base that would give some validity to this as we move forward" [Key Stakeholder]

"The fundamental question is not how to disseminate best practice but what should be considered as best practice. Once that is understood and agreed then the chances of teachers buying in to the process and believing in the process and valuing it as a worthwhile investment of their time and energy goes up." [School – Online Survey Respondent]

"As a school Principal I find that most teachers want to improve their practice but they have to believe that if they make a change that it will work in their classroom" [School – Online Survey Respondent]

According to DE's *Count, Read: Succeed Strategy*, through the ETI inspections, DE will report upon successful approaches to enable best practice to be identified and shared. It will also work closely with providers of initial teacher education and the statutory education bodies to disseminate good practice.

ETI and the EA's School Development Service are well placed to identify best practice, in collaboration with schools, due to their experience of observing a range of teaching styles across Northern Ireland and can therefore recognise professional competence through a process of benchmarking.

One of the five key actions arising from the Learning Leaders strategy is a focus on supporting the identification and harnessing of innovative practice in professional learning already in the system in order to effect improvement and develop 'next' practice. DE intend, as resources allow, to commission 'pathfinder' projects from the EA and the Higher Education Institutions (HEI) designed to build 'next' practice. These may look at issues such as coaching and mentoring, the role of the teacher tutor, partnership arrangements, peer learning and support and leading and managing school improvement in challenging circumstances. Pathfinder projects will be subject to rigorous evaluation to identify lessons learned before being considered for wider implementation.

DE, ETI and EA also work on a North-South basis to share best practice and make maximum use of resources. For example, ETI has worked with inspectors from the Republic of Ireland to identify ways to promote and improve good standards of literacy and numeracy in schools in both jurisdictions and the EA recently facilitated a North South project sharing practice for Irish Medium Education.

DE and the Department of Education and Skills (DES) Ministers agreed that officials should work together on the development of a proposal for external assistance to progress teacher professional development in the area of educational underachievement and to cover the dissemination of best practice in literacy and numeracy from the work of the Inspectorates, both north and south of Ireland.

Co-operation Ireland has been awarded the contract to lead the North South Underachievement Practitioners Engagement Project. This project was launched in February 2016.

A North South oversight committee, comprising of DE and DES officials, has been established to oversee and manage the project. Co-operation Ireland has also established an advisory group which includes key education stakeholders from both north and south of Ireland.

The expected outputs from the project are:

- An all island programme of dissemination of best practice in literacy and numeracy.

- An all island programme of teacher professional development in relation to the management of educational underachievement.

- Two engagement events for teachers North and South on educational underachievement.

- The development of effective stakeholder engagement models and recommendations on the establishment of cross border networks of schools, as part of the programmes as described.

- A published report capturing the learning and feedback from participants in the engagement events and recommendations for future dissemination practice.

- It is envisaged that all work will be completed and the final report submitted by July 2017.

Although the ETI inspection process is one of the key mechanisms for identifying best practice, due to resource constraints and a risk based approach to inspection, some schools have not been inspected in seven years. The system is reactive, in response to inspections, as opposed to supporting schools in a proactive way to identify and implement new approaches to improve outcomes for pupils.

> *"…because of funding pressures, there is too much of a focus on just supporting the failing as opposed to encouraging and drawing out information from the schools that are performing very well so that that can be shared"* [Key Stakeholder]

Identifying best practice is also carried out by other relevant education bodies i.e. the Council for the Curriculum, Examinations and Assessment (CCEA), the Council for Catholic Maintained Schools (CCMS), the Northern Ireland Council for Integrated Education (NICIE), Comhairle na Gaelscolaiochta (CnaG) and the General Teaching Council for Northern Ireland (GTCNI). These organisations observe and monitor school performance. In cases where schools show improving trends and educational improvement, further contact is made to identify the strategies that have been employed to achieve improvements, which can be disseminated to other schools. Regular communication with schools leaders and school inspection visits contributes to the development of a close working relationship, which aids in the identification of good practice.

Examples of alternative practice

Scotland alignment of inspection service with school support service
Scotland has aligned the Scottish Inspection Service with the school support service within a new amalgamated structure, under 'Education Scotland'. Revised inspection arrangements place a stronger focus on: school self-evaluation; analysis of a wider range of outcomes; and a wider range of "continuing engagement" or "improvement visits" carried out by senior education officers who work within Education Scotland. This engagement aims to offer support more directly or to capture and publish innovative or creative work noted on inspection.

Networking and area based inspection

The report, School Inspection in a Polycentric Context (2015)[6], endorses school and stakeholder networking and area based inspection in Northern Ireland. The research concludes that networks of educational organisations and institutions guided and advised by ETI can achieve progress and improvement across a range of areas which is impossible to envisage any single organisation acting alone being capable of. The report notes that networking has brought about increased cooperation between agencies, continuous professional development for teachers, curriculum planning and sharing and inter-agency cooperation transcending traditional boundaries. Moreover the report also suggests that networking of this type closely linked to area based or polycentric inspection can contribute significantly to enhanced educational outcomes for students.

NB. The report is based on research undertaken for an Erasmus + project which evaluated the impact of school networking linked to area based or polycentric inspection in four European countries – Northern Ireland, Bulgaria, the Netherlands and England. The element of the research focused on West Belfast where the West Belfast Partnership Board brings together the schools, training agencies and other education, community and youth services into an active network.

Recommendations:

- Best practice should be identified and endorsed by a credible source and validated before widespread dissemination can be justified i.e.

  – For schools to devote time and effort to embedding a new practice, it must be <u>endorsed</u> from a <u>credible</u> source. Consequently, there is a need for adequate resources allocated to the inspection process and/or to the EA School Development Service to visit, observe and support schools in the identification and <u>validation</u> of best practice.

  – The best practice identified must have <u>relevance</u> to the intended audience, and be able to be implemented by schools to address a specific school need/ priority.

- Schools are inundated with information, which limits the effectiveness and dilutes the impact of various communications relating to best practice. Principals have to quickly react to the information received, giving it a priority depending on the needs and circumstances of the school. To support Principals in this filtering process, DE needs to coordinate the identification of best practice and signpost this to schools by tailoring the message to the target audience, ensuring that all relevant schools are included in the communication.

Dissemination Methods

Literature to include both dated and more recent academic research all suggest a tiered system when considering the various dissemination approaches and methods, with the emphasis towards increasing capacity for transformative practice.

- Eraut (1994)[7] identifies three contexts in which professional knowledge is acquired: the academic context; institutional discussion of policy and practice; and practice itself.

- Gravestock (2002)[8] explored a model of dissemination that uses an initial stage for awareness, followed by knowledge and finally dissemination for use, and referred to active and passive end-users.

- King, H. (2003)[9] discusses three objectives of dissemination: dissemination for the purpose of awareness, understanding or action.

  - Awareness: the objective of dissemination is focused on raising the awareness of the target audience and end-users of the project information, innovation, or resource. The communication is almost always one-way, directed from the disseminator to the intended audience.

  - Understanding: this objective of dissemination builds upon raising awareness by not only informing the end-users about the innovation or resource but also about educating them and increasing their knowledge so that they may take up the innovation themselves. King (2003) describes two types of dissemination that assist in improving the understanding of the target audience:

    o Active dissemination involves the disseminator engaging more actively in the dissemination and information provision process via activities, such as events, workshops, presentations, etc.

    o Passive dissemination requires the disseminator to provide accessible information to the target audience so that the end-users may retrieve the information when necessary, such as websites, libraries, and web-based archives and catalogues, resources, etc.

  - Action: this objective of dissemination is characterised by the uptake of information or a particular innovation which results in a change of practice and possible adaptations to the original innovation or resource to meet the needs of the end-user in different contexts. Dissemination of information and resources is far more active and engaged; it is a continuous two-way process from the outset, rather than merely occurring at the end of a project. Such a process involves end-users at critical stages of the project and requires considerable pro-activity, support and follow-up to the end-user. Dissemination strategies for this objective include activities, such as events that create a community of practice.

- Grundy and Robison (2004)[10] single out three interconnected purposes of professional development: extension, growth and renewal. Extension is discerned through introducing new knowledge or skills to a teacher's repertoire, growth is achieved through the development of greater levels of expertise and renewal is attained through transformation and change of knowledge and practice.

- Kennedy (2005)[11] defined three methods of professional development: transmission methods which give little opportunity for teachers to take control over their own learning; transformation methods that integrate several different types of methods to provide a strong degree of professional autonomy and give teachers the power to determine their own learning pathways; and transitional which is compatible with either the transmission of transformative models (e.g. coaching/mentoring).

- Kryvonis (2013)[12] set out four metaphors to describe current approaches to the continuing professional development of teachers in the USA: retooling (learning and development of new skills), remodeling (modifying existing practices to ensure that teachers are compliant with government change agendas – teachers as uncritical consumers of expert knowledge), revitalising (professional renewal through opportunities to rethink and review practices and in so doing become a reflective practitioner) and reimagining (professional development networks which create opportunities for teacher learning and transformation).

- Tabak et al (2013)[13] describes dissemination as the active approach of spreading evidence-based interventions (EBIs) to target audiences via determined channels using planned strategies. The authors describe 'Implementation' as the process of putting to use or integrating EBIs within a setting - the resulting action/change.

- Patterson and Connor[14] suggest a series of milestones along the process of change that sit within three phases: Preparation; Acceptance; Commitment. Failure to achieve one of these milestones can be as a result of: failure to make meaningful contact, inadequate awareness, poor understanding, negative perception, rejection, adoption fails.

- Realising and Applied Gaming Eco-system (RAGE) (2015)[15], funded by the European Union's Horizon 2020 research and innovation programme, developed a dissemination and communication strategy which is driven by exploitation – actual usage of results - and not limited to raising awareness. This approach requires a clear vision of the impact to be generated along with a coherent definition and interaction of target groups, messages and channels to accelerate the path from awareness to impact (i.e. awareness, knowledge, willingness, commitment, action, results and impact).

Based on a review of literature and key stakeholder consultations, a tiered system has been adopted to describe the levels dissemination, reflecting an increasing scale in terms of engagement i.e. transmission for the purpose of raising awareness (low engagement), transfer of knowledge for increasing understanding (medium engagement), and transformation for the purpose of generating change and embedding new practice (high engagement).

Table 2: Tiered Dissemination System

Purpose of Dissemination	Dissemination Approach	Brief Description	Dissemination Activities
Awareness raising	Transmission	• Involves telling teachers about an initiative/best practice through policy documents or professional development resources.	• Reports /Publications • Training (one-way) • Conferences /Events (one-way)
For increasing understanding /engagement	Transfer	• Involves the transfer of knowledge using cascade approaches i.e. key individuals being 'trained' in the matters to be disseminated. Those trained then train others where good practice cascades down from the top. As the word spreads, the practice is adopted by each level in the cascade until it ripples across the final level, the whole community of teachers.	• Coaching/ mentoring • Training (interactive) • Conferences /Events (interactive) • Networking (active participants)
For action / generate change	Transformative	• Involves engagement of teachers in the process of transforming their assessment practices, often through action research. It emphasises that for real change, the individuals involved need to take more control of what they are being asked to do. They need to make sense of it through reflection and sharing it with others until new ideas and processes become internalised.	• Action research (process of inquiry conducted by and for those taking the action) • Transformative model – combination of methods used in a strategic manner

It is important to note that the concept of 'transformation' is not akin to implementing one specific method per se, but will require a combination of approaches as part of a coordinated and strategic dissemination plan.

(1) Transmission Method

Traditional approaches to the dissemination of educational research involves telling teachers about an initiative/best practice i.e. *'transmission approach'* - where researchers gain insights into classrooms and learning and then attempt to communicate those insights to teachers as knowledge.

Traditional transmission-based methods largely involve the dissemination of messages via reports, professional development resources, publications/teaching materials, policy documents and online platforms. These resources are aligned to a passive form of information gathering and learning.

Training, delivered in a top-down manner, is another transmission-based method. It typically takes place off-site and facilitated by an expert in a lecture-style delivery of ready-made ideas on teaching methods that are imparted to teachers for them to implement.

Although training is an effective means of introducing new knowledge, training via lecture-style conferences, seminars and events can result in attendees being passive recipients of information and it is difficult to assess how this new knowledge is used in practice, if at all, when teachers return to their school setting. Kennedy (2005) refers to the training model as generally 'delivered' to the teacher by an 'expert', with an agenda determined by the deliverer and the participant placed in a passive role. Hoban (2002)[16] also suggests that in terms of the relative power of stakeholders the training model provides an effective way for dominant stakeholders to control and limit the agenda, and places teachers in a passive role as recipients of specific knowledge. Such lecture-style teaching has proved unpopular with teachers, who tend to prefer more active and practical styles of learning (Edmonds and Lee, 2002)[17]

Gardner et al (2008) states that approaches to dissemination which involve telling teachers about an initiative through policy documents or professional development resources, can suffer from considerable drawbacks. For example, they may ignore the importance of the often enthusiastic engagement of teachers in making the initial, pilot development successful. Teachers 'being told' about such an initiative, without experiencing the participation that was a feature of the pilot, are not likely to adopt the changes with the same commitment. In such circumstances a signal failure to recognise that the learning process has to be the same for the first person as the last has meant that many attempts to scale up or roll out innovations in assessment have had only limited success.

(2) Transfer Method

The transfer of knowledge using cascade learning methods involves key individuals being 'trained' in the matters to be disseminated. Those trained then train others where good practice cascades down from the top. As the word spreads, the practice is adopted by each level in the cascade until it ripples across the final level, the whole community of teachers.

It is a more sophisticated model of 'telling teachers' and can achieve success if they engage the teachers in the practices as soon as possible, encouraging them to create and tell their own stories of practice and has the advantage of peer-to-peer dialogue. The problems encountered and the solutions to them are shared, leading to more secure adoption than the direct transmission model may achieve.

According to the Analysis and Review of Innovations in Assessment (ARIA) project (Gardner et al, 2008), the cascade model of dissemination is widely used in the UK. For example, in England the cascade model was the central approach taken to the dissemination of innovative practices at Key Stage 3 (Stobart and Stoll et al, 2005)[18]. This involved centrally prepared materials used to 'cascade' the training to consultants, who then trained those teachers who attended the training. It was expected that a minimum of two teachers from each school would attend the training sessions. These teachers received the materials which they were expected to disseminate in schools, with the help of the consultants who would visit pilot schools to work with teachers. There is some evidence of dissatisfaction with reliance on cascade training. These primarily concerned the lack of time and opportunity to cascade training to all staff and develop practices and the difficulties conveying the ideas to other teachers, along with the dilution of impact further down the cascade.

Knowledge can be cascaded using two different coaching and mentoring formats i.e. novice/experienced teacher (hierarchical) and/or peer-to-peer (equal partners). Key to the coaching/mentoring model is that professional learning can take place within the school context and can be enhanced by sharing dialogue with colleagues. The process of observation and feedback is an integral part of coaching/mentoring and facilitates dialogue and exchange of ideas and practices in the context of secure and trusting relationships.

It is important to note that the coaching/mentoring model can support either a transmission (where teachers are initiated into the status quo by their more experienced colleagues) or a transformative approach (where the relationship provides a supportive but challenging forum for both intellectual and affective interrogation of practice) to professional development (Kennedy, 2005).

DE's Learning Leaders Strategy proposes that all teachers will have opportunities to develop specialist knowledge and skills in specific areas supported by coaching and mentoring skills to allow them to share outstanding practice with others.

Novice/experienced coaching/mentoring

The coaching or mentoring relationship can be hierarchical, for example the novice/experienced coaching/mentoring is where the experienced teacher initiates the novice teacher into the profession and/or in the new best practice approach.

Peer-to-peer coaching/mentoring

Peer-to-peer coaching/mentoring involves a mutual and reciprocal approach during which both teachers have the opportunity to observe and to be observed and give and receive feedback. The aim is to provide support and to critically evaluate teaching and learning methods in order to improve teaching skills and improve student learning.

Many teachers are likely to be more comfortable discussing their practice with peers than with senior management, where issues surrounding performance management may hinder honest and open discussion (Kennedy, 2005). A supportive, blame-free environment that encourages and facilitates professional dialogue, and provides opportunities to extend and experiment with new practice can further the benefits of peer collaboration and support (Eraut, 2001)[19].

(3) Transformative Method

The Global partnership on New Pedagogies for Deep Learning (2012) highlights that one of the fundamental barriers to the development of 21st Century skills is the inadequate dissemination of new pedagogical models that foster deep learning and the inadequate development of ways of measuring and assessing deep learning.

Literature highlights the move towards the promotion of transformation (deep learning) rather than transmission approach to professional development recognising that improving practice involves changing habits, not adding knowledge.

> *"We have assumed that the "problem" is that teachers don't know enough, and so we have herded them into rooms to hear experts supply the missing knowledge, and then we have assumed that with their deficits in knowledge rectified, teachers will be more effective. It hasn't worked because the diagnosis is wrong. Teachers don't lack knowledge. What they lack is support in working out how to integrate these ideas into their daily practice, and this takes time, which is why we have to allow teachers to take small steps."* (Wiliam 2014).

Gardner et al, (2008) state that this method involves the engagement of teachers in the process of transforming their practices, often through action research to move teachers from a purely information-gathering stance (transmission) to information generation focused on the critical and active use of information (transformation). It emphasises that for real change, the individuals involved need to take more control of what they are being asked to do.

Action research

Action Research can be defined as *'the study of a social situation, involving the participants themselves as researchers, with a view to improving the quality of action within it'* (Somekh).[20] Research and a detailed review of literature carried out by Noffke and Somekh (2009)[21] highlights that rather than research being a linear process of producing knowledge which is later applied to practice settings, action research integrates the development of practice with the construction of research knowledge in a cyclical process.

Riel and Rowell (2016)[22] also describe action research as an iterative, cyclical process of reflecting on practice, taking an action, reflecting, and taking further action. Therefore, the research takes shape while it is being performed. Greater understanding from each cycle points the way to improved practice.

Teachers can use the peer-to-peer coaching process to conduct action research and can engage with partners (between teachers, academics and other organisations). In this situation, a teacher formulates a set of hypotheses about classroom practices and develops a plan to test them by asking a colleague to observe and take notes. Later, the colleagues discuss and analyse the data. Some teachers have kept reflective journals of their findings over time. The focus is on 'enquiry' and identification and implementation of relevant research activities rather than relying on externally produced research, promoting greater capacity for transformative practice.

Action research can have a greater impact when conducted by and/or shared with learning communities where the sum total of individual knowledge and experience is enhanced through collaborative networks and therefore contribute to increased levels of transformation. Of course, this will be dependent on the

motivations and experience of individuals within the learning community – whether as a passive observational experience or a positive and proactive experience.

The collective learning community supports discussion, reflection and debate between various stakeholders in education, which might lead to the new knowledge and enquiry and ultimately transformative practice.

Morris et al (2003)[23] claim that linking internal school reform networks and projects and external teacher networks that focus predominately on enhancing teachers' pedagogical knowledge can provide the transformative power to alter professional development and teacher learning in powerful and sustainable ways.

Underpinning research and action research led by the Higher Education Institutions (HEI) is one of the supporting elements of DE's Learning Leaders strategy (i.e. teachers at all stages of their careers will have opportunities to develop their skills in action research, through closer partnership arrangements between schools and the EA, HEIs and GTCNI).

Examples of Action Research in NI and elsewhere

Northern Ireland
GTCNI developed a **Research Lesson Study (RLS)** pilot project, in collaboration with Queen's University Belfast, in over 30 schools. GTCNI have held two dissemination conferences in 2011 and 2012 to share the experiences of the schools involved. *Approach:* (1) Choose a group of colleagues who want to reflect and learn, (2) clarify a focus of observation, (3) plan the lesson together and teach, observe (4) Discuss, reflect and improve. Characteristics of the model: collaborative planning, critical reflection on teaching, leading to improvements in pupils' learning. Schools have overwhelmingly found the work rewarding for teachers and in terms of improved learning. Feedback from one participating case study school highlighted the following benefits: RLS has the ability to 'slow down' the teaching situation to enable teachers to observe the complexity of the classroom. Furthermore, the professional learning during the RLS process could be then applied by teachers in other classroom situations i.e. the lessons and skills learned were transferable. This professional learning could also be disseminated to all the teaching staff and used as an ideal and natural platform for whole-staff development.

England
The Education Endowment Foundation's (EEF) Teacher Effectiveness Enhancement Programme (TEEP) is an action research programme to support teachers to improve their classroom practice. Since its inception the programme has grown steadily in terms of the numbers of staff trained and the variety of training models offered. Lead practitioners have a clear objective to develop practice, stimulate professional dialogue and reflection and encourage other practitioners on their learning journey. Independent evaluations have been carried out by Warwick University, York University and London Institute, highlighting the merits of the programme. All three reports conclude that the training positively transformed the way teachers behaved in the classroom. They describe increased engagement of pupils in their learning, improved behaviour in lessons, increase in active learning by pupils, increase in higher level thinking and improved attainment amongst their findings[24].

National Strategies' Leading Teachers Programme
Research investigating the National Strategies' Leading Teachers Programme (Hadfield, Jopling and Emira, 2011), of which Lesson Study was a key element, showed that those schools using this approach

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(among others) out-performed a comparison group in both English and Mathematics. The Education Endowment Foundation (EEF) note that although there is evidence that Lesson Study could have a positive impact in English schools, it is not yet enough to justify scaling it up.

As a result, EEF have commissioned an evaluation of this approach using a randomised controlled trial involving 160 schools. The impact of Lesson Study will be tested through pupils' literacy and numeracy outcomes at Key Stage 2. The evaluation is set up as an effectiveness trial. Effectiveness trials aim to test whether an intervention can work at scale in a large number of schools. The evaluation report will be published in Spring 2017.

Ireland

Educational Action Research in Ireland (EARI) is an example of a small scale project where a number of teachers have collaborated to engage in action research and to disseminate findings via a dedicated website and blog. The teachers acknowledge the ever-increasing interest that now exists in practitioner based research and action research. EARI aims to explore the appropriateness of self-study approaches to action research for practitioners. EARI's network for action researchers is called Network for Educational Action Research in Ireland (NEARI).

4. Key Findings - Dissemination Methods used in Northern Ireland

This chapter presents the findings from the online survey of schools and reflects feedback from the key stakeholder consultations. Findings are categorised as follows:

- Profile of School and Respondent.
- Motivations for engaging in methods used to disseminate best practice.
- Responsibility for disseminating best practice.
- Methods used to disseminate best practice by and with schools.
- Barriers inhibiting effective dissemination.
- Factors leading to effective dissemination.

Annex I provides a description of the various dissemination methods used, the application of these methods and relevant examples.

