Seminar 2: The Impact of Using Data to Improve Learning and Teaching in Fife
Fife Pedagogy Team

Supporting Effective Pedagogy in Fife

(Breaking the Cycle of Disadvantage)

June 2016
Breaking the Cycle of Disadvantage
Who are we?

3 Pupil Support Assistants
12 Primary Teachers
Development Officer and Team Leader
Mathematics and Numeracy Development Officer

Fife Pedagogy Team
What?

- Nurturing Relationships
- Pedagogical Approaches
- Workshop for Literacy
- Developing Support Staff
- Developing Conceptual Understanding in Numeracy
Intensive
those with
the greatest risk

Additional
disadvantaged children
and young people

Universal
all children and young people
We consider the following ‘Breaking the Cycle of Disadvantage’ factors:

- Free School Meal entitlement
- Scottish Index of Multiple Deprivation (SIMD) data
- Exclusion rates
- Attendance data
- Numbers of Looked After Children
- Numbers of English as an Additional Language pupils
- Attainment data
- Engagement levels with other provisions e.g. Pupil Support Service
## Intensive and Additional Engagements

<table>
<thead>
<tr>
<th>Section</th>
<th>Staff</th>
<th>Pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nurture</strong></td>
<td>325</td>
<td>4109</td>
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<tr>
<td><strong>Literacy</strong></td>
<td>271</td>
<td>3155</td>
</tr>
<tr>
<td><strong>Numeracy</strong></td>
<td>509</td>
<td>7290</td>
</tr>
</tbody>
</table>
Developing Nurturing Relationships

Key aspects of our approach in Fife:

• Target the most vulnerable children within schools serving the most disadvantaged communities
• Improve pupil engagement and learning readiness
• Support pupils to achieve positive educational outcomes

  Resilience
  Self regulation
  Attachment
  Restorative Approaches
Workshop for Literacy Approach

Key aspects of our approach in Fife:

• Enhanced teacher knowledge and skills
• Early identification of children most at risk of experiencing literacy difficulties
• Literacy skills made explicit
• Use of real texts
Developing Conceptual Understanding in Numeracy

Key aspects of our approach in Fife:

• Importance of conceptual understanding before moving to procedural activities
• Appropriate learning opportunities based upon strategies that develop active thinking and construction of meaning
• Assessments which give diagnostic data
Pedagogical Approaches

- Effective Questioning
- Collaborative Learning
- Nurturing Growth Mindsets
- Developing Independent Learners
- Engaging Pupils Through Meaningful Learning
- Responsive Feedback
Professional Learning for Pupil Support Assistants

Nurturing Relationships

Literacy

Numeracy

Supporting Children Outwith the Classroom

PDA Award for SSSC
Impact

“I will have a stronger **focus on concepts** rather than procedures in my teaching.”

*Class teacher at Valley Primary School*

“Very valued experience promoting quality discussion which **impacts very well** on classroom experience.”

*re Professional Learning Packs*

“Loads of lightbulb moments. The opportunity for **team teaching and dialogue** keeps momentum and enthusiasm.”

*Class teacher at Cowdenbeath Primary School*

“I don’t get as stressed with maths because our teacher told us it’s **okay to make mistakes** as it can help you learn more.”

*Hannah, P7 pupil*
Improving Life Chances for All.....

Using performance information to inform decision-making

Raising Attainment Conference

Hampden Park, June 2016

Ralph Donaldson, Education and Children’s Services Directorate, Fife Council
BGE Performance Analyses:

- **CfE Performance Pack**  
  CfE analyses against school comparators/Fife  
  Pupil characteristics  
  Individual pupil progress over time  
  *Information culled from TRAMS (bespoke tracking, monitoring and reporting software)*

- **AfE Value-added Pack**  
  Value-added from P1 to P3 to P5 to P7 and P1 – P7  
  P1-P7 progress against National  
  Attainment against comparator schools/Fife  
  *Information culled from CEM University of Durham Reporting Website and TRAMS*

Assessment values:

- Teachers determine a learner’s progress through a level using the taxonomical scale of being Secure, Consolidating or Developing

- Teachers consider four main lenses throughout the year when making a CfE declaration:  
  Professional judgement (Personal)  
  Moderation (Comparative)  
  External assessment (National)  
  Progress history (Longitudinal)
**Fife Post- National Improvement Framework**

**BGE Performance Analyses:**

- **CfE Performance Pack**
  - Introduction of Executive Summary of key performance data for 2016 – 17
  - CfE analyses against school comparators/Fife plus three year trend
  - Introduction of progression analysis for SIMD groups for 2016 - 17
  - Introduction of CfE progression values for 2017 - 18
  - Introduction of Cluster stage progression (CfE/AfE) for 2017 - 18
  - Pupil characteristics – will alter for session 2017-18
  - Individual pupil progress over time plus SIMD, LAC and ASN classifications
  - *Information culled from TRAMS (bespoke tracking, monitoring and reporting software)*

