AMiE's Response to the Government Consultation on SEND Reform: A Maths Education Perspective

We are a group of SEND teachers, researchers and consultants who have come together under the umbrella of Equals Maths – AMiE's SEND publication: Alan Edmiston, Janet Goring, Pete Jarrett, Louise Langford, Madeline Lake, Gemma Chapple and Alison Rylstone

The first part of our response to the white paper is summarised using the following three headings: areas we are supportive of, concerns we have and suggestions and questions we think need to be considered.

Our overall response looking at the individual questions can be found on page 3.

Areas we are supportive of

- Better training for teachers which is linked to identifying barriers and evidence-based adaptations. Collaboration with other local mainstream/specialist settings is welcome as it will develop inclusive mainstream alongside high quality specialist provision.
- An increased emphasis on early identification and support to promote prevention over intervention, whilst also recognising when there are specific difficulties.
- Inclusion by design and intention to provide a 'universal design for learning' approach that is designed to meet all 5 areas of development.
- Consideration of the 'whole child' and the wider influences and responsibilities of all children's services alongside a broader curriculum that secures key skills and knowledge, as well as stretches and challenges every child.
- It is positive that a graduated response is being promoted to identify and support children early.
- It is great to see the focus on oracy for learning is highlighted and this especially important for understanding in mathematics.

Concerns we have

- Who will the experts at hand be and who will create the specialist provision packages? It is brilliant that Maths Hubs will be involved and many of us already work with them but where is the 'specialist' expertise for mathematical learning difficulties?
- We already have much evidence on what impacts learning in maths and evidence-based pedagogy for intervention, as well as whole class teaching, how will this be included in the proposed changes and support?

- It would be helpful to make ‘quality first teaching’ or ‘inclusion by design’ more prominent as the first step for schools to reflect on and develop. This is an approach specifically developed within many schools who are engaging with the maths Hubs.
- It is great that executive function and SLCN are recognised but where do other cognitive processing factors such as numerical processing fit in the new five arecas of development? As it is not explicit, will it be ignored or missed? Is there a danger that some CYP will slip through the net?
- Along with many others, we have concerns about the limited availability of accessible assessments that provide information for intervention. There is a lack of training for teachers to understand and use assessments. There is also a lack of evidence-based maths interventions that work.
- To support quality first teaching investment is needed in training how to use concrete and visual resources to promote mathematical understanding with all learners and to develop teachers’ metacognitive approaches to addressing gaps and need.
- In maths topics change frequently and the pace of delivery can be too fast for SEND learners.The revised curriculum needs to prioritise embedded opportunties for over learning skill. Linear exams place huge demands on memory and processing and a huge reliance on rote learning e.g. GCSE maths.This hugely disadvantages many learners e.g. those with SpLDs, ADHD, EF weaknesses and children with anxiety that causes barriers to them demonstrating their maths ability. Functional maths courses and test papers also pose language barriers for many SEND children who often have no option but to take these exams.

Suggestions and questions arising

- Within ITT, further consideration is needed as to how inclusion can be strengthened within an already full academic timetable for trainees and ‘inclusion by design’ must be effectively modelled in their placement schools.
- Teachers need effective CPD in the psychology behind learning. For example how language, working memory and other executive functions impact on maths development. This is currently very limited. Will existing teachers have access to effective CPD with opportunities to embed in their own specific settings or will there just be ‘tick lists’ and ‘toolkits’ to identify barriers, intervene and assess?
- Schools need access to evidence-based interventions that are practical and affordable to implement.
- If screeners are used, what is their evidence base and what adaptations/action will this lead to? Where is the qualitative assessment that leads to more effective intervention?
- Experts at hand doesn't mention subject-specific specialist teachers. Could specialist teachers and assessors work alongside speech therapists, Ed Psych’s etc to improve targeted intervention, training and sharing of expertise?
- Assessment and curriculum structures should be reviewed to reduce unnecessary demands on memory, processing, and language, to allow for a broader range of assessment methods beyond linear examinations and move away from reliance on rote learning.
- Schools will need sufficient time, staffing and funding to implement these measures effectively. Reduced teaching assistant capacity is a significant concern, as TAs can be

more skilled and trained than teachers in SEN yet poorly paid. TAs should have access to appropriate training, recognition and progression opportunities, including Level 5 qualifications where relevant.

Overall response

We welcome the direction of travel in *SEND reform: putting children and young people first*, particularly its stronger emphasis on earlier support, needs-led decision-making, and a more coherent system across curriculum, accountability and qualification reform. Maths is explicitly recognised in the consultation, and this matters: pupils with SEND continue to experience substantial and persistent gaps in attainment and progress, including in mathematics, while the wider evidence base on effective maths-specific SEND support remains comparatively underdeveloped. A successful reform programme therefore needs to combine inclusive system design with investment in maths-specific expertise, assessment, professional development and evidence-building.

