Improving school readiness
Creating a better start for the West Midlands

West Midlands Local Knowledge and Intelligence Service
The purpose of this report is to:

• Provide a snapshot of school readiness in the West Midlands

• Describe the importance of school readiness

• Describe the economic case for investing in school readiness

• Summarise the evidence of what works to improve school readiness in order to facilitate improvements in service planning and delivery

• Provide an impetus for further detailed analysis in local areas
What is School readiness?

School readiness is a measure of how prepared a child is to succeed in school cognitively, socially and emotionally. The good level of development (GLD) is used to assess school readiness. Children are defined as having reached a GLD at the end of the Early Years Foundation Stage if they have achieved at least the expected level in the early learning goals in the prime areas of learning (personal, social and emotional development, physical development and communication and language) and in specific areas of mathematics and literacy.

<table>
<thead>
<tr>
<th>Areas of Learning</th>
<th>Early learning goal</th>
<th>Percentage achieving a GLD, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>West Midlands</td>
</tr>
<tr>
<td>Communication &amp; language</td>
<td>Listening &amp; attention</td>
<td>83.1</td>
</tr>
<tr>
<td></td>
<td>Understanding</td>
<td>82.8</td>
</tr>
<tr>
<td></td>
<td>Speaking</td>
<td>81.6</td>
</tr>
<tr>
<td>Physical Development</td>
<td>Moving &amp; handling</td>
<td>88.1</td>
</tr>
<tr>
<td></td>
<td>Health and self-care</td>
<td>89.1</td>
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<tr>
<td>Personal, social &amp; emotional development</td>
<td>Self-confidence &amp; self awareness</td>
<td>86.3</td>
</tr>
<tr>
<td></td>
<td>Managing feelings &amp; behaviour</td>
<td>85.5</td>
</tr>
<tr>
<td></td>
<td>Making relationships</td>
<td>87</td>
</tr>
<tr>
<td>Literacy</td>
<td>Reading</td>
<td>74.3</td>
</tr>
<tr>
<td></td>
<td>Writing</td>
<td>69</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Numbers</td>
<td>74.8</td>
</tr>
<tr>
<td></td>
<td>Shape, space &amp; measures</td>
<td>77.8</td>
</tr>
<tr>
<td>Understanding the world</td>
<td>People &amp; communities</td>
<td>81.9</td>
</tr>
<tr>
<td></td>
<td>The world</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>Technology</td>
<td>88.6</td>
</tr>
<tr>
<td>Expressive arts, designing and making</td>
<td>Exploring &amp; using media &amp; materials</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Being imaginative</td>
<td>84</td>
</tr>
</tbody>
</table>
The importance of school readiness

School readiness starts at birth with the support of parents and caregivers, when young children acquire the social and emotional skills, knowledge and attitudes necessary for success in school and life.

Children who don’t achieve a good level of development aged 5 years struggle with:

- Social skills
- Reading
- Maths
- Physical skills

which impacts on outcomes in childhood and later life:

- Educational outcomes
- Crime
- Health
- Death
What do school-ready children look like?

- Recognise numbers and quantities in the everyday environment
- Participate in music activities such as singing
- Have good oral health
- Are well nourished and within normal weight for height
- Are able to communicate their needs and have a good vocabulary
- Are able to socialise with peers and form friendships
- Are independent in eating
- Are able to take turns, sit, listen and play
- Are independent in getting dressed and going to the toilet
- Develop motor control and balance for a range of physical activities
- Have received all childhood immunisations

Milestones of normal child development aged about four years (based on the work of Mary Sheridan, From Birth to Five Years)
Why invest in school readiness?

Failing to invest sufficiently in quality early care and education short changes taxpayers because the return on investment is greater than many other economic development options.

