## TACKLING THE POVERTY-RELATED GAP IN EARLY CHILDHOOD LEARNING IN NORTHERN IRELAND

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## Summary

Early childhood, from birth to age five, is the most critical development stage of a child's life.The early years see rapid developments in a child's cognitive abilities. Children need quality nurturing care during this period to develop the foundations of their development and for future learning. Early childhood interventions should support children's early learning - their early language and communication, pre-literacy and pre-numeracy skills - at home, in early years settings and in their communities.

This also means the early years are a vulnerable time when children's experiences and environments can negatively influence their development. Save the Children is concerned about the impact of growing up in poverty on children's early learning. There is growing evidence across the UK and internationally that there is a strong link between poverty (low income) and cognitive outcomes in the early years. The evidence shows that the gap in attainment between children growing up in poverty and their peers starts early and lasts through school.

Yet, there is little evidence that explains the nature and extent to which children are falling behind before they start school in Northern Ireland. This new research sought to contribute to this knowledge. It found that young children growing up in poverty are much less likely
to do as well as their peers in meeting a range of early learning outcomes at age five, and that this early gap can persist right through school.

At age five structural or socio-economic characteristics such as family income, tenure, multiple deprivation and parental education, are associated with around half the gap in cognitive and language development between children from low-income and higher-income households.

Development in early childhood is likely to account for a significant proportion of the gap in educational achievement in primary and post primary school.

But none of this is inevitable. The report outlines how the association between learning outcomes and disadvantage can be prevented.

The existence of this attainment gap in the early years and its impact give real cause for concern. There is an imperative to take urgent action. Analysis of levels of child poverty in Northern Ireland highlights that the biggest proportion of children in low income households lives in families where the youngest child is under 5. This, coupled with the fact that child poverty is set to increase, means it's never been more urgent to redouble efforts to tackle the impact of poverty on children's early learning outcomes.


## WE ARE CALLING FOR:

1. A world-class early education and childcare system for all children
2. Better support for parents to engage in their children's early learning - at home and in school
3. A co-ordinated approach to supporting children's early learning in communities
4. Betterdata to improve our understanding of the early learning gap

## Save the Children

 wants to make sure that no child falls behind before they reach the classroom and every child can thrive during their first school years.
## Introduction

This briefing paper examines the link between early learning outcomes and poverty in Northern Ireland.Earlylearning covers a huge range of developmental milestones and outcomes for children. We have specifically focussed on core cognitive skills. That is the skills the brain uses to think, read, learn, remember, reason and pay attention. These skills involve the progressive building of learning crucial to processing and understanding information, such as attention, memory and thinking. Speech, language and communication, pre-literacy and prenumeracy skills are foundational to the development of other skills.

- Speech, language and communication skills: these cover a range of vital skills, including the ability to speak fluently, using pitch, tone and volume to convey meaning; the ability to use words to describe objects, actions and feelings, using words to create sentences, conversations and narratives; and the ability to understand what others are saying and respond to nonverbal cues.
- Literacy and pre-literacy skills: these include the ability to read and understand increasingly complex words, sentences and stories; fine motor skills that enable children to use a pen, and an understanding of how books work; and the ability to write increasingly complex words and sentences, including the correct use of spelling and grammar.
- Numeracy and pre-numeracy skills: these includein-depthunderstandingofnumbers, counting, simple calculations, shapes, space and measurement; and the ability of young children to use these skills to describe and analyse the world around them.

The briefing draws on new research findings to highlight the extent to which low income children are falling behind at an early age, how this compares to their peers, the lasting impact of falling behind before they start school and what factors explain why this is happening. We also highlight the opportunity that exists in early childhood to support and prevent children falling behind. Finally, we point to what more could be done to meet this challenge.


## The Link Between Poverty and Early Learning Outcomes

We want all children to have a fair start in life, to enjoy their childhood and have the best life chances later in childhood and into adulthood. This means all young children should be happy, healthy and cared for, and be supported to learn and develop. Yet, many children fail to meet key learning milestones.