- **Welcomed features:** stronger alignment with related reforms, recognition of underachievement in maths for pupils with SEND, an emphasis on support based on need rather than diagnosis, and the intention to strengthen early identification and intervention.
- **Areas requiring careful implementation:** the proposed four layers of support, Individual Support Plans (ISPs), and the ambition to identify need early should all improve consistency, but only if they are accompanied by clear expectations, high-quality tools, and workforce capacity.
- **Key concerns:** current attainment measures for pupils working below age-related expectations do not always show how far below expectations pupils are, making it difficult to identify appropriate next steps in mathematics. Guidance is needed to ensure progress from starting points is measured rigorously and that no child is overlooked.
- **Clarity still needed:** the revised areas of development, the National Inclusion Standards, the SEND training offer, the research programme, specialist provision programmes, and the proposed digital library of resources should all explicitly address mathematics. If the government is serious about reducing underachievement in maths, then access to suitably qualified maths specialists should be treated as an essential part of the reform architecture.
- **Executive function:** we welcome the inclusion of executive function, but there is a risk that removing a broader cognition and learning category may leave some pupils' needs less visible. The framework should explain how children with persistent mathematical difficulties that do not fit neatly within the revised categories will be identified and supported.

Responses to consultation questions

1. **Question 2: How can we make sure that high-quality evidence and best practice inform decisions about SEND?**

There is currently limited high-quality research focused specifically on SEND and mathematics. The government should therefore draw not only on general SEND evidence, but also on research in mathematical cognition, maths anxiety, developmental trajectories, and intervention design. We recommend a targeted evidence-building programme for maths within SEND, including the evaluation of assessment approaches, adaptive teaching, intervention models, and specialist support. The National Inclusion Standards should distinguish clearly between evidence-informed practice, emerging practice, and promising practice still requiring robust evaluation.

2. **Question 3: How can we ensure that children are best supported by the Universal offer?**
   Universal support should include access to high-quality maths teaching that is genuinely inclusive, supported by centralised training informed by research and by dedicated time in schools to implement it well. Staff need practical guidance on early mathematical development, the use of representations and language, identifying barriers to learning, and adapting teaching without narrowing entitlement. Local follow-up support from appropriately trained leaders will be essential if national training is to lead to sustained changes in classroom practice.
3. **Question 4: How can we ensure that children in the Targeted layer are best supported?**
   Children in the Targeted layer need assessment systems that identify risk early and provide enough diagnostic detail to shape support. In mathematics, this means moving beyond broad statements that pupils are below age-related expectations and towards information that helps teachers understand specific barriers and starting points. Training should be provided for senior leaders, teachers and intervention staff so that targeted support is evidence-informed, carefully monitored, and connected to classroom learning. International models should also be reviewed to identify how targeted maths support is organised effectively elsewhere.
4. **Question 5: How can we ensure that children in the Targeted Plus layer are best supported?**
   The same principles apply, but with greater intensity, coordination and specialist input. There is a strong case for revisiting and modernising programmes such as Numbers Count and Maths Recovery in light of current evidence and today's school context. Targeted Plus support should combine high-quality assessment, structured intervention, and close links between specialist advice and everyday classroom practice.
5. **Question 6: How can we ensure that children in the Specialist layer are best supported?**
   Children in the Specialist layer should have access to specialist maths teaching from staff with rigorous but manageable training. If the reforms are to improve outcomes in mathematics, the system will need a clear workforce strategy for developing maths specialists who understand SEND, as well as SEND specialists with strong mathematical knowledge. Specialist provision packages and wider specialist support

arrangements should make explicit how mathematical development will be assessed, taught and reviewed.

6. **Question 7: How can settings best support mental health and wellbeing?**
   In relation to mathematics, settings can support wellbeing by ensuring secure early foundations, identifying children who begin school already behind in early mathematical development, and putting support in place quickly. The reforms should also recognise the risk of maths anxiety. Repeated failure, inaccessible assessment, and poorly matched intervention can damage confidence and engagement; inclusive teaching and early success are therefore central to both attainment and wellbeing.
7. **Question 8: Do you agree that the refreshed areas of development will support educators to understand and address barriers to learning and participation?**
   We welcome the inclusion of executive function, but we are not yet convinced that the refreshed categories fully capture the range of pupils who experience persistent difficulties in mathematics. The removal of a broader cognition and learning category risks leaving uncertainty about where some pupils fit, especially where difficulties are real and significant but do not align neatly with the revised descriptors. Further clarity is needed on identification pathways, overlap between categories, and the implications for support.
8. **Question 11: What should the top three priority areas be for building and sharing evidence within the National Inclusion Standards?**
   First, a strong commitment to evidence-based practice, including transparent standards for what counts as secure evidence. Second, genuine expertise and lived professional experience, including the contribution of maths specialists, SEND practitioners, researchers and families. Third, collaboration across schools, local areas, specialist services and the research community so that effective approaches are shared, tested and improved over time.
9. **Question 12: What are the most important issues for national training to cover?**
   National training should explicitly include mathematics within SEND. Priorities should include early mathematical development; assessment for identifying specific barriers; adaptive teaching in maths; intervention design and implementation; the relationship between language, executive function and mathematical learning; dyscalculia and persistent mathematical difficulties; and approaches to reducing maths anxiety. Training should be staged over time and linked closely to classroom practice, case studies and implementation support.
10. **Question 20: What arrangements are needed to deliver the Experts at Hand offer effectively?**
    For Experts at Hand to work, mainstream settings need timely access to credible specialists, including specialists with expertise in mathematics where underachievement is identified. Local partnerships across education, health and social care should establish clear referral routes, agreed response times, and shared accountability for follow-up. The model will only succeed if specialist advice is practical, rapidly available, and integrated into day-to-day school support rather than operating as a remote add-on.