

Understanding Vulnerability in Mathematics



Survey Results

Purpose

This survey was shared with all schools engaged with EMS Maths Hub in 2025–26 to understand how schools describe which groups of pupils experience the greatest barriers to success in mathematics. The findings are intended to inform the selection of case-study schools during the current year and to shape the focus of future Maths Hub activity.

Participation

142 Responses (representing **45.9%** of engaged schools)

- **Primary:** 117 responses (57.7% of engaged primaries)
- **Secondary:** 25 responses (28% of engaged secondaries)

By Local Authority Total, (primary, secondary):

- Leicester: 32 (27, 5)
- Leicestershire: 82 (67, 15)
- North Northamptonshire: 25 (20, 5)
- Rutland: 3 (3, 0)

The data therefore reflects the views of engaged schools, rather than all schools across the region. Lower response rates in secondary and in some local authorities mean findings should be interpreted with appropriate caution.

How the data was analysed

Analysis focused on identifying **how vulnerability in mathematics is described**, rather than establishing causal relationships. Primary and secondary responses were analysed separately, with further consideration of local authority patterns where sample sizes allowed.

Ranked responses were weighted to identify the most frequently prioritised factors. The number of first-choice selections and total mentions were also analysed. Open-text responses were reviewed for recurring themes and key language.

Key Findings: Which groups are most frequently identified?

Across all measures, two student groups consistently emerged as most closely associated with vulnerability in mathematics:

- **Pupils with Special Educational Needs and Disabilities (SEND)**
SEND was the most frequently identified factor overall. It was particularly prominent in primary responses.
- **Pupils eligible for Free School Meals (FSM)**
FSM was identified as the second most significant factor at primary, and was **first within secondary schools**, with SEND a very close second.

Other factors (e.g. girls, EAL, and ethnicity) appeared less frequently and tended to vary by phase or local authority. This suggests they are understood by schools as context-specific influences.

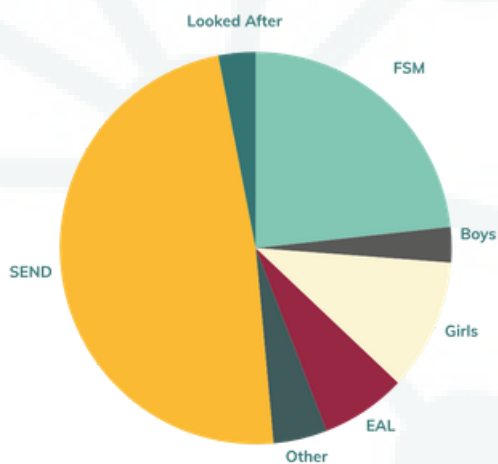
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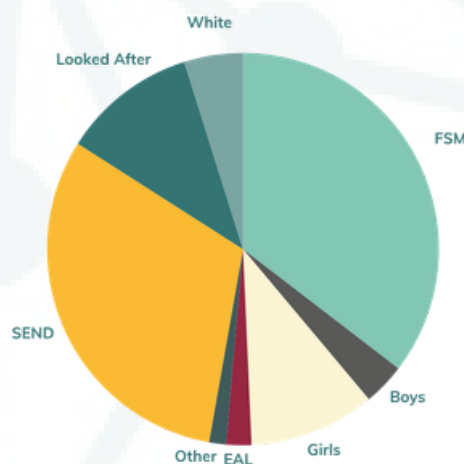
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Key Findings: Which groups are most frequently identified? (cont.)

Primary Weighted Total



Secondary Weighted Total



Intersectionality: How do factors overlap?

Written responses were asked to consider where groups overlap. SEND & FSM were mentioned together 23 times (16.9% of all responses). The next most common pairings appeared far less frequently (five mentions each).

Additional factors — including attendance, home circumstances and gender — were often mentioned alongside SEND and FSM.

“Disadvantaged children who also have SEND tend to form the groups that struggle most with making progress.”

This suggests that schools commonly report vulnerability in mathematics where learning needs and socioeconomic context intersect.

What this means for EMS Maths Hub work

In response, the Maths Hub’s case-study work this year will focus on the following enquiry:

“How is mathematics provision organised and experienced in settings for pupils whose learning needs and socioeconomic context intersect?”

Through this work, we aim to:

- Deepen understanding of how vulnerability in mathematics is experienced by pupils
- Explore how elements of provision support participation and engagement

Why this matters

Rather than attempting to generalise across all schools, this survey provides a direction of travel for further exploration. It helps the Maths Hub prioritise work that aligns with how schools themselves conceptualise vulnerability in mathematics and refine practice that enables inclusion.