KEY FINDINGS

Profile of School and Respondent

The survey was issued to all schools (n=1,179) in Northern Ireland, generating a response rate of 10%. It is worthwhile noting that this is a typical response rate for an external survey. Encouragingly, the sample achieved (n=122) is reflective of the whole school population, as illustrated in the graph below.

Figure 2: Responses to school survey by school type
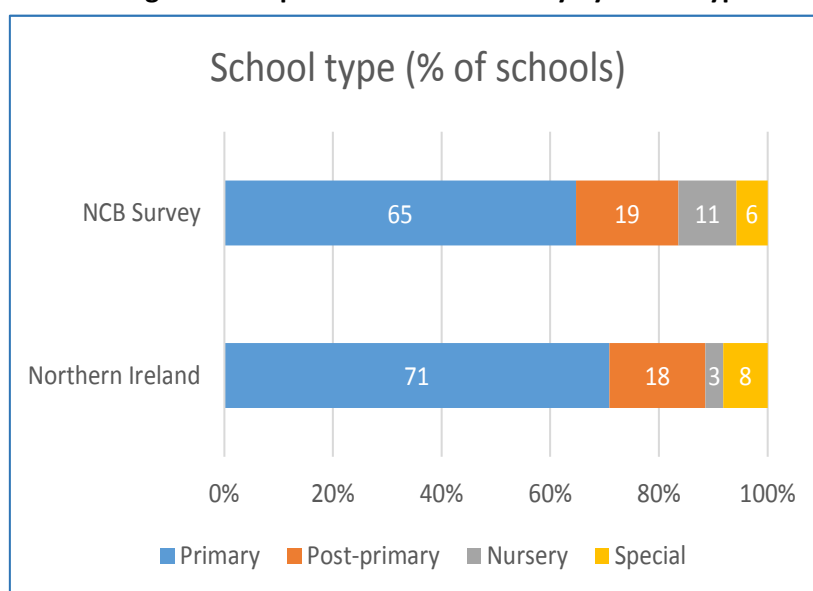
School Management Type

Over a half (56%; n=68) of all respondents to the online survey represented Controlled schools, followed by 34% (n=41) from Catholic Maintained schools. The remaining respondents represented the following management types: Voluntary (n=6), GM Integrated (n=5), Controlled Integrated (n=1) and Other Maintained (n=1).

Role of Survey Respondent

The vast majority of survey respondents were in a senior position i.e. Teaching Principal (43%, n=52); Non-teaching Principal (53%, n=65) and Vice-Principal (2%, n=3) and the remaining two respondents were teachers. Respondents were asked to complete the online survey from a whole school perspective and encouraged to discuss the questions with other staff.

Motivations for engaging in dissemination activities

> Key Finding: The top three most important motivations for engaging in dissemination activities were:
> - To improve the educational attainment of our pupils.
> - To enhance professional development of teaching staff / build their capacity.
> - To promote school improvement.

Survey respondents were asked to select the top three most important motivations for engaging in dissemination activities.

1. '**To improve the educational attainment of our pupils**' was rated the most highly, with 80% (n=97) ranking this option as one of their top three motivations. 57% (n=69) ranked this option as number one, 14%, (n=17) ranked this number two and a further 9% (n=11) ranked this option as number three.

2. '**To enhance professional development of teaching staff / build their capacity**' was rated by 72% (n=88) of all respondents as one of their top three motivations. 11% (n=13) ranked this option as number one, followed by 33% (n=40) as number two and 29% (n=35) as number three.

3. '**To promote school improvement**' was rated by 64% of respondents (n=78) as a key motivation. This option was rated consistently across the three rankings i.e. 22% (n=27) ranked this option number one, 20% (n=25) ranked this option as number two and 21% (n=26) ranked this option as number three.

In addition to the above, a further two motivations where ranked by approximately one-quarter of respondents and worthy of note i.e.

- '**To address educational underachievement in our school**' was rated by 28% (n=34) respondents as one of their top three motivations for engaging in dissemination activities.

- '**To develop a culture of learning**' was ranked in the top three motivations by 25% (n=29) of all respondents.

Stakeholders were also asked to identify the motivations for schools to lead and/or engage in embedding and disseminating best practice research.

- Respondents asserted that the key purpose of disseminating best practice is to empower schools and to provide support to schools to effect school improvement by raising educational standards and achievements in the interest of pupils.

- Respondents were in agreement that a key motivation for engaging with good practice is to support high quality teaching and learning, to promote and lead to better engagement and outcomes for children.

    "We want our young people to have the best education. We want our young people to come out confidently from their education system. And they can do this if the people who are educating them,

are also educating themselves and constantly learning about what they do, and hearing how other people do it" [Key Stakeholder]

- Schools are motivated to lead and engage in best practice as a means of not only raising standards but also as a way of promotion and developing a reputation of being a good school to attract pupils.

- For teachers own personal satisfaction, the desire to develop new skills, for professional development, to share learning with others and as an affirmation of their work were also mentioned as motivating factors.

- In cases where schools have identified weaknesses as part of their self-evaluation process, it was felt that they will seek ways to improve.

  "If they are aware of a particular issue themselves, through their own self-evaluation - at the core of Every School a Good School and school development process should be identifying areas where there are training needs or underperformance of pupils, low achievement of pupils… and that should stimulate a need to look for good practice" [Key Stakeholder]

- According to some respondents, impending and/or follow-up inspections can be a key motivator as schools will actively seek out new practice with the aim of enhancing educational provision/standards.

  "If you think you have an inspection coming up, I think you are more likely to be looking at what is it the Inspectorate are going to be looking for. Or if you have been inspected and you've got areas for improvement you will be looking for best practice to include in an action plan" [Key Stakeholder]

Responsibility for disseminating best practice

Key Finding: Half of all survey respondents reported that there is a person responsible for disseminating best practice in teaching and learning, with the majority indicating that is person is the Principal, Vice-Principal or Middle Managers.

Interestingly, half (50%, n=61) of respondents stated that there was a person responsible for disseminating best practice in teaching and learning and conversely the remaining half reported that no one had this role within their school. For those that did have a dedicated teacher responsible for disseminating best practice, this role was largely assumed by senior staff i.e. Principal (85%, n=51, base=61), followed by Vice-Principal (49%, n=30) or individuals in a middle management position (44%, n=27). The remaining respondents stated that this responsibility lay with a 'Teacher' (16%), 'Board of Governors' (15%) or 'Other staff member' (13%). The literature would advocate a whole-school approach, with all teachers having a role in the dissemination of best practice.

Levels of usage and perceived effectiveness of methods to disseminate best practice

Key Finding: The more traditional transmission and cascade approaches are used by the majority of survey respondents to disseminate learning, with less than half adopting transformative practices.

Interestingly, although 'transmission of information' was a commonly used method by schools (81%, n=99) to disseminate learning (e.g. reading reports, publications, listening to and receiving information from seminars etc.), only 7% rated transmission approaches as the most effective method. Results indicate that respondents preferred a more engaged form of dissemination in the form of 'transfer of knowledge' (e.g. cascade methods such as peer coaching) – which 89% (n=108) respondents regard as the most effective dissemination approach.

Just over one-third (35%, n=41) rated 'transformative' methods (e.g. action research) as the most effective dissemination approach. However, as transformative approaches were used by less than half (49%, n=49) of respondents, it was difficult for those respondents with no experience to conclude whether this is the most effective method, impacting the results. One school stated 'none of the above' - this perhaps suggests that respondents may be unfamiliar with terms used to categorise methods.

Figure 3: Approaches used by schools to disseminate best practice

Does your school use any of the following approaches/strategies to disseminate best practice?

Transfer of knowledge: Engagement	89
Transmission of Information: Awareness	81
Transformation of practice: Action	49
None of the above	1
Other	11

Base: 122
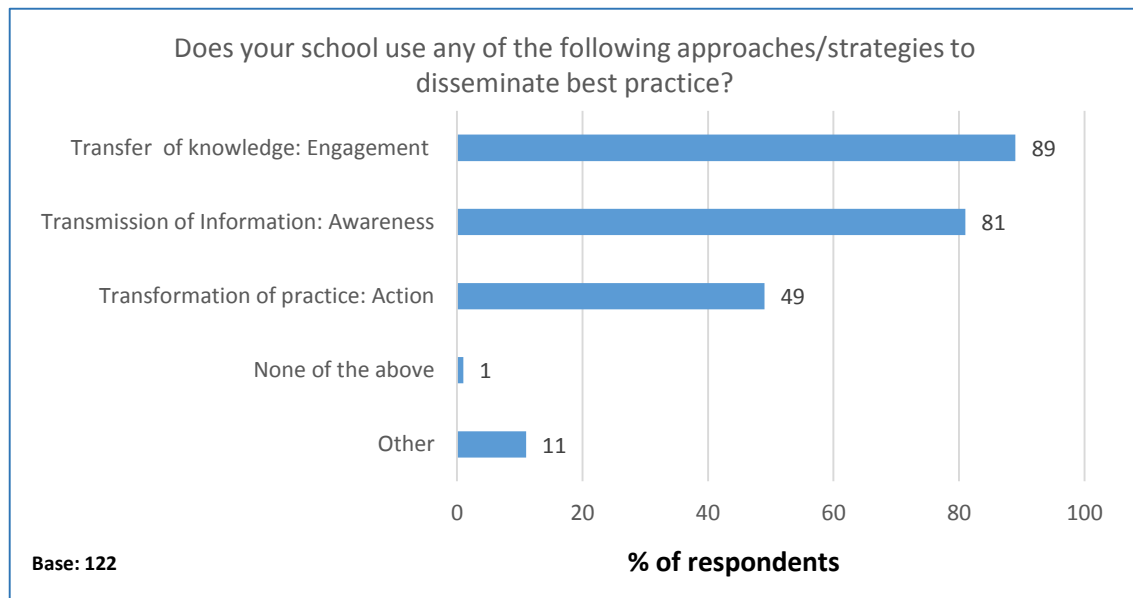
% of respondents

Figure 4: Effectiveness of approaches used by schools to disseminate best practice

Overall, what dissemination approach do you thnk is most effective?

Transfer of knowledge: Engagement	51
Transformation of practice: Action	34
Transmission of Information: Awareness	7
Other	9

Base: 122
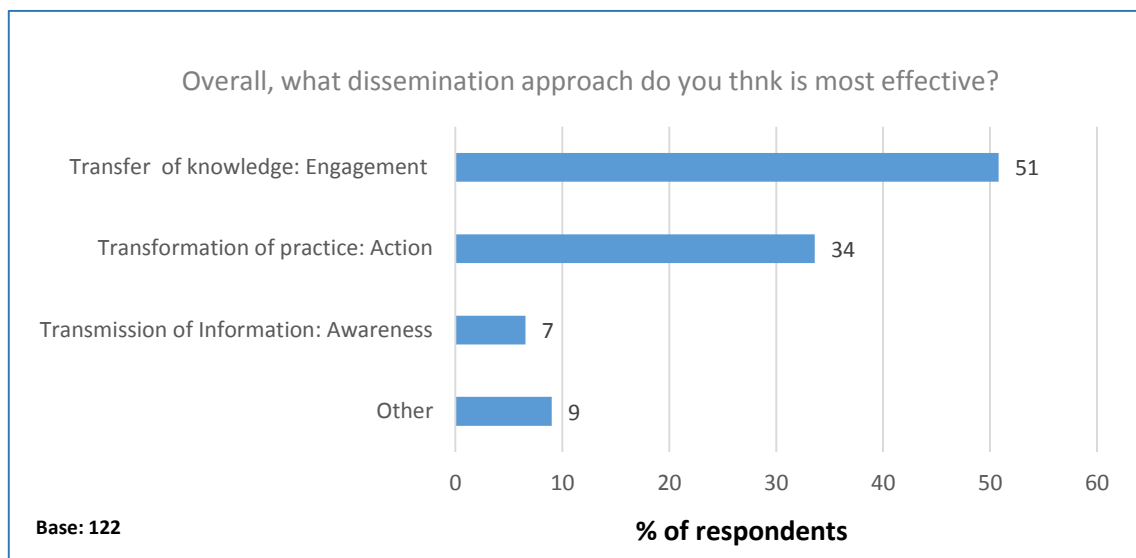
% of respondents

Sixteen respondents provided one or more examples of 'other' approaches used by their school, however once reviewed these responses can be categorised into transmission and cascade approaches.

According to two survey respondents, a combination of all of these approaches is the most effective means of disseminating best practice.

"All are effective as it depends on the nature of what is being disseminated" [Survey Respondent]

Stakeholders were also asked to identify methods used to disseminate best practice and the effectiveness of such methods.

Respondents articulated that passive engagement of dissemination in the form of communication and publishing documents (i.e. transmission) are less effective than more active forms which involve two-way communication, engagement and learning related to a specific practice identified as being best practice (i.e. transfer and transformative). Furthermore, it was cited that ensuring messages are frequent and sustained, regardless of the communication mode, is the most effective way to disseminate good practice.

According to respondents, no one method of disseminating best practice is the most effective but a combination of methods should be used as part of a wider dissemination strategy.

"Because there are different strengths and weakness with each, and benefits and risks associated with each, it is probably best to have a range, rather than just relying on one method, resources permitting". [Key Stakeholder]

"It is not any one thing. I think it is a combination of everything, because some people respond to the online, some people respond to the conferences, some people respond to workshops" [Key Stakeholder]

"It is a combination of methods that are needed. And that combination is going to be different from one place to another. There are different channels of communication too. It could be some are online, some need to be face to face, some need to be done in groups, some need to be delivered in more of a conference style; so it is a mixture of all those methods" [Key Stakeholder]

"To make it effective you have to reach as many people as possible in a manner that they are going to buy into, and that's why it has to be that varied approach" [Key Stakeholder]

Specific methods used to disseminate best practice

From a list of current dissemination methods available in Northern Ireland, respondents were asked to state whether they (1) currently use; (2) aware but not using; and (3) not aware of these methods. For ease of interpretation and analysis, the methods have been grouped under:

- Transmission (i.e. school-led interactions, websites, publications and media and social media).
- Transfer (i.e. cascade training, mentoring, networking, conferences, case study visits).
- Transformative methods (i.e. action research and reflective practice).

Transmission

The transmission methods have been grouped according to: school-led interactions, websites, publications and media and social media.

Figure 5: Transmission dissemination methods used by schools

'Transmission' dissemination methods currently used by schools

Method	Currently Use	Aware but not using	Not aware of
Informal conversations/interactions between staff	100%		
Staff meetings	99%	1%	
Exchange/share teaching materials with colleagues	97%	3%	
Discussion of self-assessment and self-evaluation with…	96%	4%	
CCEA/NI Curriculum.org.uk website	90%	7%	3%
Reports	83%	16%	2%
Publications	77%	17%	6%
EA/Previous ELB websites	68%	27%	5%
ESaGS.tv	60%	39%	2%
DVDs	53%	40%	7%
Fronter - Virtual Learning Environment	50%	43%	7%
Twitter (school and teacher accounts)	27%	48%	25%
C2K - video conferencing & eLearning case studies	26%	56%	18%
Facebook (school and teacher accounts)	21%	54%	25%
Blogs	15%	58%	27%
Niedchat - twitter based chat forum for teachers	13%	31%	56%

School-led interactions

Encouragingly, all respondents (100%) engage in 'Informal conversations/interactions between staff' to relate best practice to each other. Staff meetings (99%) and sharing material with colleagues (97%) are also key methods used within schools to transfer knowledge and best practice and where discussion of self-assessment and self-evaluation with all teachers (96%) takes place.

Websites

The vast majority of respondents (90%, n=110) currently use the Council for the Curriculum, Examinations and Assessment's website '**ccea.org.uk**'. This high usage levels should be exploited by DE as a means of sharing information and disseminating best practice.

Other websites used by schools to access best practice are the Education Authority (**EA**) and previous Education and Library Board (**ELB**) **websites** (68%).

The dedicated internet TV channel **ESaGS.tv** is an online tool used to share outstanding or very good practice highlighted in ETI reports. ESaGS.tv is popular, with 60% of respondents using this method.

However, a further 40% are aware of this method but are not using it, highlighting the need for DE/ETI/EA to promote greater uptake of this resource.

The ESaGS.tv viewing statistics show that there is a high bounce rate[25] from the period January 2015 to January 2016 (45.25%), with visitors only spending an average of 4 seconds (00:04:21) on the site. Metrics are limited to assessing what topics/programmes are being viewed most often to help inform plans for future coverage. This approach should be extended to include a robust analysis of the end-users journey on the ESaGS.tv website to include an assessment of touch points and where/how/when individuals access the site and which calls-to-action have the most impact. Understanding the end-users journey will influence the design of the website and improvements can be made to enhance the experience and uptake levels, to improve dissemination via ESaGS.tv. Also, it is interesting that the peak usage is in June and September, which highlights an opportunity to target teachers during this period. The same approach should be taken to improve the respective websites of CCEA, C2K and EA.

Fronter, C2K's Virtual Learning Environment (VLE) is used by 50% of respondents and the remaining respondents are either 'aware but are not using' (43%) or 'not aware' (7%), highlighting the untapped potential of this resource as a means of knowledge sharing and best practice dissemination.

C2K also offer a range of **video conferencing and e-learning case studies** on its website, which is currently used by 26% of respondents. The C2K website is outdated e.g. 'Latest news' section refers to articles date 2014 – which is likely to be discouraging active usage of the site due to lack of relevance.

Publications & Media

Reports and **publications** circulated to schools are used by the majority of respondents, 83% and 77% respectively. **DVDs** are also used by 53% of schools as a method for accessing and disseminating best practice.

Social Media

School led social media, such as **Twitter** and **Facebook** (school and/or teacher accounts) are used by approximately one-quarter of all respondents, 27% and 21% respectively.

Blogs are used by 15% of respondents and a further 58% are aware but not using this method.

13% of respondents use the **Niedchat** Twitter based chat forum for Northern Ireland teachers. The online discussion forum aims to provide a niche discussion for issues which affect Northern Ireland. There are currently 1,170 twitter followers on Niedchat, however, not all are regularly engaged with limited numbers involved in weekly discussions. Niedchat are currently compiling a list of teachers who are using Twitter for their own professional development and for the sharing of good practice.

Transfer

The transfer methods have been grouped according to: training, networking, conferences, case study visits, mentoring.

Figure 6: Transfer dissemination methods used by schools

'Transfer' dissemination methods currently used by schools

Method	Currently Use	Aware but not using	Not aware of
School Development Days	100%		
Principal/teacher observations of practice and feedback	97%	3%	
Teamwork and collaborative learning	95%	5%	
Externally facilitated Conferences/Seminars	91%	5%	4%
ALC/School led cluster group meetings	80%	13%	7%
Mentoring by experienced teachers	79%	20%	2%
Workshops (interactive format)	73%	21%	6%
Observation visits/Case Study visits to other schools	63%	30%	7%
Team teaching (together with more experienced teachers)	53%	45%	2%
School led conferences e.g. Teach Meet, Niedcamp	27%	35%	38%
Schools using their leading teachers to mentor in other schools	26%	57%	16%
Observation visits to business premises, public orgs, NGOs	25%	48%	28%
'Ted style talk'	21%	30%	49%
Networking events	17%	69%	14%

Training

All respondents (100%) reported using **School Development Days** (SDD) as a means of disseminating best practice. Schools are allocated five SDD each year to give teachers time to work on school improvement matters. In addition, five INSET (*IN-SErvice Training day*) are also available each year for staff training. Time within these days could be dedicated to establishing an action research task group and to the dissemination and reflection of best practice.

Other forms of training provided using **workshops** (interactive format on subject matter and/or education related topics) are also popular and used by 73% of respondents.

Mentoring/ Coaching

Mentoring and coaching approaches are readily adopted by schools, with almost all (97%) respondents reporting that they currently use '**Principal/teacher observations of practice and feedback**', '**Teamwork and collaborative learning**' (95%) and '**Mentoring by experienced teachers**' (79%). 'Schools [using] their leading teachers to mentor in another school', was reportedly used by just over one quarter (26%) of respondents.

Key stakeholders interviewed also referenced 'coaching and mentoring' as an effective training approach, often involving the school being supported by an educationalist/advisor to help engender change through the adoption of best practice. This level of support is particularly important in cases where teachers are working in challenging circumstances.

Just over half (53%) of respondents currently use '**Team teaching**' methods. This is where the members of the team co-teach alongside one another and share responsibility for planning, teaching, and assessing the progress of all students in the class. This approach can be very effective and provides an opportunity for teachers to learn from each other and to share responsibility for planning, teaching, and assessing the progress of all students in the class. As 45% of respondents are aware but not using this method, this represents an opportunity to promote this strategy.

Networking/Conferences

Externally facilitated Conferences/Seminars are used by 91% of respondents, highlighting the reach which this method achieves. Conferences can be a powerful way to engage with teachers and bring work/ resources into the public domain (e.g. ETI reports). Informal conference conversations and sharing ideas between sessions and at conference social events can provide an effective medium for disseminating best practice.

According to key stakeholders, dissemination events/conferences should not be limited to Principals attending events and passing on information to teachers. Middle management, heads of departments and subject coordinators should also be encouraged to attend dissemination events as they ultimately will be the ones responsible for applying good practice in the classroom: "*they are the engine room of effective practice, they are the role models"*. These individuals need to be inspired and have the opportunity to discuss ideas, rather than hearing practice second-hand. Individuals should be equipped with the skills to appropriately relay the information gained so that best practice and change is embraced.

Some 80% of respondents engage in **Area Learning Community (ALC) /School-led cluster group meetings.** An ALC is an effective vehicle used by schools to collaborate and to share learning. Although a post-primary initiative under the Entitlement Framework, some ALCs have extended to include nursery and primary schools. Informal clusters have emerged from ALCs and have continued to evolve and grow organically as a means of sharing best practice and as a forum for discussing policies impacting the school and school community.

School led conferences e.g. TeachMeet, NIEdcamp are used by 37% of respondents and a further 35% are aware of but not using them. Interestingly, 38% of respondents are not aware of this form of collaboration for the purpose of disseminating best practice. NB. TeachMeet is an informal, collaborative experience organised by teachers, for teachers as a means of sharing ideas and experiences. NIEdcamp was developed by and for teachers as a model for sharing of good practice. NIEdcamp promote weekly conversations on Twitter and the TeachMeet movement.

The majority (49%) of respondents are not aware of a '**Ted style talk**' method of sharing between teachers and only 21% use this method, with a further 30% aware but do not use. A 'Ted style talk' is a short form conference presentation, which is based on a 5-10 minute presentation. This format involves using visual aids and audience engagement. The short presentations are dynamic and creative but are limited in terms of scope and detail. They may, however, help to generate ideas that can be tested further in the school setting.

