Subject:IMPACT OF LITERACY AND NUMERACY STRATEGIES IN
FALKIRK COUNCIL SCHOOLSMeeting:EDUCATION EXECUTIVEDate:3 FEBRUARY 2015Author:JOINT ACTING DIRECTOR OF EDUCATION

1. INTRODUCTION

- 1.1 This paper reports on the progress made by Falkirk Council's primary and secondary schools in implementing its Literacy and Numeracy strategies.
- 1.2 The Literacy Strategy was introduced in November 2013 and has now been revised in light of ongoing evaluation. It was developed in response to Education Services' determination to adopt a policy of Zero Tolerance to Illiteracy, based on an awareness that a lack of ability to read is the main cause of children and young people not being able to access the curriculum, leading in turn to disaffection. The strategy aims to improve children's access to their learning and to give young people the best opportunities in achieving positive destinations on leaving school.
- 1.3 The Numeracy Strategy was introduced in September 2014 and, similar to the Literacy Strategy, will be adapted over time in light of ongoing evaluation. The purpose of the Numeracy Strategy is to raise standards of numeracy across Falkirk from pre-birth to adulthood.
- 1.4 The introduction of standardised testing in session 2011-12 in Primary 1, 3, 5 and 7 and in S2 in secondary schools has enabled performance in literacy and numeracy to be measured each session. In 2013-14, it further allowed trends to be identified over the three sessions since its introduction.

2. MEASURING PROGRESS IN LITERACY AND NUMERACY

2.1 The programme of standardised testing in Falkirk Council schools, which has been in place since session 2011-12, has enabled primary and secondary schools, as well as officers at the centre, to gain an increased awareness of attainment in literacy and numeracy. An explanation of the standardised testing programme is detailed in Appendix 3.

3. IMPLEMENTATION OF THE LITERACY STRATEGY

3.1 The Literacy Strategy is driven by eight work streams as outlined in Appendix 1. These embrace the need to promote lifelong development of literacy in children, young people and adults.

- 3.2 There has been positive progress with all work streams. Some examples of this are:
 - Secondary schools have each identified a member of staff to be literacy co-ordinators, whose role is to help departments to encourage teaching of literacy skills across the curriculum. Literacy is now formally assessed as part of SQA National 4.
 - An extensive range of partner agencies has been identified to help in promoting literacy in the Falkirk Council area. Education Services is creating a literacy 'hub' with other authorities (North Lanarkshire, Stirling, Moray and Clackmannanshire Councils) thereby promoting Falkirk as a place where literacy is a core area for development. A wide range of partners is involved in schools to promote literacy.
 - Parents are seen as key partners in developing their children's literacy as well as, where appropriate, their own. Family involvement is a key priority and we are engaging through Twitter accounts, Falkirk Council's YouTube Channel, leaflets, etc. Falkirk Council's work has been noted as an example of good practice by the Scottish Government's Raising Attainment team.
 - In schools, a very high uptake of professional development-related courses has been recorded, with a major conference planned for January 2015 which, it is hoped, will draw together all who contribute to literacy in Falkirk.
 - Progress is also illustrated and supported by the Literacy Strategy Blog <u>https://blogs.glowscotland.org.uk/fa/LiteracyStrategy/</u>

4. IMPACT OF THE LITERACY STRATEGY

- 4.1 <u>Reading in P1</u> Standardised tests over the three sessions from 2011-12 show that the Value Added (the difference between test results at the start of the session and those at the end) has fallen progressively over the three-year period from 26% of pupils having gained better than average Value Added in 2012 to 21% in 2013 and to 18% in 2014. The focus at early level has been on the teaching of phonics and this is evident in CEM results. A training need has been identified for early level staff in relation to skills needed in the teaching of reading. An early level mobilisation team has been set up and currently looking at providing CPD in this area. Good practice has been gathered and support materials have been produced. Pupils' performance in Phonics improved, however. Strong Phonics development in P1 is closely linked to effective long-term development of Reading.
- 4.2 <u>Reading in P3, P5, and P7</u> Performance in Reading at these stages shows year-on-year improvement from 2011-12.

