

The HCCS community works hard, enjoys achieving and is proud of our curriculum and wider school life. Our curriculum aims to inspire drive, passion and commitment whilst promoting high standards; diversity and inclusion; success and achievement. Enriching, broad and balanced, our curriculum is designed to develop the whole individual and removes any potential barriers to learning to ensure equality of opportunity for all of our community.

Everyone can learn mathematics.

Brain science has shown that the brain grows so that nobody is born with or without a maths brain (Boaler, 2015). This emphasises the importance of recognising that mathematical understanding is a continuum in which students are continually moving throughout their time with us at HCCS.

All students deserve access to a demanding mathematics curriculum

All students can learn mathematics

*Every class is, in essence, mixed-attainment even when in a set or stream format; the range may be narrower but a top and bottom will still remain. When classes are set, issues can arise on the 'borderline', even more so when limits are placed on either attainment or class size. **Mixed attainment classes seek to eradicate these issues and focus more positively on developing understanding and improving attitudes towards/within subjects.***

Principles of Mixed Attainment Grouping:

In mixed attainment grouping, students of differing capabilities are taught at the **same pace** within the **same class**. There are some fundamentals associated with this process:

1. It creates equal and high standards for **all** learners and offers them access to the same resources at a variety of entry points.
2. Rich, academic and collaborative discussion ensures **all** students are given the opportunity to debate, reason and justify their understanding
3. Low-Floor-High-Ceiling tasks increase student motivation and engagement enabling **all** students to access high-order thinking

Benefits of this Approach:

- Collaborative planning and cooperative learning have improved academic achievement as well as motivation, self-esteem, retention and metacognition (Slavin, Hurley & Chamberlain, 2003) *Slavin, R. E., Hurley, E. A., & Chamberlain, A. (2003). Cooperative Learning and Achievement: Theory and Research. Handbook of Psychology. doi:10.1002/0471264385.wei0709*
- Discussion gives *higher* achievers the opportunity to elaborate their thinking while providing *low* achievers the opportunity to ask questions they may not feel comfortable sharing directly with their teacher (William, 2011) *William, D. (2018). Embedded formative assessment. Bloomington, IN: Solution Tree Press.*
- Groups outperform individuals on tasks and individuals who are part of groups, perform better on later individual assessments - *Barron, B. and Darling-Hammond, L. "Powerful Learning: Studies Show Deep Understanding Derives from Collaborative Methods."*
- Mixed-ability provides students with access to more learning opportunities (*Maria and Pavlou, 2008*)
- Students who are struggling, benefit from modelling of their peers whilst higher-achieving students are challenged to articulate their understanding to their peers
- All students benefit from the opportunity to work alongside each other and engage in higher-order thinking tasks
- Mixed attainment groups help students to develop growth mindsets around their learning, as well as higher self-efficacy in both academic and non-academic areas
- Smaller class sizes cater for greater teacher-student interaction and more urgent in-class intervention where required