Only 17% currently use **networking events** and a further 69% are aware of but not currently taking advantage of opportunities afforded by networking events as a means of accessing and disseminating best practice.

Some 63% of respondents reported that they currently engage in '**Observation visits/Case Study visits to other schools'**, whilst 30% are aware but do not take advantage of this opportunity. Observations can provide professional developmental opportunities and personal benefit. When the teacher returns they can feel energised and have time to reflect and report back to the wider team.

Key stakeholders agreed that case study visits to observe good practice are effective.

> "G*ood practice is as much about seeing a situation on the ground and giving practical help to the people experiencing that, to deal with and resolve problems".*[Key Stakeholder]

> *"I think there is an issue with schools looking inwards. I think they need to look outside as well. So although they are using...practice in their own school and sharing it, I think they still need to be looking outside and seeing what is going on elsewhere"* [Key Stakeholder]

Secondments were also mentioned by key stakeholders, stating that when a member of staff is released into a seconded position it helps to re-energise the teacher by providing the opportunity to engage in new environments, with the result that learning is brought back to the school.

> *"[it would be useful] If there is a facility to free somebody for a period of time to allow them to just do a bit of research, do a bit of building of their own capacity and come back in again and feel revived in the process"* [Key Stakeholder]

'Observation visits to business premises, public organisations or NGOs' is not commonly used, with only 25% of respondents reporting using this method. Visits and/or placements may give teachers experiences and opportunities to learn a new skill and the school the opportunity to build a wider network.

In terms of 'other' responses provided, it is evident that there is a desire for increased observation visits in other organisations including within and beyond the education sector. According to DE's Learning Leaders strategy, "School leaders will have opportunities to access extended professional learning – this may take the form of additional study or placements in other organisations including within and beyond the education sector"

'Other' 'verbatim responses' provided by respondents reflecting transfer/cascade style methods used
Observations / Case Study visits / Sabbaticals
• *We would like to spend more time with colleagues in other schools actually teaching together and then reviewing our plans together to ensure that best practice is shared and supported.*
• *School collaboration needs to be funded. Teachers must get out to see best practice not just read about it.*
• *Good practice visits to and from other schools.*
• *Observing other classes in other schools.*
• *Visits to other schools by coordinators etc.*
• *Post inspection, schools identified by ETI as outstanding in a particular area of practice to be encouraged to have a curriculum open day for staff from other schools to visit.*
• *Visits to colleges of best practice in England.*
• *As Principal, I have linked with two other nursery colleagues in early July for past 2 years to visit good practice schools in England with a specific focus. These are links made through blogs, Twitter and 'Kinderchat' (twitter group chat on a weekly basis). Photos, videos and background have been shared.*
• *Regular sabbaticals for Principals and teachers to have extended meaningful time to read the plethora of information that descends upon schools.*
• *We have 'good practice days' and all make ourselves available to visiting teachers and sit round for a*

plenary and then we take them round to where they want to go.

- *Mutual guided observations across groups of three colleagues from distinct curricular areas.*
- *Lifting the phone to the Inspectorate or another school maybe or whatever relationships are there, to see is this happening elsewhere.*
- *Opportunities for staff to spend a prolonged time in another business.*

Mentoring/Coaching
- *Role modelling, tutoring and mentoring by Principal/ Vice-Principal.*
- *Mentoring by experienced teachers.*
- *Peer observations.*
- *Study buddy - classroom observation of expert colleague.*
- *ICT sharing is often done with an agreed mentor in a one to one or on a small group basis.*

Staff meetings / interactions
- *Staff meetings/discussions sharing ideas and practice.*
- *On each agenda for every departmental meeting, if anybody was on a course or if anybody saw good practice, to talk to the rest of the staff about it.*
- *Team teaching.*
- *We broke the staff up into groups of six and asked a few questions. Each person was given five minutes 'like speed dating'. We rang a bell and you moved on to the next. And we did an awful lot of very good dissemination of practice that way.*

Collaborations / Networking
- *Clustering with….*
    – *local schools in a cross-phase approach.*
    – *neighbouring schools.*
    – *other similar-sized primary schools.*
    – *coordinators to share good practice and support other co-ordinators with INSET.*
- *NIEdcamp.*
- *Teach-Meet.*
- *Trusted Colleague Network.*
- *Networking events opportunities.*

Training
- *Whole staff training by enthusiastic, knowledgeable professionals who are expert in their curricular field.*
- *Staff Development days are used to disseminate and share practice across departments.*
- *Prioritising through self-evaluation a common need within the school - finding expertise in that area - devoting quality time to develop teachers' skills and confidence (going to a nice location and providing a quality lunch to ensure staff feel valued). Developing a programme of work specific to that.*
- *Face-to-face training from outside bodies.*

Transformative

Transformative methods are grouped as either reflective practice (peer review and feedback) or an action research approach.

Figure 7: Transformative methods used by schools
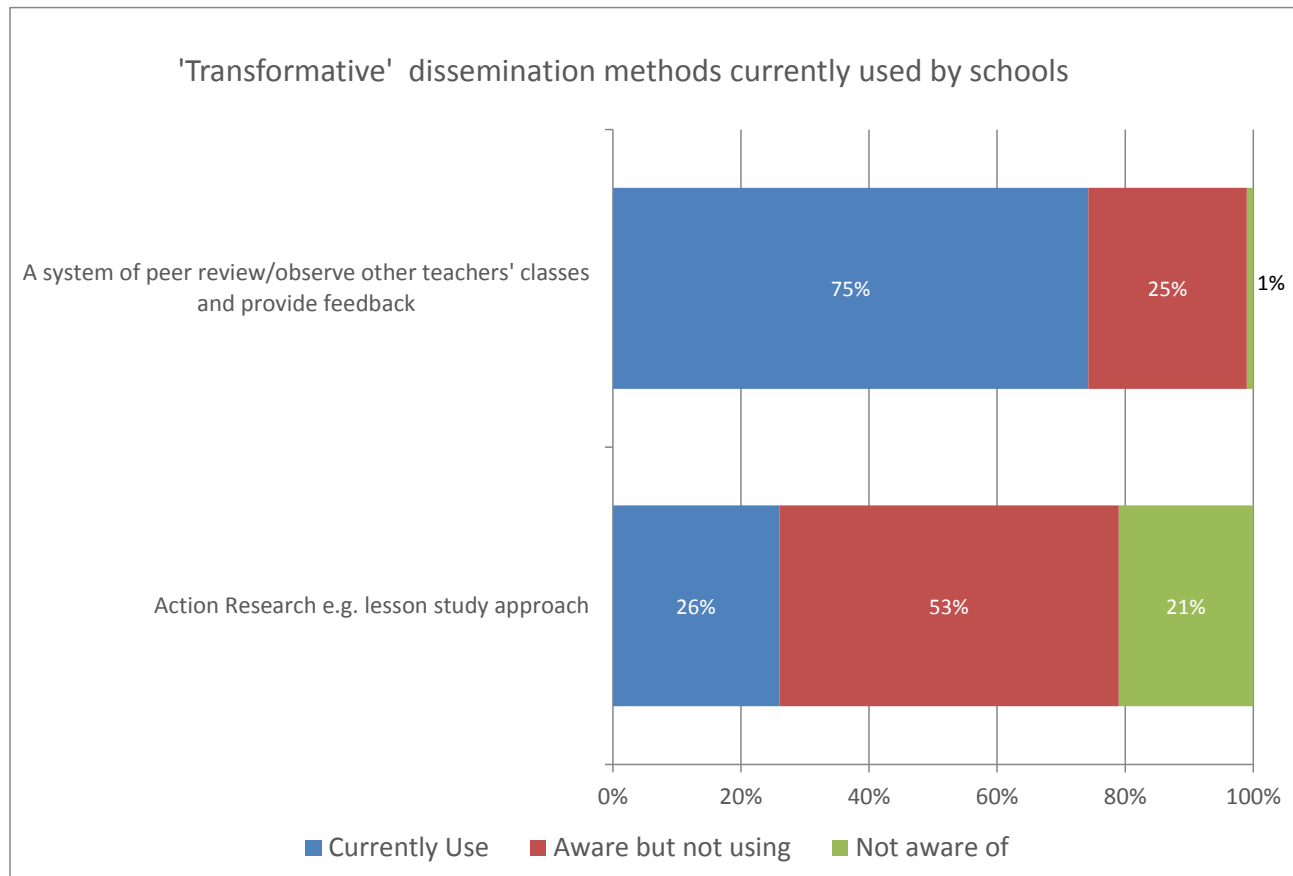
The process of reflective practice is used by three quarters (75%) of respondents.

> *"Reflective practice is really important and can be 'built in' to structures so it doesn't depend so much on the personalities, e.g. every Tuesday full staff team meet to share practice and policy updates. Teachers are assigned responsibility for an area and given lots of notice, time to plan etc. before presenting to other staff"* [Survey Respondent]

> *"Every time we do a round of classroom observations, we call the whole staff together and we bring out staff to talk about what it was like for them and what they saw. And then we tell staff what we saw and what we need to work on. And we decide our training after that"* [Survey Respondent]

> *"It is about providing that opportunity for them to be self-evaluative, to be able to do the research required, to be able to check and follow through"* [Survey Respondent]

> *"One of the most valuable drivers for changing and improving is when teachers are supported in finding time to reflect on their own practice and to share good practice with others either within their own school or in others. When they can see this approach making an improvement in their teaching they are then more likely to identify other ways to improving further. Having a culture of continuous improvement"* [Survey Respondent]

Action research is used by 26% of respondents. A few examples were provided by respondents, including:

> *"Collaboration of Principals from similar background schools, initiated by ourselves, provides CPD from a range of backgrounds and opportunities to research/ examine a range of strategies and resources"* [Survey Respondent]

> *"Full team is involved in identifying the problem, that full team is involved in seeking the solutions, that full team has a say in the ones that you might try or not try"* [Survey Respondent]

The transformative potential of action research is not being exploited to its potential, as 53% reported that they are aware of this method but not using it and 21% are not aware.

> *"There are limited opportunities for practitioner research. School leaders should provide opportunities for teachers to test new ways of working that have proven to be effective. The action research model is a way in which schools...support innovative practices by testing new ways of working and self-evaluate and reflect on the effectiveness of the practice prior to the full adoption/implementation of new practices"* [Survey Respondent]

Alternative methods of disseminating best practice in other education systems

Respondents were asked if they are aware of any other effective methods currently adopted in the UK, Republic of Ireland or elsewhere to disseminate best practice. The majority (55% n=67) stated 'no' and almost one third (32% n=39) stated 'not sure'.

Some 13% (n=16) reported one or more methods that they are aware of in other jurisdictions, which are not dissimilar to those used in Northern Ireland and include methods such as: collaborative working, networks, training, mentoring, video conferencing and observations, school visits and sabbaticals.

'Other' 'verbatim responses' provided by respondents reflecting awareness of alternative methods used in other education systems to disseminate best practice
Collaborative working
• *Collaborative working groups of schools with district inspector focusing on good practice (America)*
• *Collaborative networks for teachers (Bulgaria)*
• *One management Board in each area so all schools access same materials and resources (Scotland)*
• *Nursery schools created a learning HUB. Joint training, speakers, etc. Observed it in action and met with Nursery Principals from Derby City and Derbyshire to find out how it works. Visited the room at University of Derby allocated as the HUB. Included displays, resources, publications and a venue to meet on a regular basis and each school contributes to the hub (England)*
• *Edcamp model*
• *Teacher Learning Communities (England)*
• *The concept of a 'teaching school', similar to a 'teaching hospital' where a school becomes the hub for action-based, research-led professional development is something that is ripe for development in NI (England)*
Training
• *Teachers trained in England have higher level of expertise in differentiated learning and lesson planning (England)*
• *Greater fraction of Education budget apportioned to schools who buy in required bespoke support. (England)*
• *A year out of the classroom every 5 years to allow teachers time to develop their pedagogy (Norway)*
• *Time and funding allocated for planning within the teaching day (England)*
• *Teaching time reduced to allow more time for CPD (Germany)*

Mentoring
- *Teacher observation of another teacher to observe best teaching practice (England)*
- *Head Teachers mentors for other heads (England)*
- *Coaching and Mentoring Professional Development Programme (New Zealand)*
- *Mentoring Beginning Teachers (MBT) Programme (Australia)*

Triad Method
- *Use of "triad" working (England)*
- *Lesson Study (Japan)*

Video Conferencing
- *Use of "Iris" and other film of lessons under the teacher's control (England)*
- *Video Conferencing of Shared lessons, teachers plan together ,'real time' feedback and agreed improvement (America)*

Central / Filter of Information
- *Central organisation that propagates learning (England)*
- *Summary reports from respected organisations (England)*

Secondments / Case Study visits
- *Head Teachers seconded to other schools to disseminate best practice (England)*
- *Teachers go to other schools as advisors one day a week (England)*
- *Teachers being seconded to another school to learn and bring back knowledge/skills for implementation. This could be logistically organised via an application process and would enable expertise to be shared across more schools whilst at the same time eroding the culture of competition which is very evident in our current school system.*

Other suggestions
- *Networks of school Principals and ETI working together to develop excellent practice, with a more collaborative approach.*
- *ETI need to clearly signpost the schools that are found to be beacons in a particular area of provision*
- *The whole idea of a 4 day teaching week with possibly a Friday freed up for staff development, provided internally and also by external professionals, planning and*
- *Time to allow staff time to reflect and introduce new strategies and teaching methods into their own practice*

Barriers inhibiting effective dissemination

Key Finding: High workload and subsequent lack of time and lack of funding (e.g. for substitute cover) were reported as the current barriers inhibiting effective dissemination of best practice in Northern Ireland.

Overwhelmingly, the most prominent barrier inhibiting effective dissemination of best practice in Northern Ireland is 'high workload and subsequent lack of time' as identified by 95% (n=116) of respondents, closely followed by 93% (n=114) reporting 'lack of funding' (e.g. for substitute cover) as a barrier.

> *"Finance, time, training and support are the major factors required by and frequently requested by staff"* [Survey Respondent]

Respondents were also asked to rank barriers from one to three, where one is the most inhibiting factor. Given the results above, it is not surprising that the majority of respondents ranked 'high workload and

subsequent lack of time' as the dominant issue preventing effective dissemination of best practice (101 respondents rated this option, with 65 respondents ranking this as the number 1 barrier).

Figure 8: Factors inhibiting dissemination of best practice
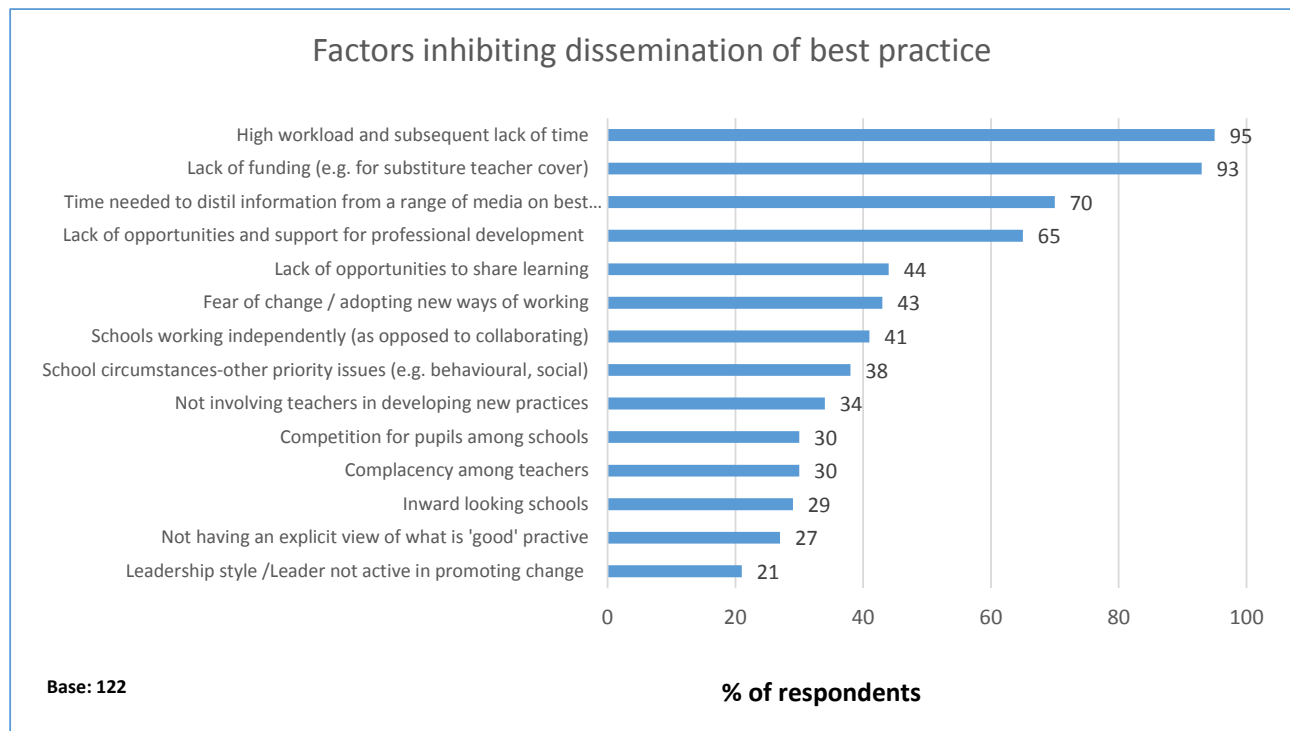
The following presents findings from the additional 'verbatim' responses provided by both online survey respondents and key stakeholder interviews with regard to barriers inhibiting the dissemination of best practice:

High workload and subsequent lack of time

Demands placed on Principals' and teachers' time makes it difficult to review or reflect on best practice research and/or attend dissemination events, consequently limiting opportunities to expand and develop their professional knowledge.

> *"I think that there is some exemplary work taking places in some schools, but the facility to access this is limited due to workload and lack of sub cover to facilitate teachers"* [Survey Respondent]

> *"The teachers are so bogged down doing assessment, doing tracking, filling in paperwork; the focus has moved away from what actually happens in the classroom"* [Survey Respondent]

> *"Many teaching Principals are at breaking point and DE must provide the necessary resources if schools are to benefit from best practice research"* [Survey Respondent]

> *"When you are doing something day in and day out, you get into a rhythm and a routine and because of the workload, because of the paperwork you don't really get a chance to evaluate it or to stand back and think about other ways of doing it"* [Survey Respondent]

> *"The absence throughout the system of coherent support for school development, the underfunding of school budgets, and the extraordinary demands on time all conspire to make effective dissemination of good practice within and between schools extremely difficult"* [Survey Respondent]

Lack of time is a particular issue for those in nursery schools where teaching Principals have no release time. This means that their opportunities to engage in accessing best practice resources and/or attend dissemination events are limited.

"Teaching Principals have a wealth of knowledge, skill and relevant and current experience and a lot to offer in all aspect of their practice. However, in the nursery sector with no Principal release time most are so burned out it is impossible to take on any further work. This is very near sighted at Department Level when they have all this expertise locked inside schools which they could utilise" [Survey Respondent]

Lack of Funding

Many respondents acknowledged that a lack of funding has resulted in the former CASS service being considerably reduced and is now on a much smaller scale within the newly formed School Development Service. This results in fewer officers visiting schools to observe practice, therefore limiting opportunities to collate information on good practice.

"The teaching profession should be supported by visible investment in the structures and support mechanisms surrounding us, e.g. EA advisers, CASS support etc." [Survey Respondent]

"The reduction in CASS staff means that teachers have few opportunities to get out of the school environment for the day, meet and talk to peers about good practice or learn new skills from external facilitators" [Survey Respondent]

"Investment in the current workforce by lightening the workload and giving time and funded cover for meaningful professional development is needed" [Survey Respondent]

"Clustering among schools and sharing good practice is essential but schools need the time and finance to enable them to do this" [Survey Respondent]

There is a cost associated with releasing teachers to attend dissemination events or to take part in training, in the form of substitute cover. It was felt, therefore, that investment in professional development will not only benefit the individual but also the whole school and wider institution and is essential.

"A lot more money [needs to be] put aside for professional development, to give space for teachers as professionals to reflect on their own practice" [Survey Respondent]

Competition between schools

Schools working independently and being in competition with each other was felt to be preventing the effective dissemination of best practice and creating a barrier to working collaboratively. This is a perceived disincentive for sharing best practice and results in some schools wanting to protect their knowledge and consequently not willing to share their best practice approaches as they can use this as a means to gain 'competitive advantage' to attract pupils. Encouraging collaboration rather than competition between schools would, it was felt, lead to more effective sharing across school boundaries.

"Expertise is held close and used in a competitive sense" [Key Stakeholder]

"In this context….dissemination of good practice is rolling the boulder up the hill, rather than the other way round". [Key Stakeholder]

"One of the problems is that schools are competing against each other, which does not set the right atmosphere for sharing practice." [Key Stakeholder]

"Schools competing against each other for children is one of the biggest barriers to schools working collaboratively" [Key Stakeholder]

Lack of incentive to share best practice

Many respondents felt that sharing of good practice was neither rewarded nor incentivised.

In cases where ETI identify good practice in a school, this school is sometimes inconvenienced by a number of other representatives and teachers visiting to observe the good practice as it has a resource implication in terms of managing this process. Alternatives to this scenario were mentioned by participants, e.g. the Principal of such a school could be asked to present at one meeting/event or the school could host an 'open day' for other teachers to visit rather than having to accommodate separate visits to their school.

It was suggested by one respondent that a positive inspection outcome should lead to more freedoms/flexibility provided to school leaders.

> *"Schools categorised as 'very good' or 'outstanding[5]' should be given more freedoms at a curricular level first and if this proves to be a success to allow more flexibility at a leadership and governance level. We need to empower schools to want to be better so you need to reward good practice"* [Key Stakeholder]

Lack of opportunities and/or support for clustering / collaborating with other schools

Primary schools have created clusters with no/little support as they see the benefits of sharing. To be sustainable these clusters need financial and/or resource support.

There is a need to strengthen the potential of ALCs to support the dissemination of learning.

> *"The disappearance of cluster groups organised by the Education Authority has somewhat restricted the interaction of teachers from different schools. Without interaction dissemination is unlikely. I am thankful that our school is part of an active and focused ALC which works to develop effective self-evaluation and challenges us all to provide the best educational experiences for our pupils"* [Survey Respondent]

Issues engaging in transformative methods in a small school setting

Implementing dissemination methods such as Team Teaching, Lesson Study etc. requires a number of staff members to be available, which is difficult in a small school setting. This issue becomes even more apparent in a rural setting where schools are not within close proximity, or when sharing takes place between Irish/English speaking schools. To ensure equity of provision, additional support is needed for these schools.