	Falkirk Council Primary Schools – Attainment in Reading						
	P3	Р5	Р7				
2011-2	103	103	93				
2012-3	103	103	94				
2013-4	104	104	95				

4.3 The average standardised scores for Reading in Falkirk Council primary schools were as follows:

Pupils at P3 and P5 have scored consistently above the UK standard and showed improvement against the rest of the UK in session 2013-14. Pupils in P7, while scoring below the UK standard of 100, have shown steady improvement since 2011-12.

4.4 <u>Reading in S2</u> - The Value Added between P7 and S2 over the three years is exactly in line with that of other Scottish schools.

5. IMPLEMENTATION OF THE NUMERACY STRATEGY

5.1 As with the Literacy Strategy, the Numeracy Strategy comprises a series of eight workstreams, as outlined in Appendix 2. The Council is part of a Numeracy Hub providing links to three other local authorities, allowing joint working in terms of sharing research and professional dialogue. School Cluster working has also been identified as an important contributor to realising the strategy. Again, working with parents is seen as a key factor in improving numeracy.

6. IMPACT OF THE NUMERACY STRATEGY

6.1 <u>Mathematics in P1</u> - Standardised tests over the three sessions from 2011-12 in P1 show overall stability in Mathematics. The percentage of pupils gaining more than average Value Added has returned in 2014 to the same level as in 2012 (ie 22%) having dipped in the intervening year to 18% in 2013. The percentage of pupils gaining significantly more than average Value Added is now the highest to date and is 3% better than in 2012-13.

6.2 <u>Mental Arithmetic and Mathematics in P3, P5 and P7</u> - Both Mental Arithmetic and Mathematics are tested using standardised tests. Following extensive work in schools since 2011-12 to improve pupils' Mental Arithmetic, attainment has improved significantly as shown in the table below. Performance in P3 is now above the UK standard of 100. While performance in Mathematics remains static in P5, that of P3 and P7 has shown improvement over the three sessions.

Falkirk Council Primary Schools – Attainment in Mental Arithmetic and Mathematics									
	Mental Arithmetic			Maths					
	Р3	Р5	P7	Р3	Р5	P7			
2012	95	93	80	102	95	87			
2013	97	93	81	102	95	87			
2014	102	98	89	103	95	88			

The recent focus on teaching the strategies to support effective mental arithmetic skills has led to an improvement in mental maths scores in CEM. Teachers have deliberately shifted the focus to this area with a view to pupils being able to transfer these skills through to Maths as it is essential the buildings blocks of mental arithmetic are embedded. This also supports pace and challenge.

- 6.3 <u>Mathematics in S2</u> The Value Added between P7 and S2 over the three years is exactly in line with that of other Scottish schools. Mental Arithmetic is not measured in standardised tests at S2.
- 6.4 Primary schools are using a range of active methods including Big Maths and online sources such as Mangahigh. Good practice is being shared across clusters, including sharing of resources. This is drawing the attention of other local authorities throughout the UK. Members of staff from St Bernadette's RC Primary School and St Joseph's RC Primary School staff are working with the publisher of Big Maths as leaders of learning.
- 6.5 Mathematics teachers in secondary schools are engaging in professional development on active learning methodologies in numeracy and mathematics.
- 6.6 Partner agencies include Andrell (publisher of Big Maths), Education Scotland, Library Resources for Schools and neighbouring authorities.

