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# AI-TOP - An AI Tool to Predict Engagement and 'Meltdown' Events in Students with Autism

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**Duration: 36 months**



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## Main aims:

- Transfer and further refine an innovative AI-driven tool to help teachers, support staff, parents and carers to better understand the behavioural and cognitive processes related to the emotional state of students with Autistic Spectrum Condition (ASC) in classrooms.
- Predict 'meltdown' moments, allowing early intervention to pre-empt challenging behaviours.

## Objectives

Teachers, support staff, parents and carers can use this information (presented via a well-designed dashboard) to:

- Provide personalised learning pathways and support according to the specific needs of each child with autism.
- Improve the understanding of autism both within school, and in the wider community.
- Increase the likelihood that students with autism will make the academic and social progress that they should.
- Decrease incidents of challenging behaviour, leading to improved mental wellbeing of individual students, and decreasing instances of absenteeism and bullying.
- Help prevent secondary consequences of their difficulties such as anxiety disorders and depression.

## Following products will be developed:

- **IO1:** Online searchable Database
- **IO2:** Transferred Mobile Engagement and Meltdown Measurement App
- **IO3:** Optimisation of autism meltdown framework
- **IO4:** Handbook for Teachers and Parents
- **IO5:** Pedagogical Framework for children with autism