Incorporating 3D design and printing into primary school classrooms

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3D design and printing provides primary school students with opportunities to use critical thinking skills to collaborate and find design solutions to real life problems. The objective of this snapshot presentation is to provide introductory ideas about how 3D printing can be incorporated into primary school classrooms through project-based learning. It specifically describes a project undertaken by a Year 2 class to design a nature play space. After gathering data involving all classes across the school, students worked in pairs to plan their ideas, then incorporated 3D designing using the Maker’s Empire App and finally printed the elements that would form a play space. Those 3D models were then used as the design plan for our space which was then constructed. Students were involved in the whole design process from start to finish, allowing a sense of ownership and accomplishment, particularly when seeing the final product. High levels of engagement were experienced by all students involved in the project and an increase in peer interaction was evident through the high level of collaboration and peer assessment.