7. **GENDER EQUALITIES**

7.1 As per the Scottish Survey of Literacy and Numeracy, there is no marked difference in attainment by gender.

8. NEXT STEPS

- 8.1 The revised Literacy and Numeracy strategies run from 2014-17 and will be adapted according to changing circumstances, eg:
 - (i) the increased focus in SQA National qualifications on Literacy skills;
 - (ii) the time required for development of Literacy and Numeracy to filter through Early Years, primary stages and S1 to S3; and
 - (iii) increasing confidence among learners in transferring their Literacy and Numeracy skills across all areas of the curriculum. Primary schools are making good progress in helping learners to transfer skills in Reading and Numeracy.
- 8.2 In line with the Literacy and Numeracy Strategy we are engaging, in a variety of ways, with a range of partners. For example our work with the Early Education and Childcare Department of Forth Valley College to establish a shared approach with students who have placements in Falkirk establishments and who may become permanent staff.
- 8.3 Schools have access to the Professional Learning Resource Falkirk Council is also part of a Numeracy Hub which includes Moray, Aberdeenshire and Highland Councils, ie cross-authority collaboration in practice, with the ultimate aim of being part of a national numeracy hub. Falkirk Council will be nominating a representative to lead within the soon to be established virtual national numeracy hub.

9. **RECOMMENDATION**

9.1 That Education Executive agree the updated strategies for both Literacy and Numeracy.

Joint Acting Director of Education

Date: 20 January 2015

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LIST OF BACKGROUND PAPERS

NIL

Falkirk Council Education Services' Literacy Strategy 2014-17

Zero Tolerance to Illiteracy

Falkirk Council's literacy strategy is informed by the Scottish Government's Literacy Action Plan and shares its vision to raise literacy standards for all and to improve outcomes and life chances for the people of Falkirk.

Rationale

"Improvements cannot be confined to a particular sector or point in a learner's journey. Literacy development starts from birth. Early years settings and schools develop children and young people's basic and advanced literacy skills and in adulthood the on-going development of literacy skills helps to advance personal achievements, employment prospects and participation in society." (Literacy Action Plan, 2010, Scottish Government)

Falkirk's vision is for our children, young people and adults to be able to read, write, listen and talk, allowing them to reach their full potential, to engage fully in 21st Century society, to access lifelong learning and actively engage in meaningful employment.

The purpose of our literacy strategy is to guide us as we raise standards of literacy from early years to adulthood. This strategy recognises that language development begins pre-birth, when the foundations are laid on which language continues to develop throughout our lives.

The strategy demands innovative approaches to partnership working. It invites services, agencies and families to raise the bar in terms of what all our children, young people and adults can achieve. This reflects recommendations from the Literacy Commission (December 2009):

- adopting zero tolerance of illiteracy;
- sharing best practice to meet the literacy needs of children;
- prioritising early years to tackle the socio-economic effect on learning;
- moving beyond the basic literacy to higher order literacy skills.

The development of high levels of literacy in Falkirk will support the achievement of the ambitions set out in 'One Council, One Plan' Falkirk Council Corporate Plan 2012-2017, specifically the aspirations to:

- further develop a thriving, sustainable and vibrant economy;
- continue to improve the health, safety and wellbeing of our citizens and communities;
- increase our efforts to tackle disadvantage and discrimination.

This strategy runs from 2014-2017 and will evolve in response to national, local and individual contributions and challenges.

Delivering the strategy

8 work streams make up the 2014-17 strategy:

- 1. Embed active literacy in every school
- 2. Maximise Early Years contribution
- 3. Further develop Literacy Across Learning in the Broad General Education and the Senior Phase
- 4. Involve families
- 5. Work with partners
- 6. Analyse data and act on findings
- 7. Deliver intelligence based professional learning experiences at school, cluster and authority levels
- 8. Populate and review the strategy support tool

Teams, involving a range of officers, school based staff, partners, parents, children and young people as required, will be set up to deliver each of the work streams.

1. Embed active approaches to literacy in every school

Active Literacy will be the main approach to the teaching of literacy. It will be supported by a diverse range of methodologies including 21st century technology. Recent HMIe school inspections have recognised the strength and impact of active literacy on children's progress. Barriers to learning are addressed through an inclusive approach, where individual additional support needs are identified and supported in line with best practice.

The foci for session 2014-2015 for learners aged 3-18:

- the development of reading skills
- confidence and the ability to transfer these skills across a range of learning experiences
- a significant improvement in literacy achievement.