> *"In a small school it is difficult for staff as they "wear many hats" when it comes to curriculum co-ordination and dissemination of best practice. More funds are needed to free up teachers for monitoring and evaluation."* [Survey Respondent]

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[5] respondent's own terms

Best practice may not be transferable between schools

Not all good practice can be replicated or is transferable from one school to another due to varying circumstances and characteristics. Therefore approaches should be open to modification and tailored to the needs of the school.

> *"Good ideas are good ideas and are capable of being disseminated and effectively implemented, but always on the caveat that they must be adjusted to local circumstances"* [Key Stakeholder]

Lack of confidence among school leaders

According to some key stakeholders, practitioners may not engage in dissemination best practice, either because they do not recognise that what they are doing is any different to what is being implemented in other schools or due to a lack of confidence. Some may feel uncomfortable *'putting their head above the parapet'*. Validation and endorsement from ETI and other relevant bodies has helped to encourage schools to come forward as case study examples.

Factors leading to effective dissemination

Key Finding: The top three factors influencing dissemination of best practice are:
- School leadership / management support.
- School ethos / culture regarding shared learning.
- Teacher attitude.

Survey respondents were asked to select the top three factors influencing dissemination of best practice:

- **'School ethos / culture regarding shared learning'** was rated by the majority of respondents (78%, n=95) as one of their top three factors. 34% (n=41) ranked this option number one, 34% (n=42) ranked this option number two and 10% (n=12) ranked this as number three.

- **'School leadership / management support'** was rated as the second most important factor by most respondents (73%, n=89), with the majority of all respondents ranking this as the top factor i.e. 36% (n=44), followed by 16% (n=19) ranking this option as number two and 21% (n=26) ranking this as number three.

- **'Teacher attitude'** was also reported as one of the key factors influencing dissemination of best practice, accounting for the views of 44% (n=54) respondents. This option was rated consistently across the three rankings i.e. 14% (n=17) ranked this option first, 14% (n=17) ranked this option second and 16% (n=20) ranked this option third.

Other factors ranked highly by respondents include:

- **'Extent of self-evaluation and reflective practice'** was ranked in the top three factors by 38% (n=46).

- **'Investment in professional development'** was ranked in the top three factors by 32% (n=39).

- **'Extent of collaborative learning / partnership working'** was ranked in the top three factors by 19% (n=23).

Strategic Approach

A strategic approach to the dissemination of best practice was recommended by respondents. Whilst it was appreciated that a cascading model is effective in terms of knowledge transfer, this may take a long time to reach all school leaders and staff, therefore requiring a more strategic focus and an enhanced level of engagement with schools to act as a catalyst for sharing.

According to one respondent, the issue of increased collaboration between education bodies is needed, where dissemination of information or practice is coordinated across areas of responsibilities.

> *"It is very important that we have a planned process of dissemination to avoid that kind of fragmentation at school level, so that schools can see there is a very coherent and cohesive range of strategies being employed"* [Key Stakeholder]

Active Leadership / Dynamic Leaders

Effective school leaders were agreed to be one of the key success factors in the adoption and dissemination of best practice. Some respondents mentioned 'distributed leadership' and were of the view that leadership qualities should be encouraged at all levels to empower staff members to take ownership of their own learning and to take part in peer learning exchanges. Leaders who empower staff and encourage leadership throughout the school help to create a culture of learning, self-evaluation and continuous improvement.

> *"Good leadership is someone who is prepared to let that leadership be distributed right throughout the school, and that leadership is a group of people who are open to change, encourage change, are looking at a continuous loop of self-evaluation in the school in terms of looking at how things work and how they can make them better"* [Key Stakeholder]

> *"If you have a leader who is innovative, who is always looking outward and trying to improve the inward, then the teaching staff begin to adopt that approach as well. It is down to how enthusiastic the leader is and how much scope they give their staff to take part in things"* [Key Stakeholder]

> *"Someone who is always looking at ways to improve the educational and learning experience for pupils and staff and more than willing to share that and she more than willing to learn"* [Key Stakeholder]

> *"Someone who is prepared to lead by example….a motivational leader to empower others to take the lead"* [Key Stakeholder]

> *"There are quite a lot of Principals out there who filter good practice down through their staff and their staff buy into this, and the Principals will do their best to remove as many barriers as possible to allow people to partake in dissemination methods"* [Key Stakeholder]

It was felt that a Principal who encourages *"reflective practice"*, one that can prioritise needs and thereby not *"overburden their staff"* with new approaches would ensure that good practice is promoted and embedded in everyday teaching and learning.

In cases where Principals and/or teachers responsible for leading the implementation of good practice retire or move on there needs to be succession management training, so that the good practice is maintained and built upon.

School Ethos / Culture of Learning

Respondents also felt that the ethos of the school is an important factor, where schools which encourage a culture of continuous development and knowledge sharing were more inclined and willing to engage with methods used to disseminate best practice.

Respondents referred to the importance of having the space to collaboratively learn and time to reflect which will *"actually provoke teachers to think about their practice".* Encouraging creative thinking and *'allowing staff to fail'* if they try something new is important – with the focus being on sharing that learning with others.

Focus on professional development

To support the dissemination of effective teaching strategies, respondents highlighted the need to focus on professional development of teachers. The development of a clear competence framework and career path was suggested as a means of motivating staff to engage with and lead good practice. Keeping staff engaged by rotating responsibilities and encouraging innovation in teaching and learning were also reported as important factors.

Collaboration & Networks

Encouraging collaboration rather than competition between schools is regarded as a means of leading to more effective sharing across school boundaries. The growth of *'trusted colleague networks'* is regarded as an important factor, leading to effective dissemination of best practice. Principals and teachers active in networking will also help to create and disseminate best practice.

Respondents were also of the opinion that facilitated dialogue in networks within and across clusters to explore concepts and ideas will contribute to identifying best practice through the *"cross-fertilisation of ideas and professional dialogue".*

One respondent was of the view that *"effective practice is down to good discussion"* and that the messages being delivered to evoke good practice has to be *"relevant to teachers in their context"* in order to *"stimulate discussions"* and sharing. The importance of peer-to-peer exchanges was also highlighted as a means of sharing and disseminating learning.

Uptake of dissemination methods to be assessed

A 'challenge function' for both education bodies and schools is needed on how information is disseminated and the uptake of best practice. For example, schools could challenge agencies on how they propose to identify and disseminate best practice, agencies could challenge schools and ask them why they have/have not engaged, and school leaders could challenge their staff to engage. The aim is for everyone to take responsibility for disseminating learning.

There should to be some engagement with schools that do not participate in dissemination activities. Their views should be sought as to why they are not engaging to ascertain if the issues are with regard to the quality of dissemination, methods being used or some other reason, with a view to overcoming the problem.

Engaging parents

To promote a whole-school approach, one respondent recommended disseminating best practice approaches to parents and thereby link with the parental resource to support learning approaches. According to another respondent, an early intervention transformation programme will be launched which will include a strand on how teachers can impart strategies to parents of nursery school age children.

Summary of Key Findings:
This findings chapter has outlined who participated in the school survey.

It has also explained the dissemination methods that are currently being used by schools in Northern Ireland as well as describing those dissemination methods that schools are currently aware of, but not using and those methods that schools are not aware of.

It has also discussed the following issues:

Motivations for engaging in dissemination activities:
- To improve the educational attainment of our pupils
- To enhance professional development of teaching staff/build their capacity
- To promote school improvement

The responsibility for disseminating best practice:
- Half of all survey respondents reported that there is a person responsible for disseminating best practice in teaching and learning, with the majority indicating that is person is the Principal, Vice-Principal or Middle Managers.

Levels of usage and perceived effectiveness of methods to disseminate best practice:
- The more traditional transmission and cascade approaches are used by the majority of survey respondents to disseminate learning, with less than half adopting transformative practices

Barriers inhibiting effective dissemination:
- High workload and subsequent lack of time and lack of funding (e.g. for substitute cover) were reported as the current barriers inhibiting effective dissemination of best practice in Northern Ireland.

Factors leading to effective dissemination:
- School leadership / management support.
- School ethos / culture regarding shared learning.
- Teacher attitude.

What is clear from the research findings, is that although schools may indeed be sharing best practice or have a willingness to do so, there are many barriers that prevent this or limit the extent of it. In order to have a more systematic sharing of best practice, there is a need for an overarching framework to coordinate dissemination. The next chapter, in part 1, provides one potential model for the establishment of such a framework, part 2 presents findings from the testing of the framework on a small sample of schools, whilst part 3 outlines considerations in relation to the implementation of the proposed framework.

5. So What? Implications for Education Structures in Northern Ireland

The aim of this research is to provide a comprehensive list of methods that are effective in sharing best practice by and with schools. Whilst the research found a wide range of methods are being used by schools in Northern Ireland, it also clearly points to the need for more strategic coordination if these methods are to succeed in improving practice. This critical coordinated approach would be achieved through the development of a framework to relate dissemination goals with dissemination methods.

This chapter presents how such a framework could be established and implemented and the associated implications for the education sector in Northern Ireland, and is structured in the following three parts:

- **Part 1: Establishing a Dissemination Framework for education in NI:** This section draws on the learning from other frameworks identified through the literature and makes recommendations for how a suitable framework should be developed in Northern Ireland.

- **Part 2: Testing the Dissemination Framework**: This section draws on the findings from testing the Dissemination Framework for education in NI with a small selection of schools.

- **Part 3: Implementing the Framework:** This section describes the key implementation drivers to be considered when using the proposed Dissemination Framework for education in NI.

Part 1: Establishing a Dissemination Framework for Northern Ireland

Dissemination Frameworks in the Health Sector

Frameworks for the purpose of disseminating best practice are most prevalent in the health sector and are used to disseminate findings from research trials in an attempt to meet the challenge of bridging science to service in the healthcare field. This concept can also be applied to other sectors, where best practice is identified but needs to be applied in a real-world service setting (e.g. the testing and practical application of new teaching strategies in schools).

Literature refers to 'dissemination and implementation (D&I) science' which *'seeks to understand how to systematically facilitate utilisation of evidence'*. An interactive website has been designed by The Centre for Research in Implementation Science and Prevention (CRISP)[26] to help researchers and practitioners to select the D&I Model[27] that best fits their research question or practice problem, adapt the model to the study or practice context, fully integrate the model into the research or practice process, and find existing measurement instruments for the model constructs. The term 'model' is used to refer to both theories and frameworks that enhance dissemination and implementation of evidence-based interventions more likely.

The inventory of D&I models was reviewed as part of this research, and all appear to have similar constructs. For the purpose of this report, one model has been outlined below.

'The **4E framework of dissemination and utilisation**'[28] includes the following stages:

- **Exposure** - to increase knowledge.

- **Experience** - to increase positive attitudes.

- **Expertise** - increase competence.

- **Embedding** - increase use in practice.

This framework clarifies what effects an organisation might expect from common knowledge transfer (KT)[29] strategies: In other words, the KT strategy employed flows out of the type of goal or outcome the organisation is attempting to achieve.

The 4E framework was developed to overcome the difficulties of KT i.e. the confusion between goals and strategies, the lack of a planned approach to the transfer of research information, and the lack of interaction in KT methodologies between users and researchers.

Dissemination Frameworks in the Education Sector

(1) D-cubed Framework for Dissemination (Australia)

In the education sector frameworks for dissemination are less common. However, the example overleaf, that of the Australian Learning and Teaching Council (ALTC) in particular, has informed this research. The ALTC have devised the 'D-cubed Framework for Dissemination' [30] .

Figure 9: ALTC D-cubed Framework for Dissemination

Dissemination is the planned process of understanding potential adopters and engaging with them throughout the life of the project, to facilitate commitment to sustained change.

Engage throughout the project

- Interact with targeted potential adopters on an ongoing basis
- Plan for interaction and respond to changes and opportunities
- Build credibility and familiarity
- Cultivate readiness for change
- Build empowerment and ownership in adopters and institutions

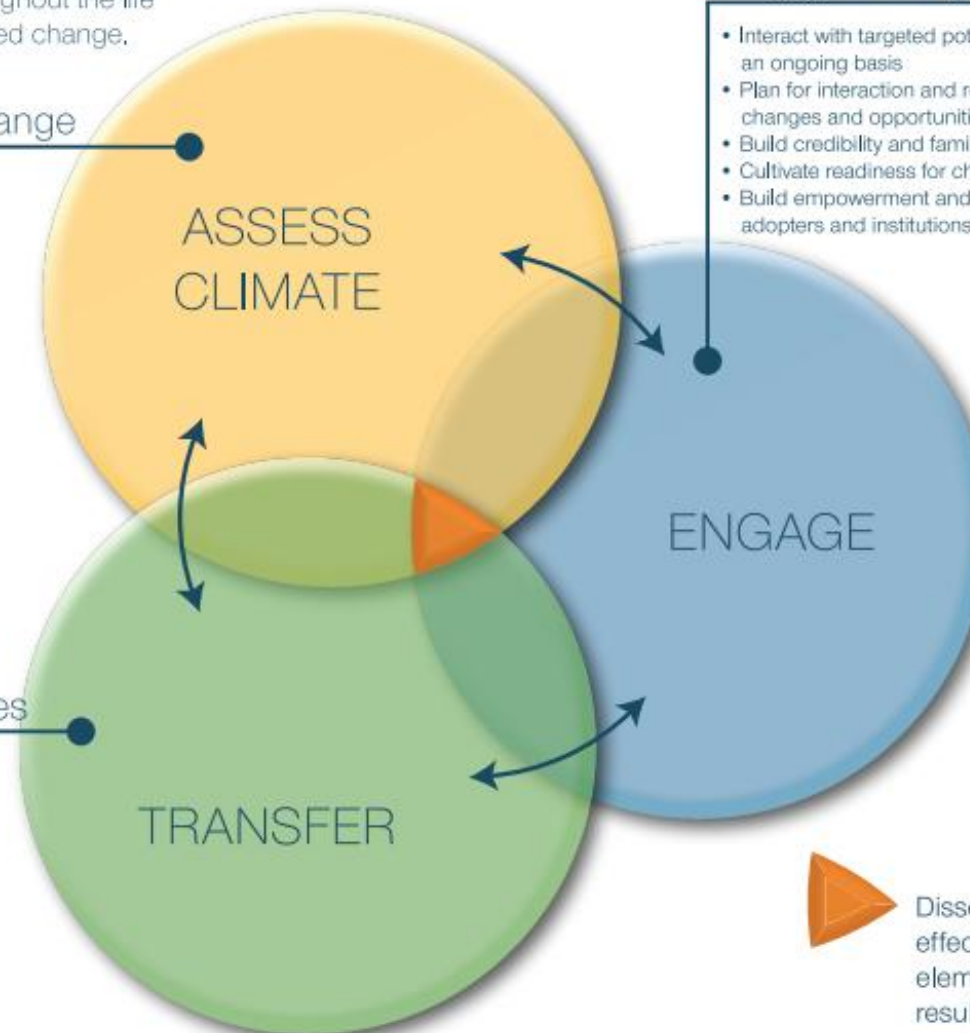Assess climate of readiness for change

- Understand the intended impacts and perceived benefits
- Address an evident need
- Consider the feasibility of project implementation
- Ensure the project is grounded in existing knowledge
- Identify targeted potential adopters
- Identify potential change enablers
- Understand the culture and structures of institutions
- Ascertain a willingness and ability to change including readiness of leadership to bear resourcing costs.

ASSESS CLIMATE

ENGAGE

Enable transfer of project outcomes

- Make the outcomes adaptable
- Make the outcomes findable
- Determine the capacity of the project to provide ongoing support
- Articulate the value of the project outcomes
- Nurture ongoing commitment, ownership and capacity to adopt

TRANSFER

Dissemination is most effective when all three elements are in place, resulting in the greatest possibility of **embedding, upscaling** and **sustainability.**

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This framework consists of three interlocking elements (assess climate, engage, and transfer) and indicates that dissemination is most effective when all three elements are in place.

- **Assess climate:** The climate of readiness for change is the existence of a fertile environment which nurtures a climate of risk taking and systematic change which are essential conditions for successful innovation and dissemination. This occurs at the planning stage, and is revisited frequently throughout the project.

- **Engage:** Engaging with targeted potential adopters throughout the project invites authentic involvement of and includes them in the evolution of the project findings. To be most effective, engagement is planned for, and takes place throughout, the life of the project.

- **Transfer:** The processes undertaken to maintain momentum and impact beyond the funded life of the project and beyond the project team. It is concerned with sustaining the influence in the long-term.

(2) Hub Model (England)

The Hub Model[31] designed by Challenge Partners[32] - a national network of local school partnerships, has also influenced our thinking, particularly with regard to the need for a more critical coordinated approach to dissemination for education in NI. The Hub Model aims to improve pupil outcomes by advancing effective school collaboration. Developed by the Challenge Partners charity, the model is owned and led by 300 schools who work together to lead school improvement.

Hubs are local partnerships of schools which provide the structures for schools to improve by acting as centres of excellence to share and develop best practice in the system. This allows the lead school in a hub to effectively manage the knowledge within its own schools, as well as the schools they work with in their Hub. The result is a reduction in the gap between the highest and lowest performing schools within the hub while increasing the performance of the hub overall. The approach to achieving this is through developing in schools the key components of effective knowledge management, which are defined as: '**The Four Capitals – The key components of effective knowledge management'** i.e.

- **Moral Capital**: Creating the moral climate for knowledge sharing between staff and schools.

- **Knowledge Capital**: Identifying those that have the knowledge of effective school practice and capture it.

- **Social Capital:** equipping the staff and schools with the social skills to share their knowledge effectively.

- **Organisational Capital:** Setting up the organisational systems for them to share this knowledge with those who need to learn.

Figure 10: Hub Model

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The theory of action to achieve this is called upwards convergence: Through upwards convergence, not only does the number of people and schools in the system which can deliver best practice increase, but best practice itself increases. The delivery agents, (Challenge Partners) role is to help make these Hubs more effective, as well as create new Hubs. In effect, this means that the aim is to reduce the disparity in performance of the schools in the Hub whilst increasing the performance of the Hub overall.

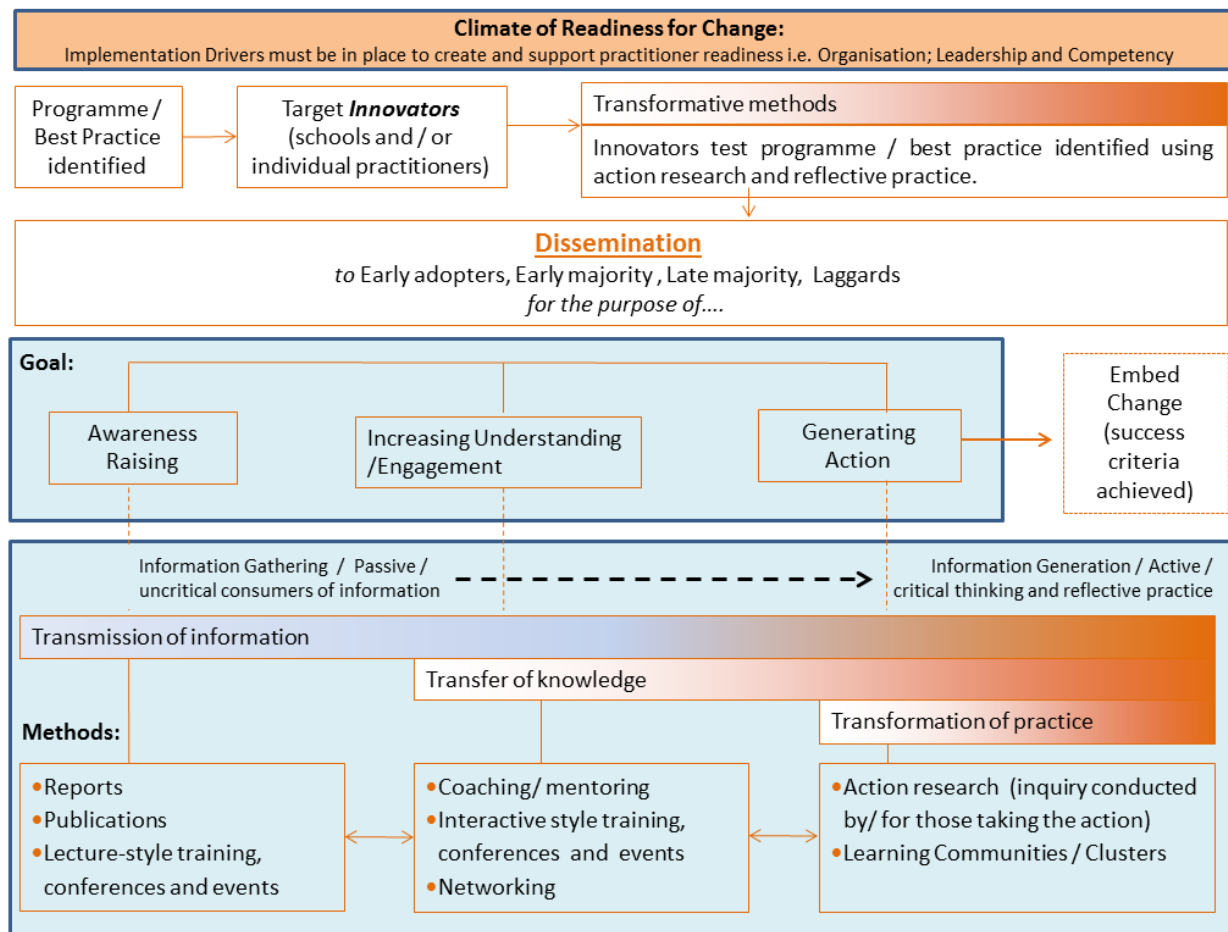## The recommended Dissemination Framework for education in NI

Based on learning from other frameworks and evidence from our online survey of schools and key stakeholder interviews, it is recommended that DE proceeds with establishing a Dissemination Framework for education in NI such as that proposed and outlined in Figure 11 below. This proposed Dissemination Framework for education in NI advocates the need for dissemination to be pre-planned, focused, coordinated and developed in a strategic manner to ensure that effective solutions are identified, disseminated and taken up more widely.

The proposed Dissemination Framework for education in NI aims to fit within existing structures i.e. promotes the process of self-evaluation and a culture of reflective practice and continuous improvement, as well as closely aligning with the new Learning Leaders strategy which seeks to promote the dissemination of good practice and develop 'next practice'.

