

# «I love the idea of mixing media and computer

Hi Mitch, how are you?



Keeping very busy – but still having fun. How are you?



We are quite busy introducing the new subject "media and computer science" as a compulsory subject into school, which I presented at the last Scratch conference in Bordeaux where we met last time. For the programming and making part of this new subject, several teacher universities recommend Scratch - How do you feel about this?



That's great to hear. We think that Scratch is the best way for students to get started with programming. And we're working hard to continually improve it.



In 2007 Scratch was published primarily for non-formal learning environments such as afternoon club-houses. Today, Scratch is being used more and more in formal settings like schools. Is Scratch compatible with schools? Will the formal school-setting change Scratch or is Scratch going to change schools?



We've been adding new features and resources, like teacher accounts and educator guides, to support the use of Scratch in schools. But we also hope schools will make adjustments as they introduce Scratch. For example, we encourage a project-based, interest-driven approach to coding, where students have time and the opportunity to work on programming projects based on their interests.



We held the opening keynote session at the Scratch conference in Amsterdam in 2015 together. We both addressed the question: Why Scratch? I regularly discuss this question with student teachers and teachers in our sessions, and I guess you answer this question on a daily basis. Nevertheless, it would be lovely if I could quote you as the founder of Scratch: Why should Swiss teachers use Scratch in School? 🤔



As students create and share projects in Scratch, they learn to think creatively, reason systematically, and work collaboratively – essential skills for everyone in today's society.



When we designed the new subject "media and computer science" for Swiss schools, it was absolutely clear that the subject will not be "programming" or "coding". Quite the contrary, we formulated a more holistic approach combining the two cultures of media pedagogy and computer science into one subject. The idea behind this combination is best described in the so-called "Dagstuhl Triangle": It's quite innovative for our formal school system, but still too traditional in your view, I assume?

I love the idea of mixing media and computer science. After all, I work at the MIT Media Lab! And we designed Scratch to provide opportunities for young people to mix different media together – inspired by the way hip-hop disc jockeys mix together music clips when they are "scratching".





Mitchel Resnick ist Professor für Lernforschung und Leiter der Lifelong Kindergarten Group am MIT Media Lab in Boston. Seine Forschungsgruppe entwickelt seit 2007 «Scratch», die am weitesten verbreitete Programmierumgebung für Kinder und Jugendliche.



Beat Döbeli Honegger ist Professor für Informatikdidaktik und Mediendidaktik an der PHSZ.



In your new book "Lifelong Kindergarten" you praise the kindergarten as the most important invention of the last 1000 years. In Switzerland, kindergarten teachers are rather skeptical about digital technology. What would you tell them?



Too often, digital technologies are used to deliver information or entertainment. My Lifelong Kindergarten research group has a different goal: We're trying to develop technologies that empower young people to explore, experiment, and express themselves – just like blocks and fingerpaint in kindergarten.



From these more philosophical questions to the more pragmatic ones: In our "media and computer science" weeks in May 2017 the teachers experienced rather slow answers from the scratch servers. All your user statistics are exploding: Can your servers and your team handle the big success of Scratch?



I'm sorry to hear about the slow service. We've been upgrading the servers and infrastructure, so you shouldn't have problems now.



Many schools in Switzerland are introducing tablets to classrooms at the moment. Scratch is currently not really usable on those devices – an insistent problem we are facing right now. Your team is going to release Scratch 3.0 to finally solve this problem. Is everything going according to plan?



Yes, we're on schedule to launch Scratch 3.0 in August, and it's designed to work well on tablets. You'll even be able to interact with Scratch projects on your phone.



A look into the future. I know the picture of your innovation cycle and I'm convinced that you are already in the next "imagine" cloud while still creating scratch 3.0. Could you tell me what your dreams are for after Scratch 3.0?



Over time, I hope that Scratch will become the standard way for people to access and control all types of programmable media, whether they are designing animations, controlling robots, accessing sensor data, or integrating web services into their projects. So it will become more and more valuable for children to become fluent with Scratch, just as they become fluent with writing.



Thanks for the interview and happy scratching and dreaming!



Scratch on!