- **AfE Value-added Pack**
  - Value-added for P1 to P4 to P7 and P1 – P7 (likely to have additional stages)
  - P1-P7 progress against National Attainment against comparator schools/Fife
  - *Information culled from CEM University of Durham Reporting Website and TRAMS*

**Assessment values:**

- Teachers determine a learner’s progress through a level using the taxonomical scale of being
  - Secure, Consolidating or Developing – awaiting outcome of Assessment Review Group (likely move to ‘Attained’ or ‘Achieved’ only)

- Teachers consider four main lenses throughout the year when making a CfE declaration:
  - Professional judgement (Personal) -
  - Moderation (Comparative) - Subject to Assessment Review – many aspects likely to remain
  - External assessment (National) -
  - Progress history (Longitudinal) -
BGE Performance Packs
Analyses of CfE declarations and AfE outcomes produced for each primary school in Fife

Kingdom of Fife Primary School

CfE Performance Pack

Kingdom of Fife Primary School

AfE Value-added Report
### Executive Summary

<table>
<thead>
<tr>
<th>School</th>
<th>Area</th>
<th>P1</th>
<th>P4</th>
<th>P7</th>
<th>P1, P4, P7</th>
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</thead>
<tbody>
<tr>
<td>Kingdom of Fife PS</td>
<td>Numeracy</td>
<td>100</td>
<td>96.2</td>
<td>81.3</td>
<td>93.5</td>
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<tr>
<td></td>
<td>Comp CFIE</td>
<td>92.2</td>
<td>95</td>
<td>75.8</td>
<td>87.8</td>
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<tr>
<td></td>
<td>School AFE</td>
<td>114.6</td>
<td>117.7</td>
<td>101.3</td>
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<td>Comp AFE</td>
<td>94.5</td>
<td>110.6</td>
<td>93.1</td>
<td>101.1</td>
</tr>
<tr>
<td></td>
<td>Literacy</td>
<td>100</td>
<td>91.2</td>
<td>81.3</td>
<td>93.5</td>
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<td>Comp CFIE</td>
<td>91.1</td>
<td>90.6</td>
<td>79.5</td>
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<tr>
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<td>School AFE</td>
<td>108.6</td>
<td>113.5</td>
<td>97.8</td>
<td>107.1</td>
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<tr>
<td></td>
<td>Comp AFE</td>
<td>92.3</td>
<td>105.5</td>
<td>96.8</td>
<td>100.1</td>
</tr>
</tbody>
</table>

- CfE declarations suggest alignment of attainment against AFE outcomes in Numeracy, except P7
- School is ahead of attainments declared by comparators in Numeracy
- School is ahead of AFE outcomes against comparators in Numeracy
- CfE declarations suggest alignment of attainment against AFE outcomes in Literacy (Reading)
- School is ahead of attainments declared by comparators in Literacy (Reading)
- School is ahead of AFE outcomes for comparators in Literacy (Reading)
- School is ahead of AFE outcomes for Scotland in Literacy (Reading) and Numeracy
Executive Summary

Calibration of coded values:

<table>
<thead>
<tr>
<th>Keys to colour coding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CfE</strong> Percentage of pupils at or above Secure at appropriate level</td>
</tr>
<tr>
<td>95 - 100</td>
</tr>
<tr>
<td>90 - 94</td>
</tr>
<tr>
<td>80 - 89</td>
</tr>
<tr>
<td>&lt;80</td>
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</table>
CfE Performance Pack
Curriculum for Excellence Levels

Present

Taking account of the National Improvement Framework:
• Show CfE declarations over a three year period against comparators and Fife (National to be included when available)
• Purposes: - inform future improvement strategies
- enhance culture of continuing improvement
- understand importance of trend analysis

Future
CfE Performance Pack

AfE Outcomes

Present

Future

Taking account of the National Improvement Framework:
• Show AfE outcomes over a three year period against comparators and (National to be included when available)
• Purposes:
  - inform future improvement strategies
  - enhance culture of continuing improvement
  - understand importance of trend analysis
  - moderate outcomes against CfE declarations
CfE Performance Pack
Progression analysis for SIMD groups (CfE and AfE)

Future

Taking account of the National Improvement Framework:

• Show CfE and AfE declarations/outcomes across SIMD groups against comparators and Fife averages
• Show whole-school profile of CfE declarations for SIMD groups
• Purposes:
  - inform future improvement strategies
  - enhance culture of continuing improvement
  - identify areas or groups who require additional, targeted intervention strategies
  - consider the comparison between CfE and AfE assessments to inform and improve professional judgement
Taking account of the National Improvement Framework:

- Show the extent to which the school is able to maintain progression through the BGE from the early stages through middle school and at P7.
- Similar to the 'conversion rate' principle established in the Senior Phase i.e. extent to which pupils achieving a National 5 qualification are able to convert this to a Higher pass.
- Future values will be less complex after a move to 'attained' or 'achieved' only.

