The first year at school in the Western Cape: Growth, Development and Progress

Key findings for discussion
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Background

• Children in the Western Cape start formal school (Grade 1) around age 6.5 years
• Non-compulsory pre-Grade 1 classes recently introduced (Reception, Grade R)
  • Two-thirds of the sample had attended Grade R (67%)
• The three main language groups in the overall population are:
  • Afrikaans, spoken by half (49.7%) the population,
  • IsiXhosa, spoken by a quarter (24.7%)
  • English, spoken by a fifth (20.7%)
• Sampled children were from a wide range of socio-economic backgrounds:
  • One in 20 learners came from households which had no tap water or electricity
  • One in 20 learners came from households with all basic amenities plus internet connection and TV
• A higher-than-average proportion of children showed ADHD type behaviours
Objectives of the study

• Measure children’s abilities on starting school, and their progress at the end of their first year, in:
  • Literacy
  • Mathematics
  • Personal and social development

• Measure how children’s abilities and progress vary by:
  • Socio-economic status, age, gender, home language
  • Previous educational experience (attendance in Grade R)
  • School type and language of instruction
  • Behaviour (ADHD symptoms such as inattention, hyperactivity and impulsivity)

• International comparison with England and Scotland
Key findings: starting points and progress

• Largest influences on children’s cognitive **starting points** on entry to Grade 1:
  • School area socio-economic status (SES)
  • Behaviour (inattention, hyperactivity and impulsivity)
  • Home SES: access to amenities and learning resources at home
  • Attending Grade R (Reception)
  • Age

• Largest influences on **progress** by end of Grade 1:
  • School effect
  • Behaviour (inattention, hyperactivity and impulsivity)
  • For reading: access to basic amenities and learning resources at home
Key findings: SES and behaviour

• School and home socio-economic status (SES)
  • Children attending schools in lower-SES areas:
    • Started Grade 1 with lower scores in reading and maths
    • Made no less progress than children in other schools by the end of the year
  • However, children from lower-SES homes made lower progress in reading than other children

• Children with higher levels of inattention/hyperactivity/impulsivity:
  • Started Grade 1 with lower scores in reading and maths
  • Made lower than average levels of progress and so were further behind relative to other children by the end of the year.
Key findings: Grade R and gender

• Children who did not attend Grade R:
  • Started Grade 1 with lower scores in reading and maths
  • Made the expected level of progress by the end of the year, but did not “catch up” from their lower starting point

• Girls:
  • In maths, girls had slightly lower scores at the start of Grade 1, and made slightly less progress by the end of the year
  • Girls made slightly more progress in reading than boys.
Influences on reading scores at the start of Grade 1: Western Cape

The graph shows the effect size of various influences on reading scores at the start of Grade 1 in Western Cape. The x-axis represents different factors such as School SES, SES, Grade R, Age, Girl, Old for the year, District 2, 2nd language, isiXhosa medium, District 3, English medium, and Behaviour. The y-axis represents the effect size, ranging from -1 to 1.

Key observations:
- School SES has a significant effect size of 0.8.
- SES, Grade R, and Age have non-significant effect sizes.
- Old for the year, District 2, 2nd language, and Behaviour have non-significant effect sizes.
- District 3 and English medium have non-significant effect sizes.

The graph indicates that School SES has the most significant influence on reading scores at the start of Grade 1.
Influences on maths scores at the start of Grade 1: Western Cape
Influences on progress in reading by end of Grade 1

Effect Size

-0.4
-0.2
0
0.2
0.4
0.6
0.8
1
1.2
1.4

Reading start
School
Maths start
SES
2nd language
IsiXhosa medium
School SES
Girl
English medium
Old for the year
Grade R
Grade R
District 2
Age
District 3
Behaviour

Non-significant
Significant
Influences on progress in maths by end of Grade 1
Questions and implications: Grade R

• What were the characteristics of the one-third of children who did not attend Reception (Grade R)?
• What could encourage families to enrol their children in Reception in future?
• What would increase Grade R provision?
• What would help children who did not attend Grade R to catch up?
• What is the availability of Early Childhood Education and Care (ECEC) for children below Grade R?
• Evidence on importance of ECEC: OECD Starting Strong
  http://www.oecd.org/edu/school/ecec-thematic-reviews.htm
Questions and implications: Absence

• Absenteeism is “an established but unofficial practice”: to what extent is it recorded?
  • Add pupil attendance records to the iPIPS data and measure relationship between school attendance and pupil progress

• Implement strategies to encourage school attendance
  • Whole-school approaches:
    • effective monitoring
    • clear attendance policies and procedures
    • recognise and reward good attendance
  • Individual approaches to lower-attending pupils
  • Parental and community approaches

• UK evidence showing low attendance affects attainment:
Questions and implications: Inattentive, hyperactive and impulsive behaviour

• Report more details about ADHD symptoms:
  • What are the average scores?
  • How do they compare with other countries?
  • Was there any change over the year?