- In the UK every £1 invested in quality early care and education saves taxpayers up to £13 in future costs.
- For every £1 spent on early years education in the UK, £7 has to be spent to have the same impact in adolescence.
- The benefits associated with the introduction of the literacy hour in the UK outstrip the costs by a ratio of between 27:1 and 70:1.
- Targeted parenting programmes to prevent conduct disorders pay back £8 over six years for every £1 invested with savings to the NHS, education and criminal justice system.

Centre for Research in Early Childhood (2013) *The impact of early education as a strategy in countering socioeconomic disadvantage*
DCSF (2008) *The impact of parental involvement on children’s education*
Public Health England (2013) *The health and wellbeing of children and young people in London*
Why invest in school readiness?

Early years interventions have been shown to have a higher rate of return per investment than later interventions. The costs of delivery per child are outweighed by the benefits to the individual, taxpayers and others through improved educational outcomes, reduced healthcare costs, reduced crime and increased taxes paid due to increased earnings in adults.

Curiosity corner

<table>
<thead>
<tr>
<th>Cost</th>
<th>Benefit</th>
<th>Benefit to cost ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>£78</td>
<td>£5,466</td>
<td>70.08</td>
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</table>

Family nurse partnership

<table>
<thead>
<tr>
<th>Cost</th>
<th>Benefit</th>
<th>Benefit to cost ratio</th>
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</thead>
<tbody>
<tr>
<td>£7,562</td>
<td>£14,694</td>
<td>1.94</td>
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Early childhood education

<table>
<thead>
<tr>
<th>Cost</th>
<th>Benefit</th>
<th>Benefit to cost ratio</th>
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</thead>
<tbody>
<tr>
<td>£6,141</td>
<td>£11,525</td>
<td>1.88</td>
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</table>

Perry preschool programme

<table>
<thead>
<tr>
<th>Cost</th>
<th>Benefit</th>
<th>Benefit to cost ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>£13,393</td>
<td>£21,598</td>
<td>1.61</td>
</tr>
</tbody>
</table>

Preschool programme designed for children (aged 3-4) who are at risk of school failure due to poverty.

Provides intensive visitation by nurses during a woman's pregnancy and the first two years after birth. Targeted at low income 'at risk' women during their 1st pregnancy.

UK equivalent being the National Curriculum.

Programme aims to enhance children's cognitive, socio-emotional, and physical development. Targets 0-5 year olds who are living in poverty.
Inequalities in school readiness; (2014/15)

Percentage achieving a good level of development (GLD) by subgroup

Gender

<table>
<thead>
<tr>
<th></th>
<th>England</th>
<th>West Midlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>74</td>
<td>72</td>
</tr>
<tr>
<td>Boys</td>
<td>59</td>
<td>57</td>
</tr>
</tbody>
</table>

% Achieving GLD

English as first language

<table>
<thead>
<tr>
<th></th>
<th>England</th>
<th>West Midlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pupils whose first language is English</td>
<td>68</td>
<td>67</td>
</tr>
<tr>
<td>Pupils whose first language is other than English</td>
<td>60</td>
<td>56</td>
</tr>
</tbody>
</table>

% Achieving GLD

Ethnicity

<table>
<thead>
<tr>
<th></th>
<th>England</th>
<th>West Midlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>67</td>
<td>66</td>
</tr>
<tr>
<td>Mixed</td>
<td>68</td>
<td>65</td>
</tr>
<tr>
<td>Asian</td>
<td>64</td>
<td>63</td>
</tr>
<tr>
<td>Black</td>
<td>65</td>
<td>62</td>
</tr>
<tr>
<td>Chinese</td>
<td>67</td>
<td>61</td>
</tr>
<tr>
<td>All pupils</td>
<td>66</td>
<td>64</td>
</tr>
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</table>

% Achieving GLD

Special educational needs (SEN)

<table>
<thead>
<tr>
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<th>England</th>
<th>West Midlands</th>
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</thead>
<tbody>
<tr>
<td>Pupils with no identified SEN</td>
<td>71</td>
<td>70</td>
</tr>
<tr>
<td>SEN support</td>
<td>24</td>
<td>21</td>
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</tbody>
</table>

% Achieving GLD
Inequalities in school readiness; (2014/15)

Percentage achieving a good level of development (GLD) by subgroup

Deprivation

Poverty can impact on school readiness. Populations in the most deprived decile and children with free school meal status have significantly lower proportions of children achieving GLD both locally and nationally.
## Indicators of school readiness in the West Midlands

A number of indicators may impact on school readiness. The West Midlands perform significantly worse than England for several of these.