Evidence from across the UK and internationally shows a strong link between low income and cognitive outcomes in early childhood - such as speech, language and communication skills, early numeracy, early literacy and the disposition to learn. (The Effective Pre-School, Primary and Secondary Education Project - EPPSE). ${ }^{1}$

In fact studies have shown that, controlling for other factors, the association between poverty and cognitive outcomes is stronger than for other outcomes, such as socio-emotional and health outcomes. ${ }^{2}$ By the time they start school, children from low-income families in the UK are already up to a year behind middle-income children in cognitive skills, while the gap between the poorest and most advantaged tenth of children is as much as 19 months. ${ }^{3}$ Early cognitive development has a lasting effect on later educational attainment. ${ }^{4}$

Further, evidence suggests that disparities in early cognitive development in the UK tend to be more profound than those seen in other outcomes. ${ }^{5}$

Save the Children is concerned about this link given the scale of poverty among children in Northern Ireland. Current figures show that the biggest proportion (38\%) of children in low income households lives in families where the youngest child is under five. Furthermore, the number of
young children experiencing poverty is likely to increase in the next few years. According to the Institute for Fiscal Studies, child poverty is predicted to increase from the current 23\% (After Housing Costs) to more than $30 \%$ by 2020-21. ${ }^{6}$

## THE DATA GAP

Further, evidence tells us that without support to overcome early disadvantage, the impact of income on outcomes remains and can increase. The relationship between income and cognitive development is present from infancy onwards. The gap in outcomes between the poorest children and their better-off peers is wide and persistent. Moreover, there is strong evidence that the transmission to future poverty mainly acts through educational achievement, which is particularly strong when poverty is experienced at a younger age. ${ }^{7,8,9}$ In the UK, studies have found that parental income in childhood is a stronger predictor of an individual's later life outcomes in the UK than in most other developed countries. ${ }^{10}$

In Northern Ireland we know there is a strong link between socio-economic disadvantage and educational underachievement at age 16 and that the link is stronger than in most other OECD countries. ${ }^{11}$ This link is evidenced by GCSE results. Department of Education figures for 2015-16 ${ }^{12}$ show an educational achievement gap of $31 \%$ at age 16. The percentage of school leavers not entitled to free school meals (FSM) - an indicator of low income - achieving at least five GCSEs at grades $\mathrm{A}^{*}$ - C or equivalent including GCSEs in English and Maths was $75.8 \%$, while the percentage of those entitled to FSM achieving the same measure was $44.8 \%$. Therefore while we know
the gap exists at the end of compulsory school, there is little evidence to demonstrate how early the gap in learning outcomes emerges between children living in poverty and their peers. This is needed to provide evidence about the number of young children left behind and to inform policy and appropriate support decisions.

A key challenge is that there are no national statistics on early learning outcomes, broken down by income. GCSE results provide the earliest national data on how the poorest children are performing. The lack of a universal indicator or measures of early childhood development in NI makes it difficult to present accurate data about children left behind at an early age.

What we do know from existing studies in Northern Ireland is that there is evidence of children falling behind in speech, language and communication in early childhood:

- According to the 2016 Chief Inspector's Report, ${ }^{13}$ pre-school settings highlight growing numbers of children who present with language delay and complex learning difficulties.
- A 2014 speech and language therapy-led pilot, delivered in several pre-schools and primary schools in a Neighbourhood Renewal area in Limavady, reported that $68 \%$ of the children had moderate or severe SLC delay. ${ }^{14}$
- In its Concluding Observations, the Committee on the Rights of the Child ${ }^{15}$ drew attention to the number of children living in poverty in Northern Ireland, particularly boys, who do not meet the expected level of language
development at pre-school level, which has a negative impact on their primary education, hindering their development throughout their life.
- In a 2016 survey commissioned by Save the Children, ${ }^{16}$ primary school teachers across Northern Ireland expressed their concern about the number of children starting school who struggle with their speech. The survey found that children from poorer families are likely to struggle with language development.

Save the Children wanted to examine this evidence gap to better understand the relationship between poverty and children's early learning outcomes at age five and the impact on later achievement. We commissioned new research on the link between poverty and young children's learning outcomes.


