Integrating Computational Thinking into Classroom Practice - A Case Study

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Abstract : Recent educational developments have seen increasing attention attributed to Computational Thinking (CT) and its integration into primary and secondary school curricula. CT is more than simply being able to use technology but encompasses fundamental Computer Science concepts which are deemed to be very important in developing the correct mindset for our future digital citizens. The case study presented in this article explores the journey of a Maltese secondary school teacher in his efforts to plan, develop and integrate CT within the context of a local classroom. The teacher participant was recruited from the Malta EU Code week summer school, a pilot initiative that stemmed from the EU Code week Team's Train the Trainer program. The qualitative methodology involved interviews with the participant teacher as well as an analysis of the artefacts created by the students during the lessons. The results shed light on the numerous challenges and obstacles that the teacher encountered in his integration of CT, as well as portray some brilliant examples of good practices which can substantially inform further research and practice around the integration of CT in classroom practice.