*(Note: this is not an exhaustive list and other factors may also contribute to school readiness)*

<table>
<thead>
<tr>
<th>Ready families</th>
<th>Ready children</th>
<th>Ready communities</th>
<th>Ready services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family homelessness per 1,000 households; 2013/14</td>
<td>Eligible pupils in nurseries and primary schools claiming FSM; (2015)</td>
<td>Children living in poverty (under 16s); 2013</td>
<td>3 and 4 year-olds benefitting from funded early education; 2014</td>
</tr>
<tr>
<td>1.7</td>
<td>16.5%</td>
<td>18.6%</td>
<td>96.0%</td>
</tr>
<tr>
<td>2.5</td>
<td>19.6%</td>
<td>21.5%</td>
<td>98.0%</td>
</tr>
<tr>
<td>Under 18 conceptions per 1,000 females aged 15-17 years; 2013</td>
<td>Low birth weight of term babies; 2014</td>
<td>Overcrowding from 2005/06-2007/08</td>
<td>MMR for 1 dose at 2 years (2014/15)</td>
</tr>
<tr>
<td>24.3</td>
<td>2.9%</td>
<td>2.7%</td>
<td>92.3%</td>
</tr>
<tr>
<td>28.9</td>
<td>3.4%</td>
<td>2.7%</td>
<td>93.5%</td>
</tr>
</tbody>
</table>

- Significantly worse than England
- Significantly better than England
- Significance not calculated

Sources:
- www.fingertips.phe.org.uk and gettingready.org
- Department for communities and Local Government (2012) *Live tables on household characteristics*
- Department of Education (2014) *Provision for children under five years of age*
- Department of Education (2015) *School children and their characteristics*
Indicators of school readiness in the West Midlands

Percentage of children who received a 12 month Health visitor review by the time they turned 12 months (Q2 2015/16)

Health visitors skilled at assessing child development are ideally placed to proactively identify problems and support families and carers in promoting school readiness of all children.

Eleven Local Authorities in the West Midlands perform better than the England average for Health Visitor reviews at 12 months (range: 44%-98%)

Note: Where there is no data the LA did not make a submission to the Interim Reporting Collection period


https://www.nice.org.uk/advice/lgb22/resources/health-visiting-60521203534021
Indicators of school readiness in the West Midlands

Percentage of children who received a 12 month Health visitor review by the time they turned 15 months (Q2 2015/16)

By 15 months the West Midlands Local Authority range has increased to between 58% and 99%)

Compared to England

Compared to West Midlands

Note: Where there is no data the LA did not make a submission to the Interim Reporting Collection period

https://www.nice.org.uk/advice/lgb22/resources/health-visiting-60521203534021
Indicators of school readiness in the West Midlands

Percentage of children who received a 2-2 1/2 month Health visitor review (Q2 2015/16)

Ten Local Authorities perform better than the England average for health visitor reviews at 2-2.5 years (range: 57%-93%)

- England
- West Midlands
- Birmingham
- Coventry
- Dudley
- Herefordshire
- Sandwell
- Shropshire
- Solihull
- Staffordshire
- Stoke on Trent
- Telford and Wrekin
- Walsall
- Wolverhampton
- Warwickshire
- Worcestershire

Note: Where there is no data the LA did not make a submission to the Interim Reporting Collection period

Compared to England
Compared to West Midlands

In 2014/15 25,270 five year olds living in the West Midlands did not achieve a good level of development aged five years.

