

## PTkai: 03: Intro: What is Designing and developing digital outcomes?

Video Name: Cross-Curricular Projects with Y9 & 10

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DDDO actually lends itself quite well into cross-curricular projects. Especially at Years 9 and 10 I think you have the scope to work with other subject areas.

One particular thing I'm doing at the moment is I've worked with the maths teachers. The Year 9s have learnt programming in Scratch. I've also gone into their classroom. They are learning about angles at the moment and so we've done some programming of angles and designs. We've actually worked across so they see the cross-curricular nature of maths and programming. Now we're bringing that together into a DDDO project where the students are working in teams. They are creating a Scratch game. The parameters that they were given was that it had to have two levels. Those levels need to be teaching in a fun and creative way some Year 9 maths concepts, whether it be integers, angles, BEDMAS. It also has to have two mini levels. In those they can have any sort of fun mini levels and those are rewards for passing the main mathematical levels.

We've discussed this with the maths teachers, had ideas about what they can include mathematically. The girls are working in teams. They have to come up with their theme, and look at what makes good game play. They are creating storyboards for the game. They are creating some of the basic algorithms that they will need and decide what variables etc they would need. Then they are going to design, actually program, and test the game. Then we are having a games day where they go and do a round-robin testing of the games and giving feedback. The final thing is to tweak it based on that feedback, share it on Scratch in the Scratch community and also make a poster that is promoting their game.