## THE NEW RESEARCH

New research (from ScotCen) analysed data from the Millennium Cohort Study (MCS) ${ }^{17}$ to provide a snapshot that examines gaps in attainment between children growing up in poverty and their peers at age five; the impact of being behind at five across a range of children's cognitive and language assessments at ages 7,11 and 14. The research also explores what factors may account for these gaps. It looked at a range of measures of cognitive development, including vocabulary, reading and numeracy. The key findings from the research are presented below. Further detail on the analysis can be found in the technical reports, which are available on request. Descriptive statistics were produced showing;

- Children's cognitive and language development at ages five, seven, eleven and fourteen, using a range of measures, broken down by gender and income.
- Selected measures of cognitive development at ages seven, eleven and fourteen were compared with the child's development at age five, as measured by the British Ability Scale (BAS) Naming Vocabulary assessment, broken down by gender and income.
- The Naming Vocabulary is a verbal scale for children aged 2 years 6 months to 7 years 11 months which assesses the spoken vocabulary of young children. The scores were divided into fourths (quartiles), so the top quartile represents the top $25 \%$ and the bottom quartile the bottom $25 \%$.

For the purposes of the briefing the 'quartiles' are called 'groups'.

To understand the drivers of educational underachievement, models were constructed to identify factors associated with selected outcome measures at each of the ages. For ages seven, eleven and fourteen, a measure of cognitive development at age five was introduced into the model to determine the extent to which it accounts for later cognitive development when other factors are accounted for.

All of the models included measures of household income (when the child was aged five), parental education (highest level of either parent, when the child was aged five), the child's sex, and area deprivation (when the child was aged five), as these are known to consistently and strongly predict cognitive ability. Cognitive development at age five, as measured by scores on the BAS naming vocabulary assessment, was also included in the relevant models. The ScotCen research found that in NI, as elsewhere, there was a persistent gap in education achievement for children growing up in poverty, as illustrated in figures 1,2 and 3.

## KEY FINDINGS FROMTHE RESEARCH

Figure 1 shows that there are more than one in three (34\%) children growing up in poverty in the bottom performing group, compared to one in five ( $22 \%$ ) of their better-off peers.

FIGURE 1


Figure 2 demonstrates that the gap between children growing up in poverty and their peers tends to persist right through school. It illustrates the percentage of all children, children in poverty and children not in poverty who remain in the bottom quartile of BAS word reading scores at age 7,11 and 14 who were previously in the bottom quartile of BAS naming vocabulary at age 5 .

On average around half of children in poverty who were in the bottom group at age five, remains in the bottom group at ages 7,11 , and $14-48 \%$ at age $7,56 \%$ at age 11 and $49 \%$ at age 14 respectively. In comparison, only $33 \%$ of children not in poverty remain in the bottom group at age $7,38 \%$ at age 11 and $30 \%$ at age 14 .

FIGURE 2


Figure 3 suggests that for children in poverty, only $29 \%$ of those in the top quartile at age 5 remain in the top quartile at age 7 and by age 11 that is $35 \%$ and by age $14,24 \%$.

In comparison, children not in poverty are more likely to stay in the top quartile than children in poverty. It shows that for children not in poverty, $41 \%$ previously in the top quartile at age 5 , remain in the top quartile at age 7 , while at age 11 it is $51 \%$ and at age $14,37 \%$.

FIGURE 3


## The Drivers of the Educational Achievement Gap

Save the Children also wanted to understand which drivers explain the educational achievement gap at ages $5,7,11$ and 14 , to help identify ways to reduce the gap. The key findings are set out below.

## KEY FINDINGS

1. A range of complex and interlinked factors are associated with the development of children's cognitive and language skills.

Key factors include socio-economic or structural factors, family background, the home learning environment, parenting styles or rules, a child's behaviour and development and prior cognitive ability.
2. At ages five, structural or socioeconomic characteristics (e.g. family income, tenure, multiple deprivation and parental education) accounted for around half of the gap in cognitive and language development between children from lowincome and higher-income households.
3. How well a child has done at younger ages (prior ability) has a significant impact on the gap in children's attainment in cognitive and language skills and becomes stronger as children get older.

