



# WHY WE NEED HANDS ON LEARNING TO CHANGE EDUCATION TODAY

Essentially, one of the most fundamental flaws within the current education system is that we are implementing teaching techniques developed during the industrial revolution to tackle the problems that we are facing in the world today. While all other industries have adapted, evolved, and grown with time, education has remained rather stagnant. However, through extensive scientific research and time multiple new teaching techniques and mechanisms have been developed.

Education disruption is a movement to incorporate many of the advances that have been made in pedagogy to develop students from simply just containers full of knowledge to actual leaders and thinkers that have the capabilities to tackle real world problems. Hands on learning and actively practicing “innovation” will allow children to set right expectations of themselves and actually learn “how to think”.

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## HANDS ON LEARNING WORKS

For instance, there was a study conducted at Stanford University that measured the impact of design thinking upon students. Their results found that students developed a diverse understanding of the problem and created projects that actually addressed these problems in a myriad of ways. One of the biggest findings was that such a methodology of teaching significantly improved metacognition within students and instead of just rote problem solvers they were actually becoming thinkers.

Not only do these disruptive forms of thinking develop parts of students that have never been looked at before, but they are also more effective than the role of current teaching techniques. According to a study conducted at Purdue, when eighth graders were taught about water quality through hands on learning vs. conventional techniques, the students “showed higher comprehension of the concepts, particularly among those students where English was not their first language.”

## RELEVANCE TO IGNITESTEM

At this conference we present many of the cutting edge innovations in education and also help you design a strategy to actually implement these developments into your day-to-day school curriculum. Through many speakers we develop a theoretical foundation for many of the hands-on-learning strategies and instead of just taking their word for it, we provide an opportunity to explore hands on learning through active workshops as well. Participants will be able to decide for themselves on the effectiveness and usefulness of such techniques. Together, we hope to revolutionize education to develop the leaders that we need today.