The proposed Dissemination Framework for education in NI firstly promotes the need to create a climate of **readiness for change** and considers **levels of diffusion** of an innovation (innovators, early adopters, early majority, late majority, and laggards). The Framework purposely **aligns dissemination goals to methods**, which when used together enhance the extent to which transformation occurs. Three '**Implementation Drivers**' must be in place to create and support practitioner readiness i.e. organisation; leadership and competency as outlined later in this chapter in part 3 on implementing the framework.

It is important to note that this proposed Dissemination Framework for education in NI is not designed to be overly prescriptive, but aims to provide guidance for the education sector so they have autonomy to select various methods available to access and disseminate best practice.

Figure 11: Proposed Dissemination Framework for DE

Climate of Readiness for Change:
Implementation Drivers must be in place to create and support practitioner readiness i.e. Organisation; Leadership and Competency

Programme / Best Practice identified → Target *Innovators* (schools and / or individual practitioners) →

Transformative methods

Innovators test programme / best practice identified using action research and reflective practice.

Dissemination
to Early adopters, Early majority , Late majority, Laggards
for the purpose of....

Goal:

Awareness Raising | Increasing Understanding /Engagement | Generating Action → Embed Change (success criteria achieved)

Information Gathering / Passive / uncritical consumers of information - - - - - - - → Information Generation / Active / critical thinking and reflective practice

Transmission of information

Transfer of knowledge

Transformation of practice

Methods:

- Reports
- Publications
- Lecture-style training, conferences and events

↔

- Coaching/ mentoring
- Interactive style training, conferences and events
- Networking

↔

- Action research (inquiry conducted by/ for those taking the action)
- Learning Communities / Clusters

The remainder of this section describes the framework components:

- Identify best practice
- Create a readiness for change
- Target innovators
- Select dissemination methods and goals
- Embed change

Identify Best Practice

Best practice should be identified and endorsed by a credible source and validated before widespread dissemination can be justified. The best practice identified must have relevance to the intended audience, and address a specific school need/ priority.

As per the terms of reference for this research, this report considers the methods used to disseminate best practice and assumes that this best practice has/will be identified by relevant bodies. This relates to the dissemination of effective programmes (e.g. evidence via pilot projects or mass implementation of practice endorsed by the EA or other education bodies) and/or that identified by schools and ratified by the EA/ETI.

Create a Readiness for Change

For best practice to be adopted systems need to be ready to change and teachers need to be motivated to act in accordance with the change. To achieve this, it is important to be clear about who will benefit from the best practice / programme (end-users) and who would be likely to take up new approaches (potential adopters). End-users (schools) should be involved and engaged at the pre-planning stage, and throughout the process. This active engagement will engender a sense of ownership and uptake of the practice to be widely implemented. It is important to note that the state of readiness may change quickly at any given point, therefore continually scanning and reviewing the climate during the dissemination process is vital.

Based on the climate considerations from the D-Cubed Dissemination Framework, ALTC provides a series of questions to assess the degree to which there is a climate of readiness for change i.e.

The big picture questions	What are your intended impacts and perceived benefits?	*What is the legacy you intend your project to leave?* *What impacts will it have and who will it benefit?*
	Who are the targeted potential adopters?	*Who are the people with whom the project seeks to engage and transfer project outcomes to for the purpose of change?*
Project questions	To what extent does the project address an evident need?	*This may be signalled by data, findings/recommendations of previous projects, support from key people and groups, and momentum for change which already exists in the sector.*
	In what ways does existing knowledge ground and inform the project?	*Consider relevant literature, previous research, internally funded grants that have seeded the project idea.*
	How feasible will implementation of project outcomes be?	*Think about costs of implementation (both within the project and beyond it), whether adopters would have the time (and see the benefits of adoption), what obstacles to implementation exist and how they will be overcome.*
System questions	Do you have people who are change enablers ready to support the project?	*Who can broker, champion, provide expertise, and support the changes you propose?*
	Do you know enough about the culture and structures of the institutions and organisations where change is anticipated?	*Evaluate your team's knowledge of how decision-making and change happens, what drivers and obstacles exist for change, and what mechanisms exist for embedding and upscaling*
	Does change seem possible?	*Consider the degree to which there is a willingness and ability to change, including readiness of leadership to bear resourcing costs of the project outcomes*

The assessment of the climate of readiness for change is an underpinning feature of the framework and is central to the dissemination process.

Target Innovators

Dissemination strategies are active and planned efforts to persuade target groups to adopt an innovation or outcomes emerging from an investigation or project (Greenhalgh et al., 2004[33]). The first step of disseminating best practice is to identify adopters. The categories of adopters are: innovators, early adopters, early majority, late majority, and laggards, as per diffusion of innovation theory (Rogers, 1962[34]) which seeks to explain how, why, and at what rate new ideas and technology spread.

The proposed Dissemination Framework for education in NI refers to schools and/or individual practitioners as being either innovators and/or adopters of change. Within a school itself, practitioners can be both innovators and adopters of best practice. This is what makes inter-school sharing possible.

1) School and/or Practitioner as an Innovator

In this case the school and/or practitioner is the innovator, using transformation methods (such as action research and reflective practice) to test new ways of working within the school. If positive results ensue, this practice should then be validated and endorsed by ETI, through the inspection process and/or through the EA School Development Service.

Wider dissemination methods of the tried and tested 'best practice approach' should be subsequently coordinated by DE e.g. development of resource to describe application of practice, training and availability

of mentors/coaches to transfer knowledge and support for schools to adapt practice to their individual circumstance to lead to transformation.

2) School and/or Practitioner as an Adopter

In this case, the school and/or practitioner adopts practice that has been tested by the 'Innovators' school. This adoption process may involve schools firstly accessing information from EA/DE/ETI/other education bodies via transmission methods and if the best practice addresses a need (via self-evaluation and linked to the School Development Plan) the adopter school should actively engage in transfer and transformative methods. Key considerations for both Innovators and Adopters are described below:

Innovators	Adopters
• These are schools with a high level of capacity for sustained improvement or practitioners that are either targeted or 'opt-in' as potential innovators. (An opt-in approach may be better received from schools – providing an equal opportunity for all). • Innovators will be motivated by their desire to pursue continuous improvement, for professional development, to promote the school and/or as an opportunity to engage with other schools through the implementation of best practice. • Innovators will pilot a specific programme and/or best practice approach. • The pilot phase will allow the school and / or practitioner to engage in transformative practice to test a theory / enquiry and the results of which will be disseminated to early adopters and widespread roll-out. • Buy-in from Board of Governors, Principal and the whole-school community is key to the success of the testing phase as it will require time and commitment and both the testing and dissemination stages.	• These are schools, not directly involved in the pilot but are aware of the study and the outcomes and therefore receptive to testing and adopting the 'new best practice approach' to check suitability and transferability to their school profile and circumstances. • Adopters will be motivated to engage by their desire to achieve best practice right across all aspects of the teaching and learning experience. • The key to the diffusion of innovation is for the adopters to learn from the innovators and from how the wave of change is enabled to move through the system. This approach ensures that the message being disseminated is from a credible source. • Adopters should be made aware of the pilot study and the outcomes achieved by Innovators. • Area Learning Communities and Cluster Groups and other school-to-school collaborations (e.g. Shared Education Projects) can provide a vehicle for the diffusion of the innovation.

In establishing the proposed Dissemination Framework for education in NI, there is a need to support the dissemination and implementation process by bringing both 'innovating' and 'adopting' schools to a point of readiness for their respective roles.

Select Dissemination Methods & Goals

Dissemination is an active process of transferring knowledge and embedding outcomes. In the proposed Dissemination Framework for education in NI, dissemination methods are purposefully aligned with intended goals, reflecting an increasing scale in terms of engagement i.e**.**

- **Transmission** for the purpose of raising awareness (low engagement).

- **Transfer** of knowledge for increasing understanding (medium engagement).

- **Transformation** for the purpose of generating change and embedding new practice (high engagement).

This proposed **'3T' approach** acts as a reminder and guidance for the education sector when considering dissemination activities.

Transmission efforts are widely used and messages can be circulated quickly and inexpensively. However, engagement is low and limited to the passive form of information gathering - where individuals are 'uncritical consumers of information'. Transfer methods are more engaged than transmission and involve cascading learning via peer-to-peer mentoring and coaching. However, effects can be negatively impacted due to the dilution of learning from person to person. At the other end of the spectrum are transformative methods, which involve active participants engaged in information generation and critical thinking and reflective practice to transform practices, often through action research.

Effectiveness is enhanced when a number of tools /methods are used in a pre-planned and coordinated manner to generate change and support a transformative agenda.

Embed Change

King (2003) clearly conveyed the message that dissemination is a continuous process involving adaptations along the way and the need to allow time for evaluation, reflection, and re-planning. This process will allow for the identified best practice to be adapted to suit the needs of schools and tailored in terms of application. The dissemination approach will be successful if schools embed the best practice approach to such an extent that it becomes 'normalised' within the schools and encompassed within their daily practice.

The D-Cubed model of dissemination suggests that sustainability is reached through embedding and upscaling. Embedding institutionalises the change that the project seeks to make and upscaling takes the change into another context or setting. **Sustainability is best achieved by paying attention to climate (readiness for change), engagement (with targeted potential adopters throughout the project) and transfer (sustaining the influence of the project in the long-term).**

The Dissemination Framework from a school perspective

An adapted version of the proposed Dissemination Framework for education in NI has been created specifically for schools to be used as a **guide to action planning – which can form part of school's self-evaluation process and school development planning**. The Framework considers WHO (Principal) does WHAT (message – best practice) WHEN (timeline for dissemination) HOW (dissemination methods) for which PURPOSE (dissemination goals) to WHOM (target groups) and WHY (generate positive outcomes and embed change).

Figure 12: Proposed Dissemination Framework for schools
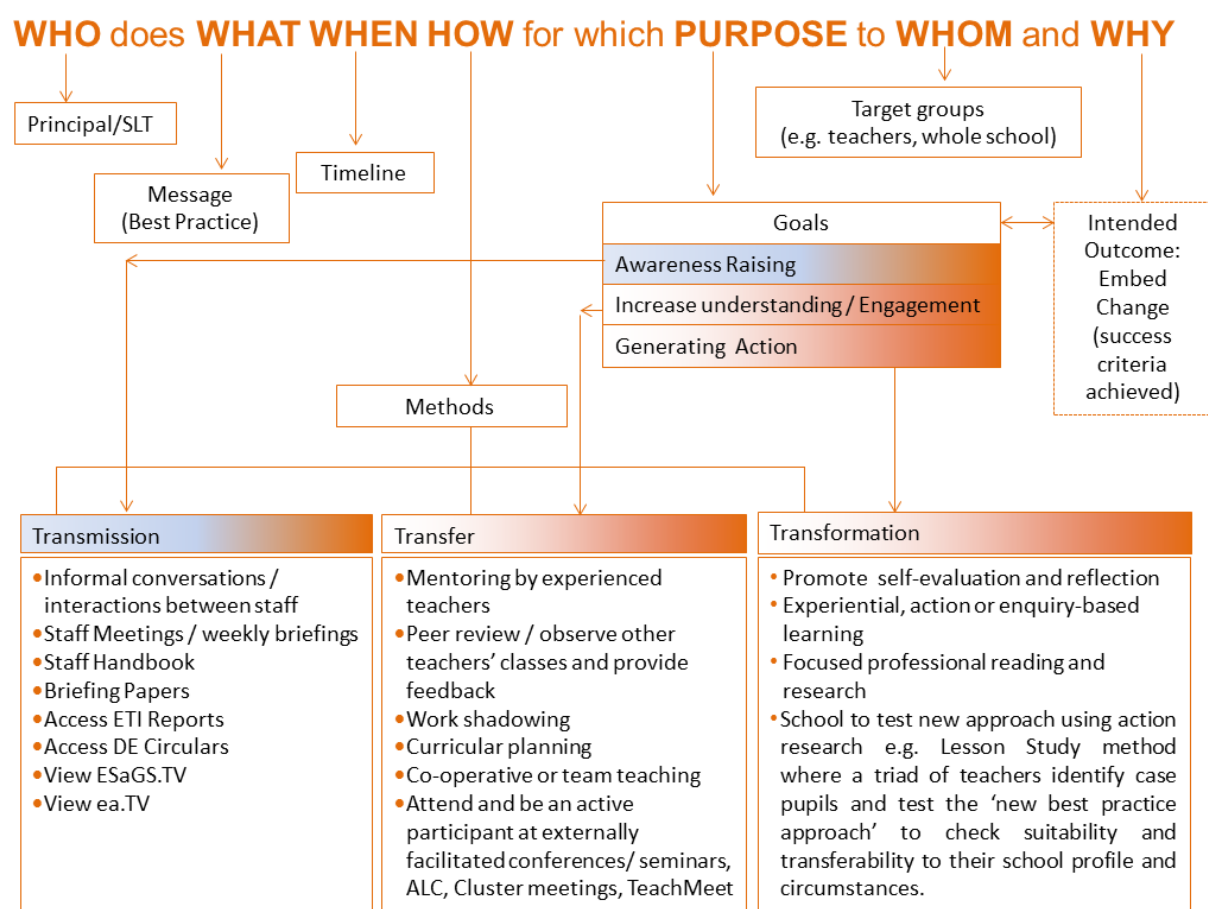
- **WHO:** Prior to a dissemination effort, it is important for the Principal to gain buy-in from all relevant stakeholders within the school as part of a whole-school approach (Senior Leadership Team (SLT), Board of Governors (BoG), teaching staff and parents).

- **WHAT:** Principal/SLT to identify priority need through the process of self-evaluation*, and identify best practice approach to address this need, as per the School Development Plan. For example, to identify best practice Principal/SLT should access sources such as, ESaGS.tv, ALC/Cluster group discussions.

   ETI's Together Towards Improvement is a resource to support schools in the process of self-evaluation, which asks school leaders to consider a number of key questions with a set of quality indicators against the follow areas: The Quality of Leadership and Management; The Quality of Provision: and The Quality of Achievements and Standards.

- **WHEN:** Timeline for dissemination to be agreed, from initial exploration to sustainability (i.e. stages of implementation include: exploration, installation, initial implementation, full implementation and sustainability).

- **PURPOSE & HOW:** The purpose for the dissemination and methods are aligned to methods i.e. transmission for awareness raining, transfer for increasing understanding and engagement and transformation for generating action.

- The Principal/SLT will agree responsibilities to deliver the dissemination action plan both within and, where relevant between schools i.e. Intra-school – within (changing practice in school context) and Inter-schools – between or among schools. NB. Principal/SLT can disseminate learning further e.g. via ALC/cluster groups, Teach Meet.

- **WHOM:** The message /best practice approach and implementation steps will be identified and disseminated to the target group (initial potential innovators and adopters within school).

- **WHY:** The objective of the dissemination action plan will be agreed at the outset and will identity the change to be generated.

Part 2: Testing the Dissemination Framework

The proposed Dissemination Framework for education in NI was tested in six schools to include a spread of various school management types, sector and geography. The purpose of the school visits was to test what has been learnt from the research and putting this into practice to assess the implementation readiness of schools.

The following resources were tested with the selected schools:

- The proposed Dissemination Framework for education in NI (Figure 11).

- Two existing programmes with proven positive outcomes were mapped to the framework as examples i.e. Literacy & Numeracy KS2/KS3 CPD Project (Figure 13) and Delivering Social Change (DSC) Literacy & Numeracy Signature Programme (Figure 14).

Key Findings: Testing the proposed Dissemination Framework for education in NI

The proposed Dissemination Framework for education in NI was well received, highlighting that the framework provides a helpful 'logic' and 'flow' when considering the various dissemination methods available to schools. Encouragingly, some of the schools commented that this framework reinforces what they are already doing and fits with the school development plan process.

> *"If I had a logical framework set out [like the Dissemination Framework], it almost creates logic in the world of chaos that a Principal's job is."*

> *"Whenever I am coming to do my school development plan…you would be able to use something like this [Framework] to be able to say right, we have done the information sessions and we have had our training, so the next part of that is, we are going to actually look at giving responsibility to the class teachers to be the leaders. To be able to break that down and actually come up with a plan of action that would work in our development plan."*

Salient points emerging from school visits based on discussions on the key components of the proposed Dissemination Framework for education in NI i.e. identifying best practice, creating a readiness for change, targeting innovators and the proposed '3T' approach:

Identifying best practice

- Best practice should be endorsed and validated by DE, EA and other relevant education bodies prior to widespread dissemination.

   "There are lots of schools that maybe would see themselves as target innovators and want to put themselves forward to share lots of ideas, but they maybe haven't been involved in any clarification as to how good that practice is."

   "ETI coming in as a professional partner in education can see how it impacts positively and negatively and decide whether or not that is a piece of good practice worth spreading…then you can stand in front of somebody with the authority that your good practice has been seen and validated by ETI."

- Programmes endorsed by education bodies must be *"relevant to the target schools"* and *"…of value to the school"* which will lead to widespread dissemination.

- There should be an appreciation that what works in one school setting may not always be transferable to others, therefore the Dissemination Framework should be used as guidance rather than being overly prescriptive.

- Reflective practice was raised as one of the key elements used by schools to identify what works well in terms of positive outcomes. This cyclical process leads to transformation of practice.

- Respondents highlighted that the Principal often act as the main filter of information which the school receives from various education bodies and cascades this information to staff, where relevant.

- The option of allocating a designated teacher for the purpose of identifying and coordinating dissemination activities, as suggested as part of the drafting of the Dissemination Framework, was discounted as respondents felt that this would not be conducive to empowering all staff to take responsibility for disseminating best practice.

Creating a readiness for change

- Respondents agreed that creating readiness for change and having an identified need and strong rationale for advocating a new practice approach will have a positive impact on the uptake and dissemination of best practice.

   "…starting with the Principal, they need to be on board and be open to coaching, open to mentoring, the teachers need to be convinced of the benefits of team teaching and opening their doors and letting other people in. So you have to create the culture first, where people actually are open to this and can see the benefits of it, and can see the rationale behind it. Otherwise people will just say, this is something else being added on here and I am not going to engage here, or pay lip service, but nothing will change."

- Building capacity and providing potential innovators with training support to give them the confidence to disseminate their effective practice.

   "…you need to be in a position of confidence where you feel that your practice is at a level where you can disseminate to other people."

"You can be within an outstanding school and be an outstanding practitioner in your own classroom, but you may not be the type of person who can go and deliver that message to somebody else. That's a skill in itself, you know. So those things need to be taken into account."

"Teaching well is one skill. Sharing that practice with others; leadership; managing change – these are different skills and you can't presume they are always there."

- Dissemination activities are more effective when they are pre-planned and resources allocated.

- Respondents highlighted the need for school involvement from the pre-planning stage and for parallel processes which bring both 'innovating' and 'adopting' schools to a point readiness for their respective roles.

Targeting Innovators

- Respondents felt that schools and individual practitioners should have the opportunity to 'opt-in' as potential innovators and should not be limited to those selected by ETI.

    "It is important that everyone has a level playing field and feel as valued and valid as everyone else".

- One school asserted that schools should be seen as both innovators and adopters, instead of one or the other.

    "Outstanding schools who acknowledge that they have much to learn from others give confidence to the 'other'.

- The issue of credibility was raised in the case of innovators, emphasising the need for innovators to have the required skills and expertise to support the dissemination process.

    "There has to be a buy-in by the adopters, but the innovators that you are putting forward from have got to be credible professionals who will be able to bring other people along with them. But again that will involve a bit of upskilling for some people, obviously, if that's something they haven't done"

- Concerns raised that if a school is identified as a potential innovator that this will lead to additional work to facilitate other schools visiting to observe practice. To overcome this issue, one school highlighted that they have 'good practice days' for the purpose of inviting other schools/teachers to visit their school, providing opportunities to share practice.

The proposed '3T' approach

- Respondents were receptive to the approach of categorising the various dissemination methods. It was agreed that a list of methods aligned to goals was a useful tool and will help schools to select the best options depending on their needs.

    "It's good because it means that it gives you options to be able to choose what you think would work for your setting."

In terms of dissemination activities, schools reflected on their experiences of engaging in the various '3T' methods of transmission, transfer and transformation, as follows:

Transmission

- All schools receive information from relevant education bodies in the form of transmission methods (e.g. circulars, emails, newsletters, websites etc.)

- It was suggested that the profile of the online tool, ESaGS.tv, should be raised to increase usage. It was also suggested that when a new segment on best practice is uploaded on this virtual platform, a notification could be sent to schools to raise awareness and generate interest.

- As social media is increasingly being used as a mechanism by which teachers can communicate and share practice, staff training in the effective use of social media was suggested.

Transfer

- Schools are proactively collaborating and often engage in pooling resources to engage in joint training and sharing of practice through various transfer methods.

- Time and opportunity to attend seminars and interactive workshops are welcomed as a way of disseminating best practice.

- Networking, clustering and area learning communities were regarded as effective methods of sharing best practice and should be considered as a key mechanism for dissemination activities. These activities were believed to encourage a 'bottom-up' approach to identify and sharing best practice.

  "I think the area learning communities have a huge role in all of this. And rather than identifying outstanding schools, a really good area learning community with schools working together really well, and the right people identified as the coordinators to support dissemination."

  "Principals groups can be very useful and are bottom-up so build capacity as well as good practice."

- The role of coordinators, for instance within ALCs, was also mentioned as an effective means of transferring learning between schools and could potentially be created to support the dissemination of best practice.

  "The Principals are looking at the policy and the practice and the big overall, and then you've got the coordinators who are bringing back, and who are looking at the implementation plan and driving it forward."

- Informal networks (e.g. Teach Meet) have proved to be a popular method of sharing ideas.

  "It is fifteen minutes of my time that I can put a quick presentation together and give people a quick taster, with a view that then they can go, oh I saw that idea. I am going to go away and research it a little bit more and put the wheels into motion in my own school."

Transformative

- Some schools reported that learning can be diluted when adopting cascade methods of dissemination, preferring opportunities for teachers to experience and test new practice themselves i.e. transformative methods.

- It was also noted that 'task clusters' and 'interest clusters' have emerged from ALC's to engage in action research type activities.

Key Findings: Mapping of Existing Programmes

The terms of reference stated that the results of this research will be used to inform a wide range of activity aimed at ensuring <u>effective programmes</u> have a legacy and that there is a high level of awareness of good practice in relation to raising standards and increasing equity.

Therefore, to test the Dissemination Framework, two existing programmes with proven positive outcomes were mapped to the framework as examples:

- Literacy & Numeracy KS2/KS3 CPD Project; and
- Delivering Social Change (DSC) Literacy & Numeracy Signature Programme[6].