- At age seven, prior ability (scores on assessments from earlier ages) accounts for just under a fifth of the gap.
- By age 14 , more than half of the total gap was explained by prior ability.
- This suggests that it is likely to be easier to tackle the education achievement gap in early years rather than wait until the post primary stage.


## THE SCIENCE AND ECONOMICS BEHIND EARLY INTERVENTION

The early years are a foundational stage in a child's life. It's during these first few years that a child develops the skills and abilities that they build on throughout their life. In the first few years of life, children develop rapidly, driven by a mix of experience, environment and genes. No children's development is pre-determined.

The science is clear that the first years of a child's life are critical for optimum brain development, and that the level of support, nurture and resources during the first five years is the foundation of lifelong health and well-being.

It is important to stress that children will continue to develop throughout childhood and into adulthood, but in the early years their brains are particularly sensitive. During these early years a child's brain undergoes rapid changes:

- By age one, the size of a child's brain is already $72 \%$ that of an adult's brain and by age two it has grown to $83 \%$ of an adult's brain. ${ }^{18}$
- At age two, the connections that are being formed in a child's brain to transmit information are happening about twice as fast as in an adult's brain. ${ }^{19}$
- And by age five, a child's brain is using almost twice as much energy as an adult's brain to support their learning and development. ${ }^{20}$

These changes underpin rapid changes in a child's cognitive abilities. For example, a child's vocabulary expands from 55 words at 16 months to 225 words at 23 months to 573 words at 30 months - an increase of over $900 \%$ between 16 and 30 months - and 6000 words by age $6 .{ }^{21}$

The economic benefits of investment in early years have been highlighted by Professor James Heckman, ${ }^{22}$ Nobel Laureate in Economics, who found that the most economically efficient time to develop skills and social abilities is in the very early years when developmental support is most influential. Sinclair ${ }^{23}$ (2007) found when programmes are targeted at higher risk children and families, there is a cost benefit ratio of up to $1: 17$ or more. According to Karoly, $2001{ }^{24}$ investment in the early years is more cost-effective than investment in later-life programmes that aim to reduce the achievement gaps and the adverse effects of poverty and social exclusion.


## Recommendations to improve early learning outcomes

In the draft Programme for Government 201621, the NI Executive set an ambitious goal to give all children the best start in life. It recognises that to achieve this goal, progress needs to be made in ensuring all children reach appropriate stages of development in their immediate preschool year. However, this research indicates that a focus on early language and cognitive development is key to meeting these aims, particularly for young children growing up in poverty. Too many children growing up in poverty are behind and are therefore at a disadvantage before they even start school, a disadvantage which persists throughout their experience of education. Save the Children wants to make sure that no child falls behind before they reach the classroom and every child can thrive during their first school years. We want to tackle the impact of poverty and children's early learning outcomes in Northern Ireland.

While the government has committed to take forward actions to meet these broad goals, young children continue to experience gaps in policies, systems, services and support, or face barriers to accessing and benefitting from them. We believe now is the time to redouble efforts, commit to a more ambitious programme of reform and reduce these gaps.

There is strong evidence that, in tandem with increased household income, government funding should be targeted at the factors that are known to matter most in the early years: support for parents to engage in their children's learning at home, support for creating a good home learning environment and the provision of high-quality child care. ${ }^{25}$

There is clear evidence that high-quality early education and childcare is associated with benefits for children's development, with the strongest effects for children from disadvantaged backgrounds. ${ }^{26}$ One of the keys to the success of Nordic countries in breaking the link between parental attainment and children's outcomes is the provision of universal and high-quality Early Childhood Education and Care. ${ }^{27}$

Save the Children is calling for a transformation of the Early Education and Childcare (EECC) system in Northern Ireland to better support young children living in poverty and their early learning. The evidence suggests that a high-quality system needs to include the following components. We believe that four key areas should be prioritised:

## RECOMMENDATION 1: <br> TRANSFORM PROVISION OF EECC TO BETTER SUPPORT YOUNG CHILDREN'S EARLY LEARNING

a) Integrate early education and childcare systems to provide holistic early learning and care

According to Lloyd and Potter (2014) ${ }^{28}$ and the Effective Pre-School, Primary and Secondary Education Project (EPPSE) findings, a key component of high-quality provision associated with improving outcomes for disadvantaged children, includes integrating education and care to create holistic and seamless provision of nurture, care and the development of social, emotional, physical and cognitive skills, abilities and wellbeing.