2. Maximise Early Years contribution

We recognise the importance of literacy skills from pre-birth: the on-line literacy strategy support tool enables practitioners to effectively support and enhance the development of literacy skills for all early years children. Practitioners will work together across Early Level, using active methodologies and strategies to support the achievement of developmental milestones. In session 2014 - 2015 the focus is emergent reading at Early Level.

3. Further develop Literacy across Learning in the Broad General Education and the Senior Phase

Roll out active literacy in all secondary schools:

- Make use of local and national guidance
- Support exploration of strategies and techniques
- Team teaching to demonstrate innovative practice in action
- Curriculum Support Officers will consult with Secondary Schools in relation to literacy across learning

4. Involve families

Families play a crucial role in the development of children and young people's learning from the early years of playing, talking and sharing books through to providing support for exams and wider learning. It is important to respond to parents/carers as individuals and work from a growing understanding of their needs.

Education staff and partners will have the required skills and knowledge to support learners and their families in the promotion of literacy.

5. Work with partners

Positive contributions that are made by a wide range of services and agencies to promote literacy and support literacy development. In the current financial climate, it is crucial that there is effective partnership working to share resources to challenge poor literacy across society.

Each individual's journey will be different according to need and will involve their family and a range of universal and specialist services and partner agencies. To maximise impact in relation to literacy development:

- Falkirk Council services will define specific team roles and responsibilities
- Partner agencies will share their literacy plans on the strategy support tool

6. Analyse data and act on findings

Analysis of available and relevant data will support and challenge all to improve the quality of provision and outcomes for learners. It will identify trends, inform direction of travel and professional learning needs. Findings will be communicated, actions taken and impact from changes made to all stakeholders.

From the outset, there will be an ongoing evaluation of the Literacy Strategy. All staff will engage in professional dialogue and reflection based on a shared understanding of literacy development and a shared vision of their aims for children, young people and families. This continuous process of self-evaluation will support identifying the agenda for improvement.

This focus will include close analysis of:

- School improvement plans
- Validation visits
- Ongoing professional dialogue
- Pupil/parent voice
- Current and prior assessment data
- Feedback from professional learning events, the literacy networks etc.

7. Further develop professional learning experiences at school, cluster and authority level

The professional learning programme aims to support **all** staff who have a role in eliminating illiteracy. This goes beyond 'courses' and could include:

- Support networks which ensure regular engagement in professional dialogue and keeping up to date with new developments
- Partnership working with Education Scotland relating to literacy eg delivering and receiving training, contributing to and learning from national advice

- Co-creation of support for schools who are addressing literacy skills in their school improvement plans
- Access to training materials online via Falkirk Council's You Tube channel to enable 24/7 access

The professional learning programme is informed by:

- Consultation with Head teachers, managers, staff, partners and professional associations
- Research
- Evaluations of courses
- The ERD process

8. Populate and review the strategy support tool

The literacy strategy statement is supported by an on-line literacy strategy support tool, <u>https://blogs.glowscotland.org.uk/fa/LiteracyStrategy/</u>. The tool aims to raise awareness of the provision that exists within and out with the formal education sector, providing an overview of roles and responsibilities, action plans, identifying gaps in literacy provision and offering links between services and agencies to offer a better understanding of how they impact on literacy and encourage meaningful cross sector working to benefit the learner.

Falkirk Council's Numeracy across Learning Strategy 2014-2017

Zero Tolerance to Innumeracy

Curriculum for Excellence national guidance makes it explicit that every teacher/practitioner should look for opportunities to develop young people's numeracy skills across all areas and at all levels of learning. This reflects the importance that the Scottish Government places on these crucial skills, which unlock learning in other areas of the curriculum and are therefore vital for success in learning, life and work in the modern world and workplace. (Scottish Government)

'All teachers have responsibility for promoting the development of numeracy. With an increased emphasis upon numeracy for all young people, teachers will need to plan to revisit and consolidate numeracy skills throughout schooling.'

Building the Curriculum 1

Falkirk Council's numeracy strategy is informed by the Principles and Practice paper and shares its vision to raise numeracy standards for all and to improve outcomes and life chances for the people of Falkirk.

