IO7 – MOOC for Teachers

Self-directed Learning Resource 2

Topic:	Digital Content Creation
Title:	Should Your 8-year-old Learn Coding
Time:	It will take you around 45 minutes to read the publication, and to take note of what is important to you.
Type of Resource:	Article by C. Duncan, T. Bell, S. Tanimoto
Content of the Resource	There has been considerable interest in teaching "coding" to primary school aged students, and many creative "Initial Learning Environments" (ILEs) have been released to encourage this. Announcements and commentaries about such developments can polarize opinions, with some calling for widespread teaching of coding, while others see it as too soon to have students learning industry-specific skills. It is not always clear what is meant by teaching coding (which is often used as a synonym for programming), and what the benefits and costs of this are. Here we explore the meaning and potential impact of learning coding/programming for younger students. We collect the arguments for and against learning coding at a young age, and review the initiatives that have been developed to achieve this (including new languages, school curricula, and teaching resources). This leads to a set of criteria around the value of teaching young people to code, to inform curriculum designers, teachers and parents. The age at which coding should be taught can depend on many factors, including the learning tools used, context, teacher training and confidence, culture, specific skills taught, how engaging an ILE is, how much it lets students explore concepts for themselves, and whether opportunities exist to continue learning after an early introduction.