In Northern Ireland, the current system continues to segregate early education and childcare, leading to variations in funding, regulation, staff requirements and qualifications, with resulting confusion and complexity for families. The Department of Education should develop an integrated early education and childcare strategy that recognises the importance of investing in high-quality care and learning provision and accepts the importance of early learning for young children before they enter the school system.
b) Implement a workforce development plan to ensure a highly skilled and valued early years workforce

A key priority is investment in a highly-qualified and valued workforce to ensure graduateled settings with the entire workforce skilled in supporting young children's social and emotional literacy and their speech, language and communication. It is also vital that early years staff have expertise in engaging and supporting parents and carers to develop the home learning environment. An action plan should ensure funding allocations for training, continuous professional development (CPD) and fair pay levels across the sectors.

Given the range of evidence that children facing particular disadvantages benefit most from the 'protective factor' of high quality provision, the Scottish government has decided that all nurseries in the most deprived areas in Scotland are, by 2018, to have an additional qualified teacher or childcare graduate. In addition, CPD will include a module on skills in parental engagement to
highlight the contribution this can make to children's development.

In Ireland, from September 2018, increased funding for the Early Childhood Education and Care scheme will provide higher pay for graduate-level staff. ${ }^{29}$

In Northern Ireland, staff requirements, qualifications, funding, pay and conditions vary across the private, voluntary, community and public sectors. For example, pre-school teachers in the statutory sector possess a degree level qualification with qualified teacher status whereas for those working in the voluntary and private sectors the Minimum Standards for Childminding and Day Care for Children Under Age 12 (2012, Standard 11) apply, meaning only half of the staff is required to possess a relevant level 2 childcare qualification. Whilst some settings may exceed these requirements, the associated salaries are based on the minimum standards (2012) and so the incentive to exceed the basic requirements is minimal.Walsh ${ }^{30}$ (2016) suggests this can translate to a poor skillset with regards to competence in literacy and numeracy, as a GCSE in English and Mathematics is not required for the level 2 qualification. This leaves the potential for children to be in a setting where none of the practitioners, other than the leader/manager, has a GCSE in Maths or English and may therefore have unintended negative implications for children's outcomes.

In part, this disparity in qualifications between the public, voluntary and private pre-school providers may reflect the disparity in funding. According to Walsh ${ }^{31}$ (2016), in the 2012/2013 school year over $£ 40$ million was provided to
the 97 Department of Education grant-aided nursery schools and 224 nursery units attached to primary schools via the Common Funding Formula; while $£ 16.4$ million was allocated to the 390 voluntary and private pre-school providers outside the formula arrangements.
c) Improve access by extending funded highquality provision to under 3s

Children under three are known to benefit from an earlier start, provided the children attend high quality settings (Effective Pre-School, Primary and Secondary Education: EPPSE). It is the combination of high quality and longer time in provision that has the clearest effect size. It is estimated that children who start to attend an early years setting before turning 3 make approximately 6 additional months' progress with moderate to high effects for early language and number skills.

In Ireland from September 2018, the Early Childhood Education and Care scheme will be made available for 2 programme years. In preparation for the planned introduction of an affordable childcare scheme in Ireland, an independent review of the cost of delivering quality childcare has been commissioned to provide evidence for the required future investment.

In Northern Ireland, most under 3s are not entitled to funded provision outside Sure Start areas. The oversubscribed two-year-old Developmental Programme is currently delivered to approximately 1,700 children (approximately $0.07 \%$ of 2 year olds in Northern Ireland) in 38
of the 39 Sure Start projects across Northern Ireland. This means that many young children under 3 , including those living in poverty, cannot access and benefit from these quality services. Furthermore, parents with children aged under three are faced with the challenge that full-time private childcare is particularly expensive for this age group. ${ }^{32}$

## RECOMMENDATION 2: IMPLEMENTA PARENTAL ENGAGEMENT STRATEGY AND ACTION PLAN

In order to support parents to engage in their children's early learning, this engagement strategy should link to the workforce development strategy and ensure that modules in parental engagement, the home learning environment and child poverty are mandatory in initial training and CPD.