Rationale

"Numeracy is a skill for life, learning and work. Having well-developed numeracy skills allows young people to be more confident in social settings and enhances enjoyment in a large number of leisure activities."

Numeracy across learning: principles and practice

Our working definition of numeracy is number based skills needed by everyone regularly as they go about their daily lives. Numeracy is not only a subset of mathematics; it is also a life skill which permeates and supports all areas of learning, allowing young people access to the wider curriculum.'

Numeracy across learning: principles and practice

The purpose of our numeracy strategy is to raise standards of numeracy from early years to adulthood. This strategy recognises that numeracy development begins pre-birth, continues throughout our lives to lay the foundation for the development of numeracy.

The development of high levels of numeracy in Falkirk will support the achievement of the ambitions set out in 'One Council, One Plan' Falkirk Council Corporate Plan 2012-2017, in particular, the aspirations to 'further develop a thriving, sustainable and vibrant economy,' 'continuing to improve the health, safety and well-being of our citizens and communities' and 'increasing our efforts to tackle disadvantage and discrimination.'

This strategy runs from 2014-2017 and will evolve in response to national, local and individual contributions and challenges.

Delivering the strategy

8 work streams make up this strategy:

- 1. Embed Active Numeracy in every school
- 2. Maximise Early Years contribution
- 3. Further develop Numeracy Across Learning in the Broad General Education (3-18) and the Senior Phase
- 4. Involve families
- 5. Work with partners
- 6. Analyse data and act on findings
- 7. Deliver intelligence based professional learning experiences at school, cluster and authority levels
- 8. Populate and review the strategy support tool

Teams, involving a range of officers, school based staff, partners, parents, children and young people as required, will be set up to deliver each of the work streams.

1. Embedding Active Numeracy in every school

Numeracy is fundamental. It unlocks learning; it improves life chances, health and well-being.

Learning through play and Active Numeracy will be a singular and all-encompassing methodology for the teaching of numeracy within nurseries and schools.

A diverse range of additional approaches and methodologies will be encouraged that complement and reinforce Active Numeracy, including 21st century technology.

Barriers to being numerate is addressed through an inclusive approach, where individual additional support needs are identified and supported in line with best practice. The identification of individual needs is integrated in practice within the education for all children. Within this contextualised approach, individual additional support needs are identified and addressed. This will include well known barriers such as learning difficulties or differences and non-attendance.

Active numeracy approaches are being supported in establishments in a variety of ways. These approaches support the needs of a range of stakeholders, including teachers, support for learning teachers and assistants. The professional learning programme for active numeracy aims to support teachers who are new to the stage, as well as those who wish to develop their knowledge further. Support networks ensure teachers are regularly engaging in professional dialogue and keeping up to date with new developments. Education Scotland supports Falkirk Council in terms of numeracy training courses, advice and running conferences. Bespoke support is provided to schools who are addressing numeracy skills in their school improvement plans. More training materials are being provided online via Falkirk Council's You Tube channel in order to enable 24/7 access. The professional learning programme is informed by consultations with Head teachers, evaluations from courses and discussions with colleagues.

3. Maximise Early Years contribution

We recognise the importance of numeracy skills from birth: the online numeracy strategy support tool enables practitioners to effectively support and enhance the development of numeracy skills for all early years' children. Practitioners will work together across Early Level, using active methodologies and strategies to support the achievement of developmental milestones.

4. Further develop Numeracy Across Learning in the Broad General Education and the Senior Phase

- Roll out active numeracy in all establishments
- Make use of local and national guidance
- Support exploration of new strategies and techniques
- Team teaching to demonstrate innovative practice in action

5. Involve families

Families play a crucial role in the development of children and young people's learning from the early years of playing, talking and counting through to providing support for exams and wider learning. It is important to respond to parents/carers as individuals and work from a growing understanding of their needs.

Education staff and partners will have the required skills and knowledge to support learners and their families in the promotion of numeracy.

6. Work with partners

Positive contributions that are made by a wide range of services and agencies to promote numeracy and support numeracy development. In the current financial climate, it is crucial that there is effective partnership working to share resources to challenge poor numeracy across society.