**Purposes:**
- inform future improvement strategies
- enhance culture of continuing improvement
- identify areas or groups who require additional, targeted intervention strategies
- support Fife’s favouring of ‘progressive intervention’ over ‘early intervention’
CfE Performance Pack

Pupil Characteristics

Present

Curriculum for Excellence (CfE) performance pack 2015

2 : Pupil Characteristics

Percentage of pupils attaining a level for stage in 2014-2015

All Pupils

(452 pupils)

Future

Taking account of the National Improvement Framework:

• Show SIMD group CfE progressions over against comparators and Fife (National to be included when available)

• Purposes:
  - inform future improvement strategies
  - enhance culture of continuing improvement
  - identify quality of educational provision for different groups
  - know the extent of improvements achieved through intervention strategies across SIMD groups
  - know whether the school is ‘closing the gap’ across SIMD groups
# CfE Performance Pack

**Individual pupil progress over time (CfE v. AfE)**

**Present**

**English Language (incorporating Literacy)**

<table>
<thead>
<tr>
<th>Reading</th>
<th>Writing</th>
<th>Listening &amp; Talking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1</td>
<td>Stage 2</td>
<td>Stage 3</td>
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<tr>
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<td>Level 3</td>
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**Mathematics (incorporating Numeracy)**

<table>
<thead>
<tr>
<th>Number</th>
<th>Money</th>
<th>Measure</th>
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<tbody>
<tr>
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<td>Stage 3</td>
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**Information Handling**

<table>
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<tr>
<th>Data Handling</th>
<th>Information Handling</th>
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<tbody>
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<td>Level 1</td>
<td>Level 1</td>
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<tr>
<td>Level 2</td>
<td>Level 2</td>
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</tbody>
</table>

**Present**

**Pupil names here**
**CfE Performance Pack**

Individual pupil progress over time (CfE v. AfE)

**Taking account of the National Improvement Framework:**
- Show individual pupil progress for CfE and AfE over time according to SIMD, LAC, ASN
- Purposes:
  - inform future improvement strategies
  - enhance culture of continuing improvement
  - identify quality of educational provision for individuals
  - know the extent of improvements achieved through intervention strategies for individuals
  - know whether the school is ‘closing the gap’ for individuals

### Future

#### English Language (Incorporating Literacy)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Class</th>
<th>Forename</th>
<th>Surname</th>
<th>Read Level</th>
<th>Write Level</th>
<th>Listen &amp; Talk Level</th>
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<td>1D 1C 1S 2C 2D</td>
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<td>1D 1C 1S 2C 2D</td>
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</table>

#### AfE Reading Scores

<table>
<thead>
<tr>
<th>Stage</th>
<th>Class</th>
<th>Forename</th>
<th>Surname</th>
<th>Read Level</th>
<th>Write Level</th>
<th>Listen &amp; Talk Level</th>
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#### Mathematics (Incorporating Numeracy)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Class</th>
<th>Forename</th>
<th>Surname</th>
<th>Read Level</th>
<th>Write Level</th>
<th>Listen &amp; Talk Level</th>
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#### AfE Maths Scores

<table>
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<th>Stage</th>
<th>Class</th>
<th>Forename</th>
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<th>Read Level</th>
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AfE Value-added Pack

Reading analysis (P5)

Present/Future

Taking account of the National Improvement Framework:

- Retain series of analyses to inform professional judgement
- Purposes:
  - inform future improvement strategies
  - enhance culture of continuing improvement
  - identify quality of educational provision for different groups
  - use AfE outcomes and individual diagnosis to moderate assessment declarations
  - use AfE outcomes as ‘indicative’ of individual, group and cohort progressions rather than ‘definitive’
CfE Performance Pack

Cluster stage progression (CfE / AfE)

Future

Analysis
- Notable regression in CfE attainment from P1 to P7
- Results show beginnings of CfE attainment regression at P4 stage
Some results must be discounted due to very small numbers of pupils in certain schools at given stages; however, the regressive pattern is noteworthy.

Analysis
- Compared to CfE attainment, regression is notably less marked from P1 to P7
- P1 are more closely aligned to P4 outcomes, with P7 showing some regression thereafter
- Results should NOT be discounted due to small numbers of pupils at given stages as individual results are standardised across all Scotland.
These results suggest CfE assessment underestimates progression within the BGE.
Latest raising attainment strategies emerging from data analysis and self-evaluation strategies:

• progressive intervention

• flexible, ambitious differentiation – fluid groupings, horizon planning

• data informed, not data driven