These are needed to deliver on the recommendations of the Chief Inspector (2012), ${ }^{33}$ the CBI (2012) ${ }^{34}$ and the Public Accounts Committee (2013) ${ }^{35}$ which recognised the crucial importance of settings' engagement with parents and the community.

Research highlights the importance of skilled early years staff who have expertise in supporting parents and carers to develop the home learning environment and in supporting parental participation in settings. (EPPNI); ${ }^{36}$ Lloyd and Potter (2014) ${ }^{37}$ and the Effective Pre-School, Primary and Secondary Education Project (EPPSE). ${ }^{38}$

Many international guidelines for best practice in early education and childcare emphasise the role of partnership between parents and settings as an indicator of quality in early years services. ${ }^{39}$

Models of best practice in engaging parents in early education curricula and programmes include the following:

- The New Zealand early childhood curriculum specifies parental engagement in curriculum development and implementation. ${ }^{40}$
- Finland's core curriculum for pre-primary education (2010) encourages the involvement of parents in the development of their children's education plans. ${ }^{41}$
- In Australia, the Home Interaction Program for Parents and Youngsters (HIPPY) ${ }^{42}$ aims to help children start school on an equal footing with their more advantaged peers, as well as to strengthen communities and the social inclusion of parents and children. A two-year study found that the gap in early numeracy and early literacy skills at the beginning of the programme, compared with the Australian norm, had closed by the end of the programme.

Save the Children have invested in parental engagement programmes within the first years of compulsory schooling. We will be applying our learning from programmes such as Families and Schools Together and Families Connect to families with younger children. Families Connect is a parenting programme that was co-designed with families and practitioners and
tested within 36 schools in some of the most marginalised communities. The programme is designed to support parents and carers to get involved in their children's learning in school and at home through a series of activities, techniques and games. It aims to develop the skills and confidence of parents to actively engage their children in learning outside the setting to provide their children with a greater chance of achieving their full potential.

Early programme evaluation shows a high level of parental satisfaction and retention rates, with school practitioners reporting an overall improvement in some children's academic ability.


## RECOMMENDATION 3: <br> INVEST IN AREA-BASED COLLABORATION TO TACKLE THE ATTAINMENT GAP IN THE EARLYYEARS

In Northern Ireland, there is evidence of excellent collaborative approaches within communities to build strong foundations for children in their early years by crossing established professional boundaries.

The Limavady speech and language project ${ }^{43}$ offers important learning about what can be achieved in less than a year with commitment and joint-working between pre-schools, primary schools, parents, the Limavady Neighbourhood Renewal Partnership, the Residents' Association, Community Associations, the Health Trust and Education and Library Board. In 2014 an initial screening of 303 young children indicated 68\% had moderate to severe language delay. A speech and language therapist worked across 6 pre-schools and primary schools to train early years practitioners and teachers as well as working with children, parents and community sector staff and volunteers. When children were re-screened after an 11-month interval, 68\% were found to have language development levels appropriate for their age.

The 'Investigating Links in Achievement and Deprivation' (the ILiAD study, 2017) ${ }^{44}$ highlights the protective effect of strong partnershipworking as 'social capital' to disrupt the statistical relationship between deprivation and educational underachievement. According to the findings, educational attainment outcomes
of young people in disadvantaged wards are enhanced by adequate levels of parental or familial support, effective school-community linkages and accessibility to parents.

West Belfast Partnership Board's 'Sharing the Learning' programme is widely regarded as an exemplar of best practice. The model illustrates the benefits of partnership and collaboration on an area basis. It involves the participation of early years providers, nurseries, primary schools, post-primary schools, community-based after-schools and crucially parents, families and children. The collective vision and ambition to improve educational achievement continue to demonstrate significant outcomes for children.

