# Closing speech Ian Galloway

Sharing Inspiration 2017: Igniting Serious STEM Education Brussels 2017, March 26

Friends and colleagues of the T3 Europe community, it is now time to go home and it is my responsibility to draw the Sharing Inspiration proceedings to an end.

The 2017 Sharing Inspiration Conference was launched under the theme of Igniting Serious STEM Education. Everybody will have developed his or her own version and understanding of this theme. Let me share mine.

### **Education**

The educational systems in our countries might be different and diverse. In some countries people talk about the Baccalaureat, in others about Matura and elsewhere it's the Abitur or A level. It might be vocational schools or general education. But in all cases it's about preparing girls and boys from the ages of 12/13 to maybe 18/19 for their lives ahead.

#### STEM Education

Some ask "why shouldn't it be called STEAM education, because of the arts? Aren't they also important?" For me this is the wrong question. Of course the arts are important but the question implies that one can only flower at the expense of the other. Mathematics could also be considered an art and many of us admire the beauty of mathematical functions. This is not a zero sum game and it's certainly not a game. Education is far too serious to waste energy on such discussions. We have a responsibility to lay the foundations for the next generation. We are at the horizon of further digitalization of all aspects of our lives

therefore to have access to a proper STEM education is more crucial than it has ever been before.

## **Serious STEM Education**

Working with a small group of super-enthusiastic and super-clever students is fun. Maker or Coding clubs in the afternoon or during summer camps are great. Yet these only reach a fraction of all students. Most students are excluded. They will never have a fair chance to learn about the beauty and aesthetical aspects and the power of the STEM subjects. For these students STEM will always remain locked away behind closed doors.

What we want is for every student to be able to make their own educated choices for their lives. This requires that she and he have had the opportunity to discover and appreciate the scientific and mathematical secrets of the real world.

Unfortunately we know what this means. If it's not in the curriculum it will not happen. And if it's not in the exam it will not happen.

So this leads me to the last point.

# **Igniting Serious STEM Education**

Let us all go home and let us all share our excitement with our colleagues, in our schools, in our region, in our state or country. Let us develop a grass-root movement and let us work with the policy makers. Let us help them all to develop the next generation curricula and exams. STEM education must not be a lottery any longer; STEM education has to become a right for every student.

Thank you.