The outcome of this mapping exercise is presented in Figure 13 and Figure 14 – highlighting that extensive dissemination activities are already being carried out. This suggests that what is missing is a framework in which to devise a dissemination plan and coordinate activities to generate the greatest impact.

Discussions during school visits indicated that schools would welcome a populated version of the framework (as per the examples presented in in Figure 13 and Figure 14) - to list the various dissemination activities planned for a particular programme.

One school reported that they had participated in one of the above programmes and mentioned that they did not realise the extent of dissemination activities until they were presented with this proposed framework, and agreed that this tool is useful and would help them engage in all levels of dissemination leading to transformation.

It was agreed that, if issued by DE at the pre-planning stage of a programme, this would generate increased awareness of the various dissemination activities available to schools to engage in the learning and to help embed a new practice.

Figure 13: Mapping of Existing Programme: CPD Project

> **Example 1: : Literacy & Numeracy KS2/KS3 CPD Project**
>
> The Literacy and Numeracy Key Stage 2/3 CPD Project is a regional project funded by the Department of Education. It started in September 2014 with training for schools commencing in January 2015. The project aims: To provide a professional development programme for teachers of English and Mathematics across Key Stages 2 and 3 which focuses on the delivery of high-quality teaching and learning. To address issues related to learning that pupils face at the transition from primary to post primary school.
>
> **Dissemination Goals:**
> - Raising awareness of leading practice in Literacy and Numeracy and Transition between KS2 and KS3.
> - Increase understanding of issues at Transition between KS2 and KS3 in Literacy and Numeracy.
> - Generate action and change in practice in regards to Literacy and Numeracy and Transition between KS2 and KS3.

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[6] *It is important to note that dissemination of best practice is not the aim of these programmes, although dissemination of good practice was an important element of the strategies used.*
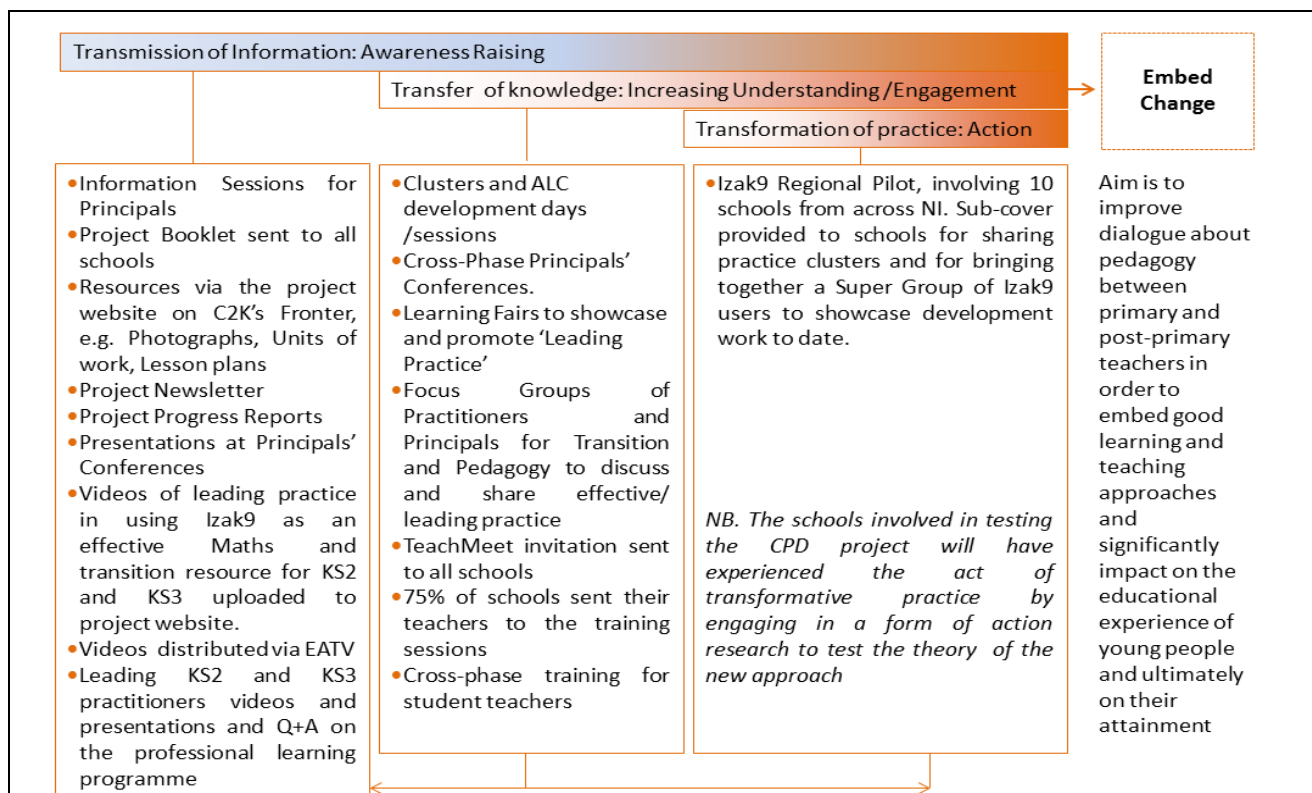
Figure 14: Mapping of Existing Programme: DSC Literacy & Numeracy Signature Programme
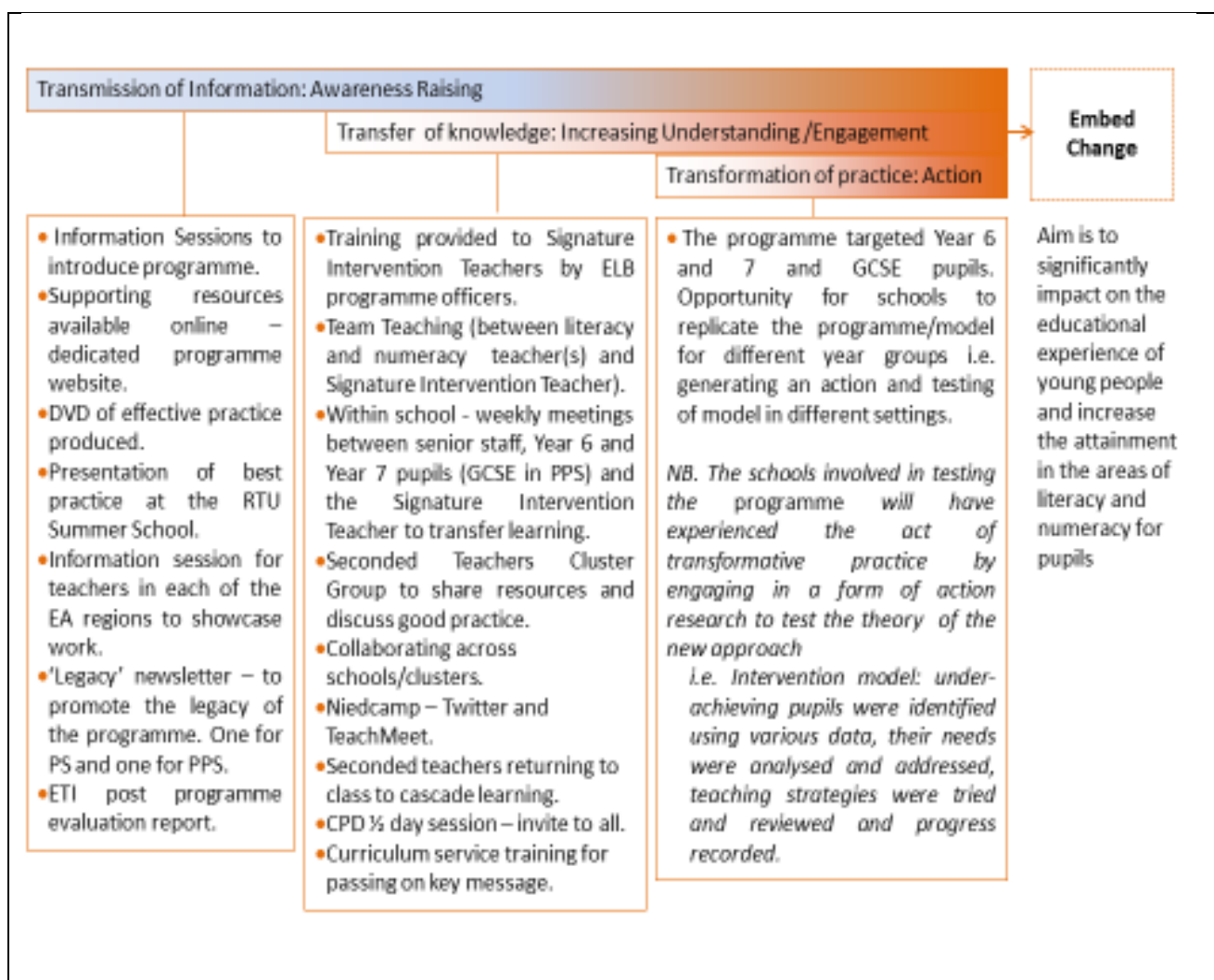

Example 2: DSC Literacy & Numeracy Signature Programme

The programme's aim was to address the challenges of disadvantage and inequality that afflict society by improving literacy and numeracy levels among all school leavers, in particular those from socially disadvantaged backgrounds, with additional support targeted at underachieving pupils. It also aimed to provide valuable teaching experience for recently graduated teachers who were not in employment.

This programme involved recent graduate teachers or seconded teachers employed as a 'Signature Intervention Teacher' to deliver additional support, where appropriate, to children in primary and post primary schools who were currently struggling to achieve at their expected level.

Dissemination Goals:
- Raising awareness of practice in Literacy and Numeracy to support pupils at risk of underachievement.
- Increase understanding of using data to identify pupils at risk of underachievement and the benefits of tailored support in Literacy and Numeracy.
- Generate action and change in practice to increase the attainment in the areas of literacy and numeracy for Year 6 and Year 7 pupils and GCSE pupils.

Transmission of Information: Awareness Raising

- Information Sessions to introduce programme.
- Supporting resources available online – dedicated programme website.
- DVD of effective practice produced.
- Presentation of best practice at the RTU Summer School.
- Information session for teachers in each of the EA regions to showcase work.
- 'Legacy' newsletter – to promote the legacy of the programme. One for PS and one for PPS.
- ETI post programme evaluation report.

Transfer of knowledge: Increasing Understanding /Engagement

- Training provided to Signature Intervention Teachers by ELB programme officers.
- Team Teaching (between literacy and numeracy teacher(s) and Signature Intervention Teacher).
- Within school - weekly meetings between senior staff, Year 6 and Year 7 pupils (GCSE in PPS) and the Signature Intervention Teacher to transfer learning.
- Seconded Teachers Cluster Group to share resources and discuss good practice.
- Collaborating across schools/clusters.
- Niedcamp – Twitter and TeachMeet.
- Seconded teachers returning to class to cascade learning.
- CPD ½ day session – invite to all.
- Curriculum service training for passing on key message.

Transformation of practice: Action

- The programme targeted Year 6 and 7 and GCSE pupils. Opportunity for schools to replicate the programme/model for different year groups i.e. generating an action and testing of model in different settings.

NB. The schools involved in testing the programme will have experienced the act of transformative practice by engaging in a form of action research to test the theory of the new approach
i.e. Intervention model: under-achieving pupils were identified using various data, their needs were analysed and addressed, teaching strategies were tried and reviewed and progress recorded.

Embed Change

Aim is to significantly impact on the educational experience of young people and increase the attainment in the areas of literacy and numeracy for pupils

Part 3: Implementing the Framework: Implications

Implementation focuses on how to use innovations as intended and achieve the promised results in typical practice settings i.e. to bridge the gap between 'research/innovations' and 'practice'.

This section describes the three implementation drivers (i.e. organisation; leadership and competency) which must be considered to successfully implement the proposed Dissemination Framework for education in NI. It also outlines the implications for the education sector in NI in moving forward to implement the proposed Dissemination Framework.

IMPLEMENTATION SCIENCE APPROACH

Implementation science promotes the integration of research findings and evidence into policy and practice.

The National Implementation Research Network (NIRN)[35] defines implementation science as *'the study of factors that influence the full and effective use of innovations in practice'*. Based on a robust review of the implementation evaluation literature, the NIRN concluded that the formula for success is:

Effective Innovations x Effective Implementation x Enabling Contexts = Significant Outcomes

In this case, **effective innovations** define *what* needs to be done; **effective implementation** refers to *how* to establish what needs to be done in practice and *who* will do the work to accomplish positive outcomes. The **enabling contexts** relates to *where* effective interventions and effective implementation will thrive.

To understand what constitutes effective implementation, NIRN propose that three 'Implementation Drivers' must be in place to create and support practitioner readiness i.e. organisation; leadership and competency – as per the figure below.

Figure 15: Implementation Drivers
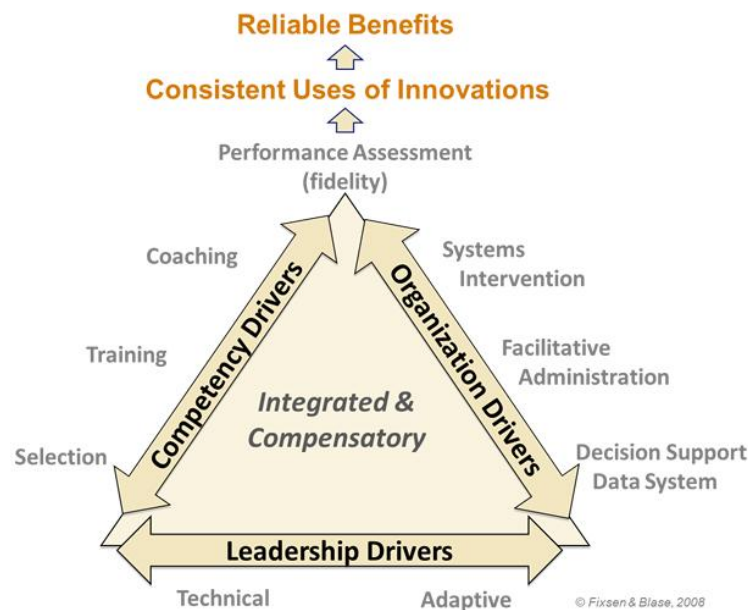
These interactive processes are *integrated* to maximise their influence on staff behaviour and the organisational culture. The interactive implementation drivers also *compensate* for one another so that a weakness in one component can be overcome by strengths in other components.

The implementation drivers, described below, underpin the success of the proposed Dissemination Framework for education in NI and represent systems that must be in place to effect and embed change. It is encouraging to note that DE's 'Learning Leaders' strategy reflects elements of these drivers. Given the importance of this strategy each of the implementation drivers have been mapped to the 'policy commitments' in the strategy (refer to shaded boxes). Therefore, **DE's 'Learning Leaders' strategy presents the vital policy vehicle to enable the proposed Dissemination Framework for education in NI**.

(1) Organisation

An organisation establishes an hospitable environment for the use of effective innovations and supports for practitioners. An organisation decides to proceed with implementation, selects personnel, establishes structures and processes to select, train, coach (Principals, teaching, non-teaching staff), and evaluate the performance of practitioners and other key staff members i.e. facilitative administration; carries out data collection and analysis functions to provide guidance for decision making i.e. decision support data system; and assures ongoing resources and support for the evidence-based practices within the organisation i.e. systems intervention.

Organisation structures and systems must be in place and take account of the various stages of implementation (Fixsen et al., 2010[36]). The first stage is E*xploration* and will require creating a readiness for change followed by the *Installation* stage which will require the organisation to secure the needed resources to do the work ahead and prepare staff for the new practices. *Initial Implementation* is when the innovation is being used for the first time - this is the most fragile stage as practitioners are attempting to use newly learned skills (e.g. the evidence-based programme) in the context of a provider organisation that is just learning how to change to accommodate and support the new ways of work. Establishing and sustaining changes to the point of integration into daily work is not likely unless there is external support for change at the practice organisation and system level.

Full Implementation is reached when half or more of the intended practitioners are using an effective innovation with fidelity and good outcomes. The organisation structures remain essential contributors to ensure that the gains in the use of effective practices are maintained and improved over time and through transitions of leaders and staff. The final stage of implementation is *Sustainability* - at this point, a new programme is no longer new and becomes standard practice.

Implications & links with the 'Learning Leaders' strategy:

DE needs to **lead and support the proposed Dissemination Framework for education in NI**, using the Learning Leaders strategy as a **policy vehicle** in which to enable the Framework development.

DE should coordinate with other relevant bodies (e.g. EA, ETI, CCEA, CCMS, CnaG, NICIE, GTCNI) **to identify best practice** to be implemented. This could be in the form of evidence based programmes (in the current education system) or by commissioning a pilot where schools opt-in as potential innovators to test the new practice approaches using methods such as action research.

DE's 'Learning Leaders' strategy – relevant policy commitments

- *Policy commitment 4: Learning drawn from research and ETI evaluations will inform the development of 'next' practice pathfinder projects at all levels of professional learning.*

- *Policy commitment 13: Teachers and school leaders will have the opportunity to contribute to designing, developing and evaluating all funded programmes related to the Strategy. Providers of professional learning programmes will establish focus and/or advisory groups to demonstrate how programmes can improve standards.*

The dissemination and uptake of best practice will have resource implications, typically such as the need for an Implementation Team to support the adoption of innovations and new practices. Given that the EA are currently working on creating a new School Development Service, the structures put in place under this **School Development Service could provide the <u>implementation vehicle</u> for the proposed Dissemination Framework for education in NI.**

If additional resources were made available, Innovators could be supported by individuals, experienced in the process of change management and with the role of providing training to practitioners in the new practice and monitoring the effectiveness of the programmes.

Existing **collaborative structures** (e.g. clusters, Area Learning Communities) provide the potential for disseminating best practice. However, there is a need for equity of access for all i.e. feedback from key stakeholders and the online survey of schools highlighted the limited opportunities for pre-school, primary

schools and the Irish Medium Sector to engage in learning community networks. Opportunities for a cross-phase approach to collaboration (i.e. pre-school and primary; primary and post-primary; and post-primary to FE/HEI) should also be considered as a means of knowledge sharing. In addition to formal collaborations, it is also important to allow space and time for organic clustering to occur (e.g. as spin-offs from ALCs, Teach-Meet models).

In terms of the Dissemination Framework, potential innovators and/or adopters could be sourced from within learning communities. This structure will provide opportunities to establish task groups to engage in action research and testing of new approaches, where the results can subsequently be reported back to the wider learning community – and other learning communities – creating a ripple effect.

> *DE's 'Learning Leaders' strategy – relevant policy commitments*
>
> - *Policy commitment 7: Support will be provided for the ongoing development and sustainability of professional learning communities and/or self-directed learning networks where schools or groups of teachers can demonstrate the capacity to deliver clear educational benefits.*

Supporting practitioners and the effective use of innovations/best practice will require investment in the development of current dissemination methods. For example, ESaGS.tv and Fronter are virtual learning environments where teachers can access case studies and guidance reflecting best practice. It is important that an existing system is promoted as a **central virtual platform** / 'one-stop-shop' for disseminating information (with sign-posting to other support where relevant). Furthermore, schools may benefit from being provided with ideas regarding the potential uses of this resource as an integral part of their staff development.

Viewing statistics and related metrics should continue to be captured by DE as a means of providing valuable insights into usage. For example, as stating in Section 3, viewing statistics from ESaGS.tv show that there is a high bounce rate from the period January 2015 to January 2016 (45.25%), with visitors only spending an average of 4 seconds on the site. To improve usability, a robust analysis of the end-users journey is recommended to include an assessment of touch points and where/how/when individuals' access site and which calls-to-action have the most impact. Understanding the end-users journey will influence the design of the website and improvements can be made to enhance the experience and uptake levels, to improve dissemination via ESaGS.tv.

> *DE's 'Learning Leaders' strategy – relevant policy commitments*
>
> - *Policy commitment 5: Teachers will have access to a virtual centre of excellence. Best practice examples and useful resources will be developed based on consultation with practitioners and mapped to the Department's vision and characteristics. This will build on and expand work already carried out by EA, HEIs, CCEA and others.*
>
> - *Policy commitment 14: The Department will engage with the teaching profession on the most effective ways to maximise the use of technology to design and deliver professional learning for the 21st century.*

(2) Leadership

Implementation requires leadership that can help resolve <u>adaptive</u> issues (convening groups to identify problems, arriving at consensus regarding how to approach a solution, detecting progress toward resolution) and <u>technical</u> problems (setting goals, managing time and effort, solving problems of known dimensions) that arise in the course of initiating changes in the ways of work and managing change in

organisations and systems. Transformative leaders support the full implementation of effective innovations – and help to move system through meaningful change and leading through the resistance that can arise in the process.

A dynamic, motivational and outward looking leader who promotes self-evaluation and expects continuous improvement will create a culture that creates effective learning environments.

Implications & links with the Learning Leaders' strategy:

A clear link has been identified between effective leadership which focuses relentlessly on improving the quality of teaching leading to better learning and higher achievement for all. Increasing the capacity of leadership across all phases of education will therefore be a key driver in improving standards.

DE intends to **build leadership capacity** by strengthening the current support and professional learning for school leaders. In terms of dissemination of best practice, it is fundamental that school leaders are equipped with skills to engage in leading change and change management – a necessary skill when embedding a new best practice approach or programme within a schools.

DE's Professional Qualification for Headship (PQH) programme targets aspiring Principals to help build leadership capacity and strengthen leadership skills.

We understand that the EA's School Development Service will carry out a review of the current PQH programme in the coming school year with a view to a revised/new programme being offered in the near future. There is the possibility of including a module on dissemination of best practice as part of the PQH programme.

Further mentoring support is provided by the EA in the form of matching experienced mentors to support newly appointed Principals; middle leadership training has been developed and taken forward to build future leadership capacity.

Effective governance and leadership will ensure that good practice is consistent and embedded in to the culture of the school. We understand that a regional governor training programme is facilitated annually by the EA. There is the possibility that this training could include an element on the importance of governors supporting school leaders in identifying, adopting and sharing best practice.

DE's 'Learning Leaders' strategy – relevant policy commitments

- *Policy commitment 10: Leadership skills will form an integral part of all competence development from ITE [Initial Teacher Education] and throughout a teacher's career. Support and professional learning for school leaders will be strengthened by developing a pathway to leadership, underpinned by new leadership competences.*

- *Policy commitment 12: Where there is evidence of underachievement in a school, the EA will provide support in strategic leadership, leading change, and coaching to assist in improving pupil outcomes.*

To extend professional learning of school leaders, **study or placements** should be encouraged e.g. leaders to spend a time in a university to update their own knowledge of current academic research (opportunity to engage in action research methods), or placements to another organisation (either within or beyond the education sector), giving leaders experiences and opportunities to learn a new skill and share this with others, as well as giving the school the opportunity to build a wider network. Placements can provide professional developmental opportunities and personal benefit as well as assisting in succession planning

to meet current and emerging needs of the school. Schools benefit when the teacher returns to their post by having their new skill-set brought back to the wider team.