• Draw on existing evidence about supporting children with Special Educational Needs and Disability (SEND) in school, e.g.:
  • Training staff on effective practice
  • Identifying children’s needs and monitoring their progress

• See SEN support: A rapid evidence assessment (2017)
Questions and implications: school effects

• In which schools do children make the most progress and what are their characteristics?
  • Did this vary by SES or for children with ADHD symptoms?

• Share best practice

• Learn from existing evidence on quality and effectiveness:
  • Process quality e.g. pedagogy and classroom management
  • Structural quality e.g. staff qualifications, staff-to-child ratios, infrastructure and resources
Questions and implications: socio-economic status

• Closing the skills gap on entry to school between lower- and higher-SES children
• Supporting schools with lower-SES intake to help their pupils catch up
• Can access to home learning resources be improved?
International comparison

• The average age of children starting school in the Western Cape was 6.8 years, compared with 4.5 years in England and 5.0 years in Scotland

• Children in the Western Cape had either similar, or higher, starting points than England and Scotland
  • Children attending Afrikaans or English-medium schools were more likely to be reading simple words and able to carry out arithmetic with formal notation than children attending isiXhosa-medium schools or children starting school in England or Scotland.

• Children in England and Scotland made greater progress by the end of their first year of school
  • Higher average end-of-year scores for reading and mathematics than children in the Western Cape
  • Teachers reported larger gains in children’s personal and social development
Reading progress in Western Cape languages groups, Scotland and England
Mathematics progress in Western Cape languages groups, Scotland and England
Personal and social development: Western Cape

- Very little change from start to end of year
  - “Upset” and “Communication” showed small significant difference
  - Other differences non-significant
Personal and social development: England (2011-12)

- Children’s starting points were lower in England than Western Cape
- Teachers reported significant progress on all measures by end of first year at school
- Due to developmental stage of younger children starting school?
Early Years Foundation Stage Profile results

- EYFSP is based on teachers’ assessment of each child’s development at the end of the Reception year
  - The gap between children eligible for Free School Meals and others achieving a good level of development was 17.3 percentage points in 2016, down from 19.0 in 2013.
  - A higher percentage of girls than boys reach the expected level in all areas on learning, including maths.
  - The gender gap has narrowed to 13.7 percentage points in 2017, from 16.3 in 2014.

Percentage of children achieving a good level of development at the end of Reception

Source: Early years foundation stage profile results in England, 2017. SFR 60/2017
Gender gap (percentage points): girls minus boys achieving a good level of development

Source: Early years foundation stage profile results in England, 2017. SFR 60/2017
Early learning goals: percentage achieving at least the expected level by gender

Source: Early years foundation stage profile results in England, 2017. SFR 60/2017
Current context in England

• Primary assessment review
  • New baseline assessment of children’s starting points on entry to school due 2020
  • Review of Early Learning Goals measured by Early Years Foundation Stage Profile

• Social mobility
  • https://www.gov.uk/government/policies/social-mobility

• Existing and new studies on early learning
  • Study of Early Education and Development (SEED)
  • Effective Pre-school, Primary and Secondary Education (EPPSE)
    https://www.gov.uk/government/collections/eppse-3-to-14-years
  • OECD’s International Early Learning and Child Well-being Study (IELS)
Further information on iPIPS assessment

• Long-established international study that measures progress on entry to school and at the end of first year in:
  • Literacy:
    • phonological awareness,
    • vocabulary,
    • ability to read written text (letters, words sentences),
    • writing
  • Mathematics:
    • counting
    • arithmetic

• Direct measures (child assessment) of literacy and numeracy
• Indirect measures (teacher-assessed) of personal and social development (PSD) and ADHD indicators
• Data on background indicators (socio-economic status, demographic characteristics)
• Optional assessment of working memory (not used in this study)
Thank you