

Meaningful Learning Experiences

Strategic Commitment	✓	Part of a pilot supported by a large academy trust
Curriculum Provision	✓	'Algebra Graphing' in year 9/10 mathematics
Employer Partnerships	✓	Part of an initiative to promote Allied Health Professions
Reflective Young People	✓	Developing 'Creativity' skills
Informed Career Choices	✓	Broadening understanding about careers in the NHS

Students use algebra graphing to encourage children's compliance with eye treatment

The teacher brief for this year 9/10 maths project at Unity City Academy in Middlesbrough stated, *'Student feedback on this topic generally tends to include comments such as 'what is the point in this' and 'I will never use this again in my life'. Students can struggle to visualise the concept of algebraic graphing and accept the graphs made by the equations as opposed to understanding them.'*

As part of an initiative involving Allied Health Professionals in the NHS, students were challenged to apply learning about the topic to a real situation faced by Orthoptic professionals – encouraging children with Amblyopia (lazy eye) to start treatment (eye patches or frequent eye drops) as young as possible. Students were presented with real data extracted from medical research papers and asked to present this in a way that would be understood and persuasive to young children.

The outline proposal was met with enthusiasm by the lead teacher: *'The action plan looks fabulous! Exciting! Let me know if you need any more information about the above!'* With students largely studying at home during the Covid-19 lockdown, learning resources required careful consideration and included a short Powerpoint slideset, an *'Amblyopia Challenge Briefing Paper'* and a video greeting from a practicing orthoptics specialist. A partnership between teacher and orthoptic specialist refined the task, concluding that, *'... asking the children to create the linear table would work best and fits best with the challenge.'*

Students' work was sent across, resulting in specific feedback, a promise to share the project on social media and, *'Thank you for including Orthoptics in this project, it has been a great experience.'*

Benefits for the Students

- *'... there has been a lot of thought, colour and effort that has gone into the submissions - there is enough to put a display up ...'*
- The achievement I am most proud of as a result of this experience is:
- *'I can now understand the data but also now I know what amblyopia is and how it affects different people.'*
- *'Learning more about amblyopia.'*
- *'Understanding that even in dull environments you can be creative.'*