Consideration should be given to **strengthening links with the private and voluntary sectors** i.e. encouraging teachers to observe practice beyond the education sector and encourage the recruitment of governors from industry – with the aim of increasing innovation and enhancing motivation of staff.

> *DE's 'Learning Leaders' strategy – relevant policy commitments*
>
> - *Policy commitment 11: School leaders will have opportunities to access extended professional learning – this may take the form of additional study or placements in other organisations including within and beyond the education sector.*
>
> - *Policy commitment 6: Teachers at all stages of their careers will have opportunities to develop their skills in action research, through closer partnership arrangements between schools and the EA, HEIs and GTCNI.*

(3) Competency

For competency development, effective innovations /new ways of work need to be taught and learned through <u>training</u> and <u>coaching</u> with practitioners (teachers, implementation team members) who have been <u>selected</u> to be the first to use the innovation. As coaches support practitioners in learning the innovation and as performance assessments are used to monitor the progress of teaching and learning, organisation and system facilitators and barriers are identified e.g. funding, knowledge, time, belief in usefulness, comfort with topic, motivation, support after training, managerial support.

Gardner et al, (2008) advocate that the best way to engage teachers are through their own reflective practice and by supporting teachers in researching their own classroom practice. Authors link the concept of action research (transformative approach) and **'**reflective practice' allowing teachers to ask critical questions of their practice and the testing of enquiry /hypotheses in action until new ideas and processes become internalised.

This concept aligns action research with the career-long professional learning (CLPL) model which builds on current strengths of CPD. The model has been generated from research studies exploring the relationship between professional learning and the enhancement of practice.

Elements of the model include:

Figure 14: Career-long Professional Learning Model
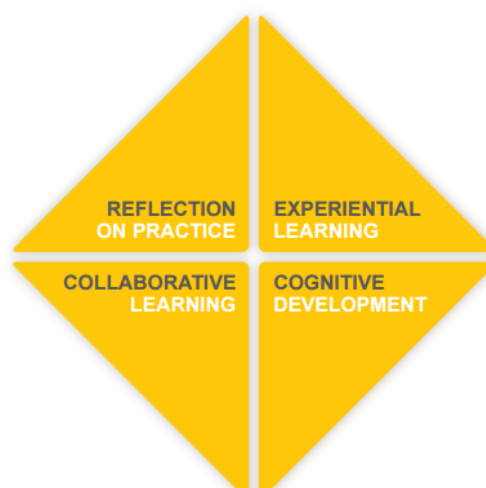
- *Reflection on practice:* asking questions, being curious and looking closely at practice; developing skills in observing what is happening; developing skills in analysing and evaluating what is happening; exploring roles and approaches in professional practice.

- *Experiential learning:* trying out and exploring the impact of approaches; experimenting and taking risks with innovative practice; examining outcomes and identifying learning from innovative practice; building new ideas into practice in structured ways.

- *Cognitive development:* being open to and seeking new ideas and practices; questioning assumptions about practice; using different sources to critically examine experience and practice; testing ideas and exploring the implications for practice.

- *Collaborative learning:* working collaboratively to support each other in changing practice; sharing ideas and experiences through professional dialogue; seeking constructive feedback on practice and the impact on pupil learning; providing constructive feedback on practice and the impact on pupil learning.

Professional learning activities within the CLPL model include: self-evaluation and reflection: experiential, action or enquiry-based learning; focused professional reading and research; curricular planning; peer support e.g. coaching or mentoring; classroom visits/observation; work shadowing; co-operative or team teaching; participation in collaborative activity e.g. professional learning community, learning round; leading or participating in a working or task group; planning learning which is interdisciplinary or cross-sectoral; participation in activities relating to assessment and moderation; secondments, acting posts and placements; and accredited courses or activity related to achieving national professional standards for teachers.

Implications & links with the 'Learning Leaders' strategy:

Creating a readiness for change requires the empowerment of teachers and training and support within education structures.

There is a need for a **career path/ career progression** structure to be created and circulated to staff with a defined competency framework in which to inspire teachers to engage in training and best practice approaches.

It is understood that the development of a Teacher Professional Learning Framework based on revised teaching and leadership competences is being devised as part of the 'Learning Leaders' strategy being taken forward by DE in association with EA, GTCNI and ETI.

DE's 'Learning Leaders' strategy – relevant policy commitments

- *Policy commitment 1: Teachers will have access to a coherent and career long professional learning framework underpinned by revised teacher competences and built on established best practice and collaboration at all stages.*

- *Policy commitment 9: Teacher tutors in schools and university tutors will have opportunities to work alongside each other. This will enable them to support and assess the progress of student teachers in*

Several collaborative teaching approaches have proven to be successful to guide educators who work together in co-teaching partnerships to differentiate instruction and to share learning. This will require **building capacity across the education system** by building on existing good practice in using strategies such as Team Teaching. Team Teaching provides an opportunity for teachers to learn from each other and to share responsibility for planning, teaching, and assessing the progress of all students. This approach can be very effective with the classroom teacher and a student teacher or two student teachers working together. Building capacity in the use of coaching/mentoring methods will help cascade learning both intra-school (within school) and inter-school (across learning communities).

DE's 'Learning Leaders' strategy – relevant policy commitments

- *Policy commitment 3: Teachers will have the opportunity to access support from a mentor or coach to identify areas for improvement and their individual learning needs. This will inform the development of their tailored professional learning plans.*

School leaders and teachers also have a responsibility for their **own professional development** and should take a proactive approach to seeking and sharing good practice with their peers. A culture of self-improvement in the school coupled with teachers taking ownership of their professional learning will lead to raising standards and positive outcomes for children.

DE's 'Learning Leaders' strategy – relevant policy commitments

- *Policy commitment 8: Where teachers and/or schools demonstrate the capacity to do so they will be encouraged and empowered to lead their own and/or other schools' professional learning. Achievement will be measured through the inspection process.*

Lessons from Elsewhere

Scotland:

Teachers in Scotland are required to engage in professional learning, self-evaluate this learning using the General Teaching Council (GTC) for Scotland Professional Standards, and maintain a record of this learning using their online profile i.e. known as '**Professional Update'** – this is requirement for all registered teachers from August 2014. The purpose of Professional Update is: To maintain and improve the quality of teachers and to enhance the impact that they have on pupils' learning. To support, maintain and enhance teachers' continued professionalism and the reputation of the teaching profession in Scotland.

Education Scotland **'Professional Learning Find (PLFind)**' is a database of professional learning opportunities from providers in Scotland and beyond.

Wales:

Teachers in Wales will be given a **'Professional learning passport' (PLP)** to help plan and record their training opportunities as part of a 'New Deal for the Education Workforce' for school staff. Since its launch in September 2015, over 2,000 practitioners have created their PLP to plan, record and reflect upon their professional learning.

New Deal aims to offer all practitioners, support staff, teachers, leaders and FE lecturers in Wales an entitlement to access world class professional learning opportunities to develop their practice through their career. It includes the introduction of a professional learning model with the following characteristics: Coaching and mentoring; Reflective practice; Effective collaboration; Effective use of data and research evidence. Dissemination methods include: the development of a range of high quality online professional learning material that e.g. information booklets, learning packs and video case studies that underpin the professional learning model.

Dissemination and uptake of best practice should not be regarded 'additional' or an added burden but as a means of improving effectiveness. Time should be allocated within **training days** available to create research teams, conduct research and share the findings of such research and best practice with colleagues.

DE's 'Learning Leaders' strategy – relevant policy commitments

- *Policy commitment 2: The Department will review current arrangements, which provide up to five additional staff development days to ensure they support Boards of Governors and Senior Leadership Teams to deliver professional learning approaches that align with the Strategy's vision and characteristics.*

Key recommendations and next steps:

- The proposed Dissemination Framework for education in NI was well received by schools, highlighting that the framework provides a useful structure in the form of the '3T' approach (Transmission, Transfer and Transformation) when considering the various dissemination methods available.

- The proposed Dissemination Framework for education in NI reflects the research evidence which advocates creating a climate of readiness for change and the alignment of dissemination goals to methods which when used together enhance the extent to which transformation of practice occurs.

- DE should lead and support the Dissemination Framework, using the Learning Leaders strategy as the **policy vehicle** in which to enable the Framework.

- DE should coordinate with other relevant bodies (e.g. EA, ETI, CCEA, CCMS, CnaG, NICIE, and GTCNI) to help identify best practice and to promote the use of the Dissemination Framework to encourage knowledge transfer and collaboration between schools.

- Three implementation drivers must be in place to successfully embed the proposed Dissemination Framework for education in NI, These include: organisation, leadership and competency. This will require the support of all relevant bodies to ensure that organisation roles and functions are aligned to the identified best practice, that leaders fully support the process and incorporate the necessary implementation supports; and that staff competencies are developed to aid the uptake and dissemination of best practice.

- Implementation drivers are integrated and compensate for one another i.e. weaknesses in one driver can be overcome by strengths in other components. However, if all three drivers are weak this will adversely affect the success of the dissemination framework. Consequently, the framework will require a concentrated effort by all relevant education bodies and schools.

- The development of a future School Development Service within the Education Directorate of the EA provides the **operational vehicle** to support the implementation of the proposed Dissemination Framework for education in NI. As the new Service evolves, the coordination of dissemination activities and training in dissemination methods (e.g. peer-to-peer mentoring/coaching and team teaching strategies) should be an important role of the service.

Annex I

Dissemination Activities

Annex I: Examples of Dissemination Activities

Activity	Description, examples …..	Weaknesses/key considerations….
Action Research	Action Research can be defined as *'the study of a social situation, involving the participants themselves as researchers, with a view to improving the quality of action within it"* Research highlights that rather than research being a linear process of producing knowledge which is later applied to practice settings, action research integrates the development of practice with the construction of research knowledge in a cyclical process. Lesson Study (LS), a process of teacher enquiry, originally from Japan, is a highly specified form of classroom action research focusing on the development of teacher practice knowledge. The approach could represent an effective model for disseminating good practices. LS is widely used overseas and is becoming increasingly popular in the UK to improve teaching and learning. This model brings together a triad of teachers who work collaboratively to plan a lesson, predict student reactions, observe the reality, interview students and then reflect and repeat the process. What makes it different from many other models is that throughout the process, the triad focuses on three carefully chosen "case pupils" rather than the whole class. This allows them to explore in much greater detail the effect of their teaching on students' learning. Over a cycle of research lessons they may innovate or refine a pedagogical approach that will improve pupil's learning and which will be shared with others both through public research lessons, and through the publication of a paper outlining their work. Practical Application of a LS Approach: • Choose a group of colleges who want to reflect and learn. • Clarify a focus for observation / research question – With the help of a LS mentor, the triad is asked first to identify a clear research question. E.g. *What impact will teaching literacy techniques have on the performance of low literacy students in year 12 when answering long answer exam questions?* – A key feature of the research question is that it needs to be very specific, especially in relation to: the learning (or behaviour) outcome which is to be improved; The chosen cohort of students (e.g. low literacy students in year 12); and the chosen technique to be trialed, selected with the help of relevant research and expert advice (e.g. independent assessment). • Plan the lesson: – Plan a lesson together. – Address each activity to a specific learning goal and predict how pupils will react and how you will assess this. – Pick three case pupils.	Resource Intensive: It needs a strong commitment from school leaders if it is to work successfully. In particular, school leaders need to ensure that: sufficient time is set aside for teachers to meet regularly to reflect on observations and plan future lessons; cover is made available so that teachers can observe each other's practice; and Teachers' time for these activities is carefully protected, and other aspects of their workload are carefully reduced and monitored to ensure that they have the time to prioritise this work.

Activity	Description, examples …..	Weaknesses/key considerations….
	• Teach and Observe – Teach the lesson with your colleagues observing. – Pay particular attention to the case pupils. – Conduct any assessment and/or interview during and after. • Discuss, Reflect and Improve – As soon after the lesson as possible, reflect how each activity elicited the sought-after change. Were your predictions correct? Why? Some schools have used video technology to record and then discuss lessons as part of Lesson Study cycles. However, it is important that members of the triad are able to do classroom-based co-observation during the process as well, as opportunities for peer-to-peer observation are one of the key benefits of the LS process. The act of planning a lesson together means that there is much more trust between participants when it comes to delivering the lesson, while the focus on "case pupils" means that the observation is of the students' work rather than the teacher's practice. The LS model requires a very supportive culture, strong leadership and the support of other schools.	
Area Learning Community (ALC)	• Area Learning Communities (ALC), which bring together local, post-primary schools and other learning providers, have been established throughout Northern Ireland. • ALCs exist to develop collaborative practice between post primary schools to increase the choice of the number of subjects which students can choose to study in line with the Entitlement Framework. • ALCs allow schools to look at and begin to plan, individually and collectively, for delivery on an area basis • An ALC is an effective vehicle used by schools to collaborate and to share learning for example in relation to literacy and numeracy and as part of the L&N KS2/3 CPD Project.; as well as a wide range of other curricular areas; SEN provision and middle management • Although a post-primary initiative, some ALCs have extended to include primary schools and in some cases nursery.	It is the perception of that some ALCS are more effective than others. There are no equivalent learning communities for primary schools, or nursery sector or Irish Medium schools.
Blog	A blog (weblog) is a discussion or informational site published on the web consisting of discrete entries known as posts on a particular subject matter. The majority of blogs are interactive, allowing visitors to leave comments and message each other. An example of an author who writes an influential blog on education in the UK is Ross Morrison McGill (@TeacherToolkit). He is an award-winning deputy head teacher and is one of the most widely read blogs across the world. In 2015, he was nominated for '500 Most Influential People in the Britain'. Teacher Toolkit is also ranked one of the 'top-100 brands in education-technology'. He is also the 'most followed teacher on Twitter in the UK'.	Personal blogs may be biased or contain inaccurate information.
Clusters /Networks	Clustering is viewed as a key element of the Extended Schools Policy. In some cases clusters have emerged from	• The success of school led clustering is dependent on the

Activity	Description, examples …..	Weaknesses/key considerations….
(school led)	ALCs and have continued to evolve and have grown organically as a means of sharing best practice and as a forum for discussing policies impacting the school and school community. The development of effective cluster working has increased teachers / schools knowledge and networking ability. Cluster meetings allow teachers to interact face-to-face to explore ideas in more depth. Some schools within clusters have worked together to align their school development planning. It allows individuals to ask questions in a secure environment and promotes peer-to-peer learning. Informal peer-to-peer exchanges provide valuable support and are an effective form of disseminating best practice. Cluster groups are particularly important in rural or isolated areas where schools have limited opportunities to come together. Clusters are often sub-divided into working or task groups. Clusters can also form within a school, known as peer clusters. Trusted colleagues' network' have also proven to be effective in terms of strategic planning and sharing best practice ideas	leadership style of the Principal and the priority they place on encouraging and taking part in clusters and informal networks with peers. • Principals may not have the time to lead and/or organise cluster meetings, which take part on a voluntary basis. • For some clusters, there is a need for a facilitator to coordinate meetings, to manage discussions and to provide advice – however a cost is associated with this resource. • Important to ensure that the message being delivered is best practice – risk that those hosting cluster meeting are not experienced and are passing on messages to peers that are not best practice. • School led clusters are not convened in all areas. It is not structured in a concerted and organised way.
Clusters (externally facilitated)	Externally facilitated clusters/groups: • The EA has also facilitated opportunities for network /cluster group arrangements for sharing of best practice in a range of contexts, e.g. clusters for Literacy/Numeracy Coordinators and Principals' clusters on good practice – where Principals self-nominate Principals within the group to lead a session. • ETI's 'Promoting Improvement in English and Maths' project to include ten English Departments and ten Maths departments working together and sharing resources online. • CCMS have fourteen education associates who work across primary and post primary schools to identify good practice. A cluster group is then convened where identified Principals present good practice examples to their peers regarding their journey of school improvement. Peers have the opportunity to discuss strategies employed and decide how transferable they are to their respective schools. The focus of meetings has been on sharing interesting and innovative practice. • NICIE have set up a number of committees to discuss professional development and to share best practice. Committees meet several times a year and include: Principals committee, Vice Principals' committee, teachers' committee, bursars' committee and a SENCO's committee. The minutes from the committee meetings are recorded and sent to schools. • CCEA facilitate primary and post-primary forums as to help understand best practice and develop peer groups via face-to-face and using technology. CCEA provide opportunities for individuals to present best practice to a	

Activity	Description, examples …..	Weaknesses/key considerations….

	broader audience to share learning.
	• CnaG facilitate a number of events and cluster gatherings to support Principals and teachers in the Irish Medium sector, for example:
	  − Principals' forum: meet quarterly to share good practice in the sector. Principals invited to talk about an area of good practice that has worked for them. This can include a Principal/school that has been highlighted in an ETI report.
	  − Cluster groups in specific subject areas. Currently forming a Belfast cluster for special needs coordinators. Provides an opportunity to meet, socialise, and exchange resources and ideas.
	  − Annual conference – involving a series of workshops and guest speakers.
	• Shared education also provides opportunities to share good practice and to operate within a bigger pool of experience and expertise.	

Coaching / mentoring	Coaching comprises actions that intend to develop the skills of teachers, enhance their motivation level and enable them to understand the schools objectives and their role in achieving those objectives. Coaching is relevant to immediate situations and suitable in the context where the Principal needs to develop skills of others. Whereas, mentoring focuses on training the good performers and preparing them to further progress in their career e.g. succession was planning and leadership training. Thus mentoring has a long term perspective, focusing on developing the skills of high performers while The coaching or mentoring relationship can be hierarchical, for example the novice/experienced teacher model is where the experienced teacher initiates the novice teacher into the profession and/or in the new best practice approach. Peer-to-peer coaching/mentoring involves a mutual and reciprocal approach during which both teachers have the opportunity to observe and to be observed and give and receive feedback. The aim is to provide support and to critical evaluate teaching and learning methods in order to improve teaching skills and improve student learning. Many teachers are likely to be more comfortable discussing their practice with peers than with senior management, where issues surrounding performance management may hinder honest and open discussion. A supportive, blame-free environment that encourages and facilitates professional dialogue, and provides opportunities to extend and experiment with new practice can further the benefits of peer collaboration and support Teachers have used the peer coaching process to conduct action research. In this situation, a teacher formulates a set of hypotheses about classroom practices and develops a plan to test them by asking a colleague to observe and take notes. Later, the colleagues discuss and analyse the data.	Offering coaching session without a thorough analysis of the current and required skills can result in a coaching session that fails to address the skill development areas. Coaching and mentoring only become disadvantageous when the management is unable to align the objectives, expected outcome, the coaching/mentoring needs of the employees and the situational requirements.

Activity	Description, examples	Weaknesses/key considerations....

	Some teachers have kept reflective journals of their findings over time.
	
	Examples:
	• The EA identifies and matches experienced mentors to support newly appointed Principals; middle leadership training has been developed and taken forward to build future leadership capacity (Northern Ireland).
	• CnaG organise a mentoring scheme – involves a young or a new Principal being matched with a long established Principal, where they come together over a term, spend a few days either in the host school (*"the mother school")*. The Principals communicate regularly using ICT. It benefits the newly appointed Principal by providing a contact for them to seek support and advice (Northern Ireland).
	• (G)oals, (R)eality, (O)ptions and (W)ill - GROW model is one of the most established and successful coaching models. The model raises an individual's awareness and understanding of: their own aspirations; their current situation and beliefs; the possibilities and resources open to them; and the actions they want to take to achieve their personal and professional goals.
	• Mentoring Beginning Teachers (MBT) (Australia) - all provisionally registered teachers with fewer than 200 days teaching experience who are permanently employed or on a term-long contract in a Queensland state school will be matched with a mentor. The MBT programme focuses on professional learning and growth with the aim of elevating teaching standards and improving student outcomes. The MBT programme:
	  − trains mentors to guide the practice of beginning teachers
	  − matches beginning teachers with experienced teachers
	  − supports mentors by providing them with release time and ongoing networking and professional learning to improve the support available to beginning teachers.
	  − Schools will receive up to 18 hours of Teacher Relief Scheme (TRS) funding per term, per eligible beginning teacher (up to 72 hours of release time per year, per beginning teacher).	