Each individual's journey will be different according to need and will involve their family and a range of universal and specialist services and partner agencies. To maximise impact in relation to numeracy development:

- Falkirk Council services will define specific team roles and responsibilities
- Partner agencies will share their numeracy plans on the strategy support tool

7. Analyse data and act on findings

Analysis of available and relevant data will support and challenge all to improve the quality of provision and outcomes for learners. It will identify trends, inform direction of travel and professional learning needs. We will communicate the findings, actions taken and impact from changes made to all stakeholders.

This focus will include close analysis of:

- School improvement plans
- Validation visits
- Ongoing professional dialogue
- Current and prior assessment data (eg CEM and SSLN)
- Feedback from professional learning events, numeracy networks etc.

8. Further develop professional learning experiences at school, cluster and authority level

The professional learning programme aims to support *all* staff who have a role in raising attainment in numeracy. This goes beyond 'courses' and could include:

- Support networks which ensure regular engagement in professional dialogue and keeping up to date with new developments
- Partnership working with Education Scotland relating to numeracy eg delivering and receiving training, contributing to and learning from national advice
- Co-creation of support for schools who are addressing numeracy skills in their school improvement plans
- Access to training materials online via Falkirk Council's You Tube channel to enable 24/7 access

The professional learning programme is informed by:

- consultation with Head teachers, managers, staff, partners and professional associations
- research
- evaluations of courses

9. Design a strategy support tool

The numeracy strategy statement is supported by an on-line numeracy strategy support tool, <u>.https://blogs.glowscotland.org.uk/fa/NumeracyStrategy/</u> The tool aims to raise awareness of the provision that exists within and out with the formal education sector, providing an overview of roles and responsibilities, action plans, identifying gaps in numeracy provision and offering links between services and agencies to offer a better understanding of how they impact on numeracy and encourage meaningful cross sector working to benefit the learner.

APPENDIX 3

STANDARDISED TESTING IN FALKIRK COUNCIL SCHOOLS

Whose programme of standardised tests is used?

The Centre for Evaluation and Monitoring (CEM), run by Durham University, is contracted to Falkirk Council Education Services to provide standardised tests in P1, 3, 5 and 7, and in S2.

What are the advantages of the CEM programme?

Tests in P3, 5, 7 and S2 are administered at the end of each session, allowing teachers and managers in schools, and Education Officers to compare and analyse rates of progress in:

- individual pupils
- groups of pupils
- whole classes

The performance of individual schools can also be compared to that of other schools within similar catchment areas of the Council.

Pupils in P1 are tested at the start of each session as well as at the end so that, following the endof-session testing, pupils' progress can be measured and analysed.

How are tests administered?

All tests are taken by pupils on computer under the administration of their class teacher or, in some schools, by a member of the management team.

The tests ensure that pupils are set challenging questions but the software adjusts these to ensure to ensure that pupils are not subjected to undue pressure by being asked to answer large numbers of questions that are beyond their capabilities.

Results are returned to the school and to Education Services staff from CEM, usually within 48 hours of the tests being taken.

How are tests standardised?

Results from P1 and S2 tests are standardised against the expected performance of children across Scotland.

Results from the P3, 5 and 7 tests are standardised against the expected performance of children across the United Kingdom.

What is tested?

Tests in P1 measures performance in Reading, Mathematics and Phonics.

Testing in P3, 5, and 7 measures performance in:

- Reading (broken down into Comprehension, Spelling, Word Recognition and Word Decoding [the meanings of words])
- Mathematics (broken down into basic arithmetic; problem solving; shape, position and money; and data-handling)
- Mental Arithmetic

Testing in S2 measures performance in Reading, Mathematics and Science.

What is 'Value added' and what does it tell us?

The improvement in pupils' performance over time, as measured in standardised tests, is known as 'value added'.

In 2014, the Council was able, for the first time, to see the 'value' that was 'added' by schools by comparing pupils' performance in 2011-12 with that of the same pupils in 2013-14.