Maths intent, implementation and impact.

2020/2021 Miss Coultas

Covid-19 adaptation

The disruption children and young people have faced to their education during the pandemic has been extensive and will likely have profound consequences. Attainment and educational progress will have been affected, but so too will their social and emotional development. Whilst there were those students that attended school during the lockdown period, the gap in learning due to the curriculum being on hold. Students will all be completing baseline assessments to guide a new starting point to infill any gaps. A revisit and refresh period will allow students to recap their lost learning before any new learning is implemented. Understandably students will need small pieces of work that stretch and challenge not only their academic knowledge but to strive for the memory of application to return.

Students sit in a seating plan specially formatted for the 1 metre rule, students will sanitise their own work station after use and will only use their own equipment in lessons.

Intent

At Kickstart our intent for mathematics is to teach a balanced and progressive Curriculum using maths to reason, problem solve and develop understanding in each area to aid students in their later lives. Our curriculum allows students to have a better understanding of the world around them relating the relationship between mathematics and everyday life. Individual ownership is encouraged for students to be able to work towards their own goal.

Lessons are student and level focused, keeping up to date with national curriculum maths is kept fun and relevant. Students are exposed to mathematical problem solving through external agencies and activities such as fishing, crossbar coaching and Arthog.

The visual intentions are shown across the school of what we believe each student can achieve with clear progression through relevant qualifications. Mathematics in our school is enhanced by our individual class working walls designed to assist students with becoming less teacher dependable. Students are challenged where appropriate to take ownership of their learning, choosing their own level of task whilst those who are identified as SEND or underachieving are supported completely, revisiting learning where needed.

Implementation

Subject enthusiasm and personal development allow the intentions of our mathematics curriculum to be executed successfully. As subject lead and working closely in the maths department for three years has allowed me to gain a good knowledge of the expectations of the curriculum and also the obstacles that may hinder the expectations being met. All staff lead regular numeracy skill sessions in registration periods that encourage independence in alternate settings. Whole school CPD is important in maths, all staff regularly discus the progress in each subject in order to build cross curriculum learning at support. All students follow the national GCSE mathematics curriculum and are all given opportunities to achieve functional skills Edexcel qualifications ranging from entry level to level 2 in order to create a path for their further education or career.

The maths classroom provides a good standard of resources in order to support learning in each area. Students are familiar with these and are able to access them independently where needed to support their learning. Visual aids are often used in relation to the real world, food, sport and fashion are particular favourites. Visual aids of multiplication grids, lists of formulae and clear displays are present for students to explore their calculations independently.

Consistent resources for planning are used including TES, Twinkl and white rose are used allowing students to be exposed to a variety of different types of learning and problems. Class groups are not set upon ability therefore differentiation is greatly used to allow individual pace but to also stretch and challenge. Formative assessment is incredibly important in mathematics, focusing on analysing comprehension. Extension work, mini plenaries and discussion with students show the retention of information by the students. There are often opportunities for 1-2-1 learning to take place, in order to identify gaps and discuss progression to ensure every child is reaching their full mathematical potential. Students' progress is monitored through subject trackers that boasts of any qualification gained and highlighting any external/internal reason to why improvement may not be being made which allows teaching and intervention staff to liaise effectively.

Pupils work both collaboratively and independently solving problems, which require them to persevere and develop resilience, due to the unpredictable nature and previous experiences, students work is rarely marked wrong to prevent being destroyed. Students are encouraged by praise both verbal and written and guided to where an error has occurred. Students are made to feel safe and supported through encouragement and understanding which allows learning to take place initially.

Impact

The impact of our mathematics curriculum is that the students understand the relevance of what they are learning in relation to the real world. We has created an environment where it is ok to be 'wrong' because the journey to finding an answer is the most important. Students are encouraged to support one another in their own strengths and weaknesses and to understand that although time keeping is important, it is not necessary the fastest answer is the best answer. Our students have a growth mind-set and they make measurable progression against their own personal targets. Students build resilience by having the opportunity to sit regular functional skills exams with intentions to achieve to the best of their ability.

Our maths books are packed proudly with a range of activities showing evidence of fluency, reasoning and problem solving. Feedback through verbal communication and written praise is supportive, encouraging students to not be intimidated by maths. Positive phone calls and certificates are regularly used to encourage students to boast about their individual effort and ability. Our expectations in maths are high, we encourage students to know that all pupils have different strengths, students should be proud of their workbooks. Books are moderated internally to share good practice.

Students have and will leave Kickstart with a greater passion for Mathematics, an understanding of the real world and a range of qualifications.