But these examples are the exception.Too many settings and practitioners are constrained by the tight funding environment and feel compelled to protect their own positions rather than devote time and energy to partnership working. Government strategies such as the draft Programme for Government (PfG) demonstrate commitment to outcomes-based, collaborative approaches, but reduction of the achievement gap and child poverty will depend on the funding of viable area-based partnerships that focus on the best interest of disadvantaged children.

## RECOMMENDATION 4: <br> GOVERNMENT SHOULD PROVIDE CENTRALLY-HELD DISAGGREGATED DATA ABOUT CHILDREN'S DEVELOPMENT FROM BIRTH

While there are various datasets on children's health and educational attainment in their later school years, there is no universal indicator or measure of overall early childhood development in NI. GCSE results provide the earliest national disaggregated data on educational outcomes, which is far too late to tackle the achievement gap. As demonstrated by this research, we need better data in order to rigorously analyse what works in improving young children's developmental outcomes. This is essential to demonstrate the effectiveness of policies and programmes in supporting children's early childhood development and reducing the achievement gap.

There is a strong evidence base about the crucial importance of appropriate data from across the OECD countries. For example, the success of HIPPY in helping children start school on an equal footing with their more advantaged peers depends on the ability to measure their progress in early numeracy and early literacy skills against the Australian norm for that age group.

According to research organisations, such as the Administrative Data Research Network (Annual Review 2014-2015), ${ }^{45}$ access to administrative data collections support evidence-based policy-making by drawing attention to areas of the system that are working, where government policies are successful and where elements need reformed.

In Northern Ireland, the draft children's strategy ${ }^{46}$ and the child poverty strategy ${ }^{47}$ recognise the importance of early intervention and quality early years provision but continue to use GCSE outcomes as the key indicator of educational achievement.

In 2016 the draft PfG $^{48}$ cited the NI government's intention to establish a baseline for measuring improvements in developmental outcomes for young children at a population level across NI. The primary indicator for Outcome 14 of the PfG ("We give our children and young people the best start in life") is the 'percentage of children who are at the appropriate stage of development in their immediate pre-school year'. Data for the baseline is collected as part of the pilot of the '3+ Health Review', currently being implemented as part of the Early Intervention Transformation Programme (EITP).

The 3+ Health Review is a collaboration between health visiting and early years practitioners taking place in all types of preschool settings (with DE funded places). The lead measure of the pre-school child's social and emotional development will be assessed via the Ages and Stages Questionnaire: SocialEmotional (ASQ:SE), with the profile of scores generated providing a measure of how many children are developmentally on track. The aim is to establish a baseline for measuring improvements in developmental outcomes for young children at a population level across NI. In the longer term, there is the potential to develop population data for an earlier stage in a child's life in taking forward the existing, though not currently consistently available, 2-year health
review core contact, and then potentially later at primary school, using the ASQ for 5 years ( 60 month ASQ). It will be a number of years before a baseline is established for the lead measure, as the 3+ Health Review is a pilot being rolled out over the next three years.

While we welcome this new review, it will be important to include early language and cognitive development in the measure and to ensure that the data is disaggregated to monitor progress in reducing the early achievement gap.

## CONCLUSION

The paper has examined the correlation between educational achievement and income. It has cited evidence about the strong link between low income and learning outcomes in early childhood. It has outlined the reasons for the limited information on this linkage in Northern Ireland and outlined new research findings that confirm that the education gap begins in early years and can persist through school. It cites the evidence from neuroscience and economics about the merits of early intervention and makes the case for investment in high-quality early education and childcare as the optimum way to support childhood development and reduce the early learning gap.

The paper suggests the elements of high quality provision and makes a series of recommendations for decision-makers. It highlights the feasibility of implementing many of the suggestions.

# We believe there is real opportunity to make progress given that cross-party support exists to take more action to support young children. 

However, it also doesn't ignore the obstacles to delivery, which are exacerbated by current funding constraints. The conclusion must be that collaborative working, with a focus on the best interest of children, is the best way forward. But with the forecast increase in child poverty and the effect on early learning outcomes, it must be acknowledged that the challenge is stark. The effort of all partners needs to be commensurate with the scale of the challenge.

For our part, Save the Children intends to build on this research and examine in more depth what works to reduce the early achievement gap and child poverty.

## Endnotes

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