There is wide variation in the proportion of children who are school ready across the West Midlands (57.7%-70.0%)

Staffordshire has the highest proportion of children achieving a GLD (70.0%) whereas Sandwell has the lowest (57.7%).

Source: www.fingertips.phe.org.uk
In 2014/15 6,180 five year olds receiving free school meals (FSM) living in the West Midlands did not achieve a good level of development.

There is wide variation in the proportion of children receiving FSM who are school ready across the West Midlands (40.3%-54.3%).

Staffordshire has the highest proportion of children achieving GLD (54.3%) whereas Herefordshire has the lowest (40.3%).

Source: www.fingertips.phe.org.uk
Trends in school readiness in the West Midlands

Percentage point difference in school readiness between 2013/14 and 2014/15

School readiness significantly increased in all West Midlands UTLAs between 2013/14 and 2014/15.

The biggest increases were seen in Telford & Wrekin (8.4 percentage points), Worcester (8.3 percentage points) and Stoke on Trent (8.1 percentage points).

Source: www.fingertips.phe.org.uk
Trends in school readiness in the West Midlands

Percentage point difference in school readiness in children receiving free school meals between 2013/14 and 2014/15

School readiness for children receiving free school meals improved in 13/14 UTLAs between 2013/14 and 2014/15

The biggest increases were seen in Stoke on Trent (12.5 percentage points), Warwickshire (10.9 percentage points) and Solihull (9.7 percentage points)

School readiness decreased by 1.9 percentage points in Shropshire

Source: http://www.phoutcomes.info/
What works to improve school readiness?

- Good maternal mental health
- Learning activities, including speaking to your baby and reading to your child
- Enhancing physical activity
- Parenting support programmes
- High-quality early education

Department of Education, Department of Health (2011) *Families in the foundation years evidence pack*
One of the strongest predictors of wellbeing in early years is the mental health and wellbeing of the mother or caregiver.

1 in 10 women
Will suffer from a perinatal mental illness, that’s about 7000 new mothers in the West Midlands

5X
Children of mothers with mental ill-health are five times more likely to have a mental health problem themselves.

Impact of maternal depression on school readiness

- Behaviour problems
- Emotional problems
- Learning development delay
- Impaired parent child attachment
- Conduct disorders
- Learning difficulties

Actions to reduce maternal depression include

- Development of a shared vision and plan
- Effective screening and referral to services
- Family strengthening and support
- Increased public awareness

Greater London Authority (2014) *London mental health: The invisible costs of mental ill health*
Department of Education, Department of Health (2011) *Families in the foundation early years evidence pack*
Children’s Defense Fund Minnesota (2011) *Maternal depression and early childhood*
Learning activities and school readiness

A child’s communication environment is a more dominant predictor of early language than their social background.

| High income | 1116 words |
| Low income | 525 words |

By the age of 3 children from low income families have:

- Heard on average 30 million fewer words than children in high income families
- Half the vocabulary of children in high income families

Language proficiency is a **key predictor** of school success.

| 61% | of low income children have no books at home |
| 25% | Children leave primary school without reading well |
| 40% | Poorer children leave primary school without reading well |

**This rises to**

£23 billion

If all children were reading well by age 11, GDP in England in 2020 could be an extra £23 billion.

Actions to improve a child’s communication include:

1. **Research**
   - Social marketing to identify current practices and potential cultural barriers

2. **Develop**
   - Development of a strategic plan, including development and dissemination of resources

3. **Implement**
   - Dissemination of information to reach the community using existing structures

4. **Evaluate**
   - This should include short-term process measures and agreed long-term outcome measures
Enhancing physical activity and school readiness

Physical activity for young children is an important component of early brain development and learning.

Movement skills such as eye skills and manipulative skills help children access curricular activities with enjoyment and success. Communication skills depend on well developed physical skills.

