All Saints RC Secondary School

2019

YSL Pilot Centre Case Study

YOUNGSTEM leader

About

All Saints RC Secondary School is situated in Barmulloch, Glasgow and work with their young people to ensure that individual potential is fulfilled and that through high expectations and a positive learning environment, everyone achieves the success they are entitled to.

The staff team are fully dedicated to ensuring that their school is a place of learning for all young people and for many years have been running a variety of clubs and activities. STEM is a particular area of focus for All Saints RC Secondary School and there are a wide range which provide 'Skills for Learning, Life and Work', as well as enhancing opportunities for young people to develop new skills in fun and interactive ways, while promoting challenge and inquisitiveness with the unfamiliar.

STEM Activities

The Design Technology Department run daily lunch clubs in Maths, Traditional Games Workshop, Robotics and Science Club. These clubs are not led by the teaching staff (though staff do supervise) but by S3 pupils who have an interest in the subject and are excited by the prospect of inspiring and passing their knowledge to others.

In addition, S6 pupils deliver lessons to Primary 7 learners in the All Saints RC Secondary School's associated primary cluster and are currently focusing on Physics, Biology and Engineering.

Robotics Club

The Robotics Club is led by YSL, Jack, who has been involved in the Robotics Club since S1.

> "I just thought it would be better if I could go in as someone who knows how to do it and help younger people get into it."

Jack has been working with Emily and Matthew, two enthusiastic first year pupils. Emily who enjoys programming and building and wants to learn how to make a robot and Matthew who is keen to learn how to code on his own.

Traditional Games Workshop

More to come on this soon!

Teaching Engineering

Lewis and Michael are S6 YSLs who are leading a series of engineering lessons as part of their SCQF Level 6 Award. They are currently in week 2 of a 5 week programme with St. Philomena's Primary School, where they are working with Primary 7 pupils.

> "I'm building a house out of spaghetti and jelly babies and we're doing it because it's a STEM project and I'm having a lot of fun building it." Tyler, P7 YSL Participant

Class teacher, Claire Sharkey, is impressed with the impact the S6 YSLs have made already, finding that the Primary 7 pupils have fully engaged with the secondary students.

"My favourite part about working with the secondary students was last week when we made a balloon chair. We had to make balloons stay together and someone had to sit on them and lift their feet up for 10 seconds and in that 10 seconds they couldn't pop." Ava, P7 YSL Participant

Claire admits that STEM is new for her and that her approaches would normally be more traditional, focusing on the Sciences typically taught: space, forces, electricity, Planet Earth... Now that she's seen how engaged the pupils are with a more practical approach, she is keen to explore the practical activities which can be used to teach the topics she is more familiar with.

As part of the SCQF Level 6 Award, YSLs must reflect on their leadership activities and use these evaluations to improve leadership. This is in order to develop their own skills and maximise the learning for the participants. Immediately after their lesson, both Lewis and Michael were able comment on the success of the lesson and their next steps to effectively teach the Primary 7s about structures.

"They were working with people they don't usually work with and they were sharing ideas. They worked well and communicated a lot with each other. There was no real leader who took control." Lewis, S6 YSL

“They need to understand more about structures and realise that they can’t have the bare minimum. I think they struggled to get the concept to start with but the longer it went on the more they got the concept and the structures were getting better. We’ll give them more time next week because it took them a wee while to grasp.” Michael, S6 YSL

YOUNG STEM leader