Conferences / Events (Externally facilitated)	Presenting at conferences can be a powerful way to engage with teachers and bring work into the public domain (e.g. ETI reports). Informal conference conversations and sharing ideas between sessions and at conference social events can provide an effective medium for disseminating best practice. Conferences are also useful places to distribute resources and to raise awareness. Examples • Conferences, facilitated by the Chief Inspector, have taken place across Northern Ireland. A key component of each conference is the presentation of case study	• Cost associated with delivering conferences at different venues. • The organisation and preparation involved in facilitating conferences can be resource intensive. • Principals/teachers listening to best practice approaches delivered by lecturers may not be as effective as those experienced first-hand or delivered by practitioners. • Perceived lack of exchange and debate during conference style events. Delivery of the message is

Activity	Description, examples …..	Weaknesses/key considerations….
	examples, which are presented by practitioners/teachers themselves. • Conferences/events hosted by ETI are well attended as schools are keen to understand what inspectors have identified as good/best practice. • ETI's dissemination of best practice events post publication of the ETI's Survey of Best Practice in English and Mathematics in Post-primary Schools and The Chief Inspector's Report 2012-2014. • ETI also facilitate dissemination events aimed at DE and associated policy makers. This is an important forum in which to disseminate learning gained from school visits and to highlight any issues at a strategic level. • Dissemination conferences and events for primary and post primary Principals have been held by ETI and by EA to share best practice from practitioners who have been selected on the basis of their effective practice. • NICIE Principals/teachers organise two annual conferences. The discussions and issues raised are recorded and a report is distributed to all integrated schools.	often one way. • Accessing conferences can prove difficult for some e.g.: – Geographical location of event can be an inhibiting factor. – The cost of sub-cover to attend events. – Perceived that larger schools can better avail of events as they are in a position to provide sub-cover by rotating staff. – Tends to be school leaders (non-teaching) who can accommodate time in their diary to attend. • Query as to how effective the dissemination of messages are after the event - if only one teacher per school can attend, how are the messages delivered when teacher returns to school? • Depends on the motivation of the attending Principal/teacher – those with an open mind will be receptive to messages and willing to transfer knowledge and new ideas to peers.
Edcamp	The vision of Edcamp is to create an international network of educators dedicated to participant-driven professional learning for themselves and others that accelerates student growth. Edcamps are offered at no cost to attendees, enabling educators from any and all schools to participate. Every attendee voice is not only heard, but also empowered to drive the conversation and programme. Edcamps thrive on the exchange of ideas and knowledge, and creating an international network of learners that benefit from each other. In Northern Ireland, NIedcamp was developed by and for teachers as a model for effective sharing of good practice (spin off as a result of the cancellation of the RTU Summer School due to budget issues). The inaugural NIEdcamp took place on 18 August 2015 and was attended by over 400 teachers and educationalists. #NIEdcamp promote weekly conversations on Twitter and the TeachMeet movement.	Important to ensure that the message being delivered is best practice – risk that those hosting meeting are not experienced and are passing on messages to peers that are not best practice.
Learning Round	Learning Round is a form of collaborative professional learning. It involves teams of staff observing and learning about and from school practice. Observers create a base of evidence describing what they have seen. The team then discusses how they, their school or authority will use the data to bring about improvement. This evidence-based process leads to a continuous development of practice. Staff learn together and both those observed and those observing develop and deepen their understanding of how to improve learning. As	

Activity	Description, examples …..	Weaknesses/key considerations….
	importantly, the process creates descriptive evidence that can generate effective change across a school or the wider community of schools. Example • Teacher Rounds - occurs in the classroom, in real-time. It is about learning in and from practice. It involves everybody in the Rounds group taking a turn to be the host teacher. It involves the Round teacher identifying the 'problem of practice' for the Round observation. It involves a short pre-Round meeting prior to the Round observation, where the host teacher describes the context of the lesson, talks through the 'problem of practice' and shares the lesson plan. Following the observation there is a post-Round meeting to reflect on what happened during the lesson. It is a collaborative process. It's a way to bring extra eyes and ears to the task of learning what students are thinking and doing and what is engaging them and to what the resulting impact is. It involves a minimum of three and up to seven teachers. This ensures that a range of experiences and multiple perspectives are brought to the process. It entails intentional reflection, observation, inquiry and collaboration. Every member of the Round group are reflective partners and take-away something from the lesson. • Teachers who make up the Round Group are volunteers and need to agree strict protocols for working together. When the research period ends, they will feed back their reflections and what they have learned so that the whole school community may benefit. Colleagues who have been part of the Teacher Rounds research will be in a good position to set up another Rounds group in their school and make it a sustainable form of professional learning. The aim of Teacher Rounds is to develop a language and a forum for talking about teaching and learning. They help teachers to reflect on their own practice and to work collaboratively with others in a structured way, to improve teaching and take it to the next level.	
Online ESaGS.tv	The dedicated internet TV channel ESaGS.tv (www.esags.tv/) is an online tool used to share outstanding or very good practice highlighted in ETI reports and identified by other means in a way aimed at bringing practice to life and providing a lasting resource that schools can use to support their own development and improvement. It is a cost effective way of disseminating messages. Resources are developed by a range of experts, including ETI inspectors and EA advisory staff – which add value and credibility to the repository of online resources. Rather than focus on one specific school, programmes and case studies are collated and developed on a theme basis related to ESaGS policy (e.g. effective use of data, school improvement journey from satisfactory to very good). Good practice is described based on a wide range of schools – providing increased opportunities for Principals/teachers to	• Some teachers are not ICT literate to the extent that they may not be in a position to access online resources. • Issues of connectivity/broadband speeds in rural areas, making it more difficult to access video and various media. • Lack of funding to expand offering of ESaGS TV e.g. to include webinars or live conferences and debates Teachers have limited time to access online resources. • ESaGS.tv viewing statistics show that there is a high bounce rate from the period January 2015 to January 2016 (45.25%), with visitors only spending an average

Activity	Description, examples …..	Weaknesses/key considerations….
	identify what is suitable for their school and adapt accordingly. ESaGS TV can be accessed at any time by individuals. It can be accessed as a small group or with all staff and can be used as a stimulus for discussion. Other online examples: • CCEA/NI Curriculum website • ea.tv - examples of good practice from a range of projects and initiatives led by EA and the former ELBs. • Northern Ireland Signature Project for Literacy and Numeracy (NISPLAN) website - online support system coordinated by the EA to support schools in the development, coordination, monitoring and evaluation of their programme. • The Fronter website is used by the L&N KS2/3 CPD Project to facilitate on-going sharing of best practice and teacher professional learning.	of 4 seconds (00:04:21) on the site. Metrics are limited to assessing what topics/programmes are being viewed most often to help inform plans for future coverage. This approach should be extended to include a robust analysis of the end-users journey on the ESaGS.tv website to include an assessment of touch points and where/how/when individuals access site and which calls-to-action have the most impact. Understanding the end-users journey will influence the design of the website and improvements can be made to enhance the experience and uptake levels, to improve dissemination via ESaGS.tv. • Also, it is interesting that the peak usage is in June and September, which highlights an opportunity to target teachers during this period. The main operating system that users access ESaGS.tv on is iOS, so a focus should be on developing content to suit this platform.
Online Resources/ Tools	Online resources are one of the key methods of disseminating best practice. An online platform is more cost-effective than organising and facilitating events and that this method can reach a wide audience. Examples: • C2K online network is a valuable resource, providing opportunities for disseminating best practice and as a tool for teachers to engage in forums and avail of online tuition. • C2K Virtual Learning Environment, Fronter – supports professional development by providing a bank of resources for teachers and an opportunity for good practice to be shared between teachers. • Online resource provided by the General Teaching Council for Northern Ireland (GTCNI) called the Access to Research Resources for Teacher Space [ARRTS]. This is an online research repository that aims to provide teachers with access to educational research relevant to professional practice in schools. • NICIE's Excellence in Integrated Education Award (EIEA) assessment tool – based on ETI's Together Towards Improvement document and principles underpinning ESaGS. Helps integrated schools identify good practice in terms of delivering integrated education. This assessment/auditing tool results in areas of improvement being identified and an action plan being developed. NICIE identity best practice from the result of school audits for wider distribution.	The range of online resources available from various sources may prove overwhelming for teachers. There is a need for teachers/schools to be directed to one central source – with further signposting, included where relevant, to other endorsed websites and best practice.

Activity	Description, examples …..	Weaknesses/key considerations….
	• CCEA – have developed communities of learning via online platforms. CCEA officers also interact and engage with schools on the online platform. CCEA also participate and promote action research. CCEA work, programme strategies undergo a process of evaluation and continuous improvement in a key focus of the organisation.	
Online Social Media (Facebook / Twitter)	Online communication tools – such as email lists, discussion forums, and Web 2.0 technologies – provide opportunities to connect with schools to promote best practice. • Schools and some teachers use Twitter and Facebook to promote the school and as an information source for teachers, pupils and their parents. It is also used as a method for knowledge transfer. • NIedchat is an example of a teacher-led Twitter chat. It takes its inspiration from other education chats on Twitter most notably the US based #edchat and UK based #UKedchat. Online discussion forum which aims to provide a niche discussion for issues which affect Northern Ireland. NIedchat are currently compiling a list of teachers who are using Twitter for their own professional development and for the sharing of good practice. Twitter based chat forum for Northern Ireland teachers every Wednesday at 8.30pm. There are 1,170 twitter followers on NIedchat. However, not all engaged. Limited numbers involved in weekly discussions. This vehicle would require promotion to encourage greater uptake. • NICIE Principals have set up a group –'REPLY ALL' email for sharing ideas, practice, raising queries, asking for policies etc.	Important to ensure that the message being delivered is best practice.
Publications / Reading material / reports	Materials that synthesise findings and provide ready- to-use resources – which may be produced in print, electronic and online formats – support implementation by enabling transfer of effective programme outcomes. E.g. guidelines, practitioner booklets, toolkits, registers of good practice, teaching modules, a self-review framework, a facilitator's guide, resource book, and question banks. Examples: • ETI uses learning from school inspections to compile a range of publications for use by schools to assist their self-evaluation leading to improvement. A particular focus has been the quality of provision and standards and achievements relating to literacy and numeracy in schools. • ETI's Chief Inspector's Report, issued on a bi-annual basis, highlights the quality of education provision, to include examples of best practice. • ETI reports on literacy and numeracy includes a range of quotes from schools and case studies outlining best practices strategies employed by schools. This approach adds credibility to the messages disseminated with greater uptake from schools as a result. • ETI published its findings in its Survey of Best Practice in English and Mathematics in Post-primary Schools	• Printed reports are becoming less popular with increasing preference for online resources. • Cost associated with publication and distribution of publications / newsletters etc. • Difficult to keep a publication to the fore because new editions become available. • How publications are used that will determine effectiveness e.g. if publications are used as part of a staff development day and individuals are given time to discuss case studies and findings would enhance effectiveness. Staff should be given the opportunity to apply learning and reflect outcomes to their peers to aid knowledge sharing.

Activity	Description, examples …..	Weaknesses/key considerations….
	(October 2013). The report included cases studies presented by the schools themselves with the aim of gaining the highest level of engagement. • The North/South Ministerial Council has provided funding to ETI to help support the dissemination of reports developed on a North/South basis – external consultancy has been commissioned to develop an online platform for networking. • A range of resources highlighting best practice have been made available over many years by the former Curriculum Advisory and Support Services (CASS) of the Education and Library Boards and remain available on their legacy websites through the EA website. • CCEA has worked in collaboration with CASS and school partners to produce a number of resources for school staff, available both in hard copy and on-line. CCEA continues to expand its body of resources to support the curriculum and assessment arrangements. • CCMS have developed materials (e.g. on school development planning, leadership and management) that are based on characteristics of best practice to help schools evaluate where they are (baseline) and to provide methods to tackle underachievement. CCMS actively forward materials to schools to support teachers. • The Irish-medium Research Centre creates Irish Medium resources for schools in the North and South of Ireland. The mission of the Irish-medium Research Centre is to engage in enquiry-led scholarship in the area of Irish-medium education. The centre engages in research informed teaching and learning that enriches the student experience on academic programmes.	
Reflective Practice	Reflective practice is a process by which individuals stop and think about their practice, consciously analyse their decision making and draw on theory and relate it to what they do in practice. Critical analysis and evaluation refocuses thinking on existing knowledge and helps individuals generate new knowledge and ideas. According to GTCNU *"reflective practice needs to be internalised as part of a teacher's professional identity"*. Researchers link the concept of action research and 'reflective practice' allowing teachers to ask critical questions of their practice and the testing of enquiry /hypotheses in action until new ideas and processes become internalised.	
Secondments, acting posts and placements	A secondment is where a teacher temporarily changes job roles within the same school or transfers to another organisation for an agreed period of time for the purpose of upskilling and training Secondments can provide professional developmental opportunities and personal benefit as well as assisting in succession planning to meet current and emerging needs of the school. Schools benefit when the teacher returns to their post by having their new skill-set brought back to the wider team. Options include: teachers being seconded to another school; and opportunities for staff placements e.g. to spend	Some Principals may resist secondments as they see there will be focused on the short term disadvantage of having to train a new employee or increase the capabilities of the existing team.

Activity	Description, examples …..	Weaknesses/key considerations….
	a time in a university to update their own knowledge of current academic research, or placements to another business, public orgs, NGOs, giving them experiences and opportunities to learn a new skill and gives the school the opportunity to build a wider network. Examples • Teachers are encouraged to take a gap year to work in industry, and the learning gained from that experience is transferred to teaching in the classroom (Ireland). • Newly qualified teachers are given the opportunity to gain experience with a given school for 12 months (Scotland). • Head Teachers seconded to other schools to disseminate best practice (England). • Teachers go to other schools as advisors one day a week (England). • A year out of the classroom every 5 years to allow teachers time to develop their pedagogy (Norway). • Paid sabbaticals of 10 weeks' (one term) duration are available to Principals (New Zealand).	
Staff Meetings Informal conversations /interactions between staff	• Staff meetings are an effective means of both formal and informal interactions between staff to discuss teaching practice and to exchange/share teaching materials with colleagues.	Tend to focus on admin matters rather than pedagogy.
TeachMeet	TeachMeet is an informal, collaborative experience organised by teachers, for teachers as a means of sharing ideas and experiences. Anyone can host a TeachMeet: all teachers are potential hosts and participants. Teacher-driven and highly participatory. The TeachMeet is based on 5min presentations with the aim of introducing new ideas, followed by round-table discussion to help stimulate discussion and facilitate the mixing of school types and a final reflection on ideas generated. Events/meetings are promoted via social media. Benefit as the forum is teacher led and therefore individuals attending are focused on enhancing their own professional development and school improvement.	Whilst was recognised that the lack of formality and flexibility of the Teach Meet is a key strength, it also raises the issues of quality assurance i.e. ideas can be presented by anyone willing to put themselves forward and this may/may not represent good practice that is evidenced based. The short presentations are limited and will not aid the embedding of good practice in schools. Change will require a greater level of mentoring and coaching methods.
Teaching Learning Community	Teaching Learning Communities (TLCs) are small, building-based groups, where each participating teacher develops a specific plan for what they want to change in terms of classroom practice. The group meet regularly to support team members in carrying out and refining their plans. Practical application of TLC, based on what has worked in a diverse range of settings Dylan Wiliam, 2015). • TLCs focus on collaborative learning, where teachers meet monthly for at least 75 minutes, with a standard structure incorporating feedback, new learning about formative assessment, and personal action planning • Identify 8 to 10 interested colleagues. • The TLC asks that each person comes with a clear idea about what they want help with, and the groups helps that person with the task.	The focus is not on generating a lot of ideas and new approaches. Teachers need to take a small number of ideas and integrate them fully into their teaching. Teachers than attempt to implement too many ideas at a time invariable fail as classroom routines break down.

Activity	Description, examples …..	Weaknesses/key considerations….

	• Plan that the TLC will run for two years.
	• Composition: Similar assignments (e.g. early years, math/science), Mixed-subject/mixed-phase, Hybrid.
	• Secure institutional support for: Monthly meetings (75 - 120 minutes each, inside or outside school time), Time between meetings (2hrs per month in school time): Collaborative planning, Peer observation.
	• Every monthly TLC meeting should follows the same structure and sequence of activities:
	  – Activity 1: Introduction (5 minutes)
	  – Activity 2: Starter activity (5 minutes)
	  – Activity 3: Feedback (25-50 minutes)
	  – Activity 4: New learning about formative assessment (20-40 minutes)
	  – Activity 5: Personal action planning (15 minutes)
	  – Activity 6: Review of learning (5 minutes)	

Teaching School	Teaching schools have four key functions: providing initial teacher training (ITT); providing continuing professional development for teachers, school leaders and other school staff. This includes peer-to-peer support and developing and sharing best practice; identifying and developing talent and leadership potential; and providing advice and support to schools in challenging circumstances. **Teaching School / Teaching Alliance (England)** Only schools that have been judged outstanding by Ofsted can apply to become a teaching school. Their remit has been described as "the Big Six", covering initial teacher training, continuous professional development, leadership training, school-to-school support, promoting specialist leaders of education, and research and development. Teaching schools bring schools together in an alliance/ hub. Although each alliance is based around one school, a successful approach requires sharing good practice between schools, rather than one school imposing its vision on its partners. This involves a recognition that all schools can learn from each other. In England, teaching school status brings a financial reward – £150,000 over three years – with the challenge of creating a sustainable model once the funding ends. TA promote the OLEVI Outstanding Teacher Project (OTP) to further raise standard of teaching and learning. **Teaching and Learning Schools (TLS) (Northern Ireland)** Teaching and Learning Schools (TLS) is a project based on a model of teacher development that has been very successful as part of the London Challenge (OLEVI International - The International Centre for Leadership in Teaching and Learning) and has been contextualised for Northern Ireland. OLEVI has two aims: to drive up standards in schools around the world; and to create a successful teaching and learning culture that leaves a lasting legacy. TLS (NI) programmes have been designed to increase teacher effectiveness leading to improved outcomes of all pupils in the schools involved including those in challenging circumstances, by engaging schools and teachers in building	Budget considerations for establishing teaching school model.

Activity	Description, examples …..	Weaknesses/key considerations….
	pedagogic skills and classroom practice that develop a culture of reflection, research in action and focus on pupil achievement. TLS (NI) is led by a steering group of Principals of schools in Northern Ireland who are responsible for the integrity of the programme, accountability for funding and quality assurance. The Steering Group represents the Principals of schools that provide hubs for the professional development of teachers. TLS (NI) requires schools to observe the intellectual property of the materials used, to follow the methodologies developed on the programmes and to subject their professional development to the Quality Assurance techniques developed by TLS (NI). TLS (NI) only uses facilitators on the programmes that have been trained by accredited facilitators and who have undergone the programme themselves. Two key programmes: TLS (NI) Level 1: Improving Teacher Programme (ITP); and TLS (NI) Level 2 Programme: The Outstanding Teacher Programme (OTP)	
Collaborative Teaching / Team Teaching	Several collaborative teaching approaches have proven to be successful to guide educators who work together in co-teaching partnerships to differentiate instruction. The approaches include: • Supportive Co-teaching - where the one member of the team takes the lead role and the other member rotates among students to provide support • Parallel Co-teaching - where support personnel and the classroom teacher instruct different heterogeneous groups of students. • Complementary Co-teaching - where a member of the co-teaching team does something to supplement or complement the instruction provided by the other member of the team (e.g., models note taking on a transparency, paraphrases the other co-teacher's statements). • Team Teaching - where the members of the team co-teach alongside one another and share responsibility for planning, teaching, and assessing the progress of all students in the class. The lessons are taught by both teachers who actively engage in conversation to encourage discussion by students. Both teachers are actively involved in the management of the lesson and discipline. This approach can be very effective with the classroom teacher and a student teacher or two student teachers working together. It provides an opportunity for teachers to learn from each other and to share responsibility for planning, teaching, and assessing the progress of all students in the class.	Some co-teaching approaches (e.g., complementary and team teaching) require greater commitment to, comfort with, and skill in collaborative planning and role release (i.e., transferring one's specialised instructional responsibilities over to someone else). When deciding which approach to use in a given lesson, the goal always is to improve the educational outcomes of students through the selected co-teaching strategies. Many beginning co-teachers start with supportive teaching and parallel teaching because these approaches involve less structured coordination among the co-teaching team members. As co-teaching skills and relationships strengthen, co-teachers then venture into the complementary teaching and team teaching approaches that require more time, coordination, and knowledge of and trust in one another's skills.
Ted style talk	Short form conference presentation, which is based on 5-10min presentation. This format involves using visual aid and audience engagement i.e. structure talk without notes.	The short presentations are dynamic and creative but are limited in terms of scope and detail. It will, however, help to generate ideas that can be tested further in the school setting.

Activity	Description, examples …..	Weaknesses/key considerations….
Training - School Development Days and Baker Days	Five School Development Days are available to schools each year to give teachers time to work on school improvement matters. Five Baker Days are also available to schools each year for staff training.	There is a need to ensure that School Development Days and Baker Days are used effectively and that they are aligned to the schools priorities. Dissemination of best practice, an action research task group should form part of the allocated training time within schools.
Training Events	• External experts delivering a wide range of courses, with the aim of upskilling and training teachers. • The former Regional Training Unit (RTU) Summer School provided opportunities for teachers and other school professionals to explore new insights, further develop skills and contribute to their continuing professional development The funding for this event ceased in 2014NICIE provided training for governors training – which provide opportunities for governors from a range of schools to meet and share learning. • ETI's 'twilight courses with small groups' of Principals help to generate detailed discussions – also involves teachers linking to courses via video conferencing. E.g. Course on 'How schools use data to effect improvement and how data is used during inspection' was well attended.	• External agencies offering online training/resources to teachers should be quality assured - need for teachers to be directed to a central resource and/or list of accredited providers (e.g. ESaGS TV and C2K). • Lack of funding is negatively impacting the opportunities for teachers to engage in professional development. • Training should be focused on need rather than the same training being offered to all schools. • Voluntary attendance at training events – may not effectively reach those needing support most.
Triads	The Triads model involves teachers working in groups of three (Triads) to develop their understanding of student learning and to work together to improve the outcomes of their students. Professional Learning Teams, formed from the combination of two or three Triads, are established to foster a culture of collaboration and collective responsibility for the development of effective teaching practices. The professional learning teams are responsible for analysing student data, preparing action plans, implementing changes in teacher practice, and evaluating the impact of their work on student learning. Triads are used as part of Lesson Study – action research approach.	
Video Conferencing	• Video conferencing allow teachers to collaborate, share lessons, and for peer learning and exchange. • It is particularly beneficial to facilitate collaboration in rural and isolated areas. Examples • C2K offer video conferencing, known as 'Collaborate'. • Iris Connect video-based professional learning platform (http://www.irisconnect.co.uk/)	• Access to technology and software can be an issue for some schools. • Issue of connectively prevalent in rural areas – impacting the extent to which video conferencing tools can be adopted.
Webinar	The word 'webinar' is a blend of 'web' and 'seminar'. A webinar is an event held on the internet which is attended exclusively by an online audience. A typical webinar last for up to 60 minutes. A webinar presenter can reach a large and specific group of online viewers from a single location. Providing it is used	The cost associated with delivering a webinar online.

Activity	Description, examples …..	Weaknesses/key considerations….
	effectively, interaction during a webinar can be very powerful. In view of the large number of participants, smart tools are essential to channel that interaction. Hence, a webinar offers various interactive opportunities: Ask a question; Chat; Poll; Survey; Test; Call to action; Twitter A webinar gives presenters the opportunity to continue to reach your target group when the broadcast is over, since each webinar can also be watched afterwards. This enables increases both the reach and the impact of the message	
Workshops	Workshops are interactive sessions which encourage active participation from attendees, in the form of breakout groups, task setting, generating ideas, feedback sessions to the wider audience and time for reflection. Attendees are usually very motivated by this interactive process. Principals should determine which workshop, conference or webinar will benefit their schools work/priorities. Then determine who should attend. Where possible select more than one person – they will become earning leaders. Prior to attending ask selected participants to write down the three things they are seeking to learn from the event. During the event they should take notes, with an emphasis on recording information and ideas that relate to what they are seeking to learn. After the event, participants should share their learnings and ideas with others in the school as part of a formal debrief. A team should be created to implement the ideas and learnings, and dates should be set that drive actions towards new goals. Examples: • Workshops held during the ETI conferences are often facilitated by schools identified as that having demonstrated good practice. It provides the opportunity for these schools to share their experiences for the benefit of others. • Workshops/ dissemination events have also been facilitated by practitioners who had been identified, through inspection, as being very effective.	Time and resources needed to develop an interactive style workshop.

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