Benefits of physical activity include:

- Helps develop coordination and movement skills
- Promotes healthy weight in conjunction with a healthy diet
- Strengthens developing muscles and bones
- Helps children develop social skills

Actions to promote physical activity in early years include:

- Plan and develop
  Develop initiatives which target adults who interact with children in the early years

- Work with parents and carers
  Provide information on the importance of physical activity and what counts as physical activity

- Work with early years settings
  Integrate physical activity into the daily routine when planning activities

1 in 10 children aged 2-4 meet CMO guidelines of being physically active for at least 180 minutes (3 hours), spread throughout the day.

Department of Health (2011) Start Active, Stay Active A report on physical activity for health from the four home countries ‘Chief Medical Officers
Cabinet Office (2014) Physical activity Olympic and Paralympic legacy for the Nation
British Heart Foundation National Centre (BHFNC) for Physical Activity and Health, Loughborough University (2015) Early years: Practical strategies for promoting physical activity
**Parenting support programmes and school readiness**

Parenting has a bigger influence on a child’s early years than education, wealth or class.

Effective, warm, authoritative parenting gives children confidence, stimulates brain development and the capacity to learn.

4 in 10 children miss out on ‘good’ parenting.

Supporting parents with parenting programmes has a positive impact on both parents’ and children's wellbeing and mental health and is an important part of prevention and early intervention.

### Impact of parenting support programmes on school readiness

**Benefits** of the **Family Nurse Partnership** include better:

- Language development
- Vocabulary and mental processing
- Emotional development
- Attention and behaviour

**Benefits** of early family training/parenting support include **improved**:

- Numeracy skills
- Vocabulary
- Letter identification
- Emergent writing skills
- Parent-child interaction

### Actions to improve parenting support programmes include

- **Understand** parents’ needs and how to **engage** them
- **Intervene early** to maximise impact and reduce longer-term costs
- **Increase the accessibility** of programmes
- **Ensure better integration and coordination** of parenting support services
- **Improve** the quality and build the **evidence base** for support services

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Social Mobility and Child Poverty Commission (2014) *State of the Nation 2014: Social mobility and child poverty in Great Britain*

Department of Education, Department of Health (2011) *Families in the foundation years evidence pack*


Health Equity Evidence Review 1 (2014) *Good quality parenting programmes and the home of school transition*
## High-quality early education and school readiness

By the age of five the brain forms as many as **700** neural connections per second.

High-quality early years education **significantly improves** child health and educational outcomes, particularly for disadvantaged children.

### Impact of high-quality early education

- **Improved school readiness**
- **Improved future academic attainment**
- **Improved future productivity**
- **Higher levels of employment**
- **Less involvement in crime**

### Actions to improve high-quality early education include

#### Systems development
- Continued and increasing investment
- Integrated services
- Workforce training

#### Structural development
- Favourable staff to child ratios
- Encouragement of parents to support and engage more actively
- Focus on cognitive and non-cognitive aspects of learning

#### Process development
- Adoption of more responsive and nurturing staff: child relationships
- Work towards an equal balance of child and adult initiated activity

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2.5 x

The average economic benefit of early education programmes for low income 3 and 4 year-olds is nearly 2.5 times the investment.

20-50%

If all low income children received high-quality early education the gap in achievement could be closed by as much as 20-50%.

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Department of Education (2007) *Effective pre-school and primary education 3-11 project (EPPE 3-11): Influences on children’s development and progress in Key Stage 2: Social/behavioural outcomes in Year 5.*

Useful resources

- www.beststart.org
- http://www.eif.org.uk
- http://www.ioe.ac.uk/research/153.html
- www.literacytrust.org.uk
- www.talktoyourbaby.org.uk
- www.wordsforlife.co.uk
- http://fingertips.phe.org.uk
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- West Midlands Public Health England Centre

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• Girl by Rafael Farias Leão from the Noun Project
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