The Future of Education: To Focus on AI or MI ?

Posted on

"If I were not a physicist, I would probably be a musician. I often think in music. I live my daydreams in music. I see my life in terms of music." — Albert Einstein

Right now two starkly different visions of "personalized learning" are being put forward by education reformers around the world. One model has the development of Artificial Intelligence at the center, creating A.I. programs to teach children one-to-one via computers.

Schools and teachers that take the M.I. approach are aligned with how children naturally learn, focusing on developing children's creative skills and interacting with one's local community. The goal is to help each child actualize their unique human potential and Multiple Intelligences (a mix of social, emotional, linguistic, mathematical, musical, physical, ecological and visual arts capabilities).

This requires that children sing, dance, paint, communicate, read for pleasure, play freely, collaborate on projects, solve real-world problems, build strong relationships and connect meaningfully with the natural world.

On the other hand (as this BBC video below shows), the A.I. approach being designed by Silicon Valley pioneers provides a way to have students learn primarily from increased screen time with computers. Professional teachers don't need to be physically present with the children. There is much less social interaction, less art focus, reduced communication and very little group learning.

The A.I. teaching system is expensive to produce but very effective for raising test scores.

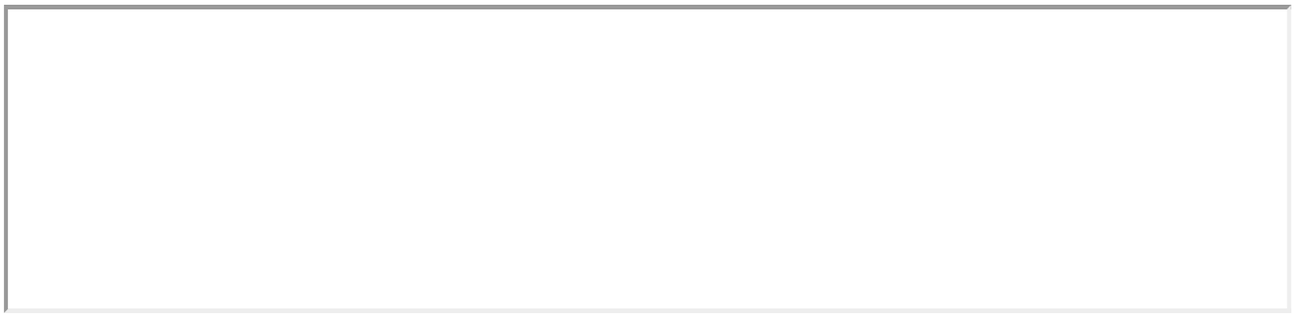
Students will be observed by cameras. Private data is collected for each learner, to be stored off site and analyzed.

The goal of this model is for tech companies to collect "big data" from children, developing algorithms to construct A.I. that can one day teach millions of students at their own pace, simultaneously. It's called personalized learning, but actually its not very personal. The students' main teacher will be a computer program.

The second model of "learner-centered" M.I. education has been in development for hundreds if not thousands of years, rooted in apprenticeship learning approaches. It is more community focused, with more communication and mastery learning alongside adults and peers.

The focus is simultaneously on group learning and each child's growth and development, helping each learner's multiple intelligences to grow and thrive while building strong relationships with others.

The M.I. approach is related to the model Maria Montessori pioneered over a century ago, which has shown great success in Finland. Not much technology is needed, as human relationships, self-directed learning and real world interactions are central. Not much data is collected. But children learn to work together creatively, collaborate, grow their skills and experience a sense of community. This video from the Mission Hill project shows how such an approach works.



These two models could be available to all children in the very near future. While very different in approach, both support a transition away from high-stakes testing, along with teacher and text book centered education.

With direct A.I. "hyper-personalized" instruction via computers, testing and data collection will now happen constantly, every day. Children are no longer compared with each other, thereby reducing test taking anxiety. They will probably do well on standardized tests with all that daily practice.

With an M.I. and local community focus tests are not even considered very important. Developing each child's creativity and unique potential is the focus. Test scores will rise naturally, but many of the skills young people develop can not be easily measured.

Another example of the M.I. approach (video above), Boston Arts Academy provides a mix of academic and arts classes. The high school's graduates do well on tests, and are valued both by colleges and employers. I worked on a similar project in the early 1990s, at Stanford University.

Unfortunately, for the last two decades most nations have put more emphasis on computers and test scores than creativity, community learning and whole child development. If we want our children to develop their full potential we need to think deeply about the kinds of learning tasks, environments and opportunities we provide for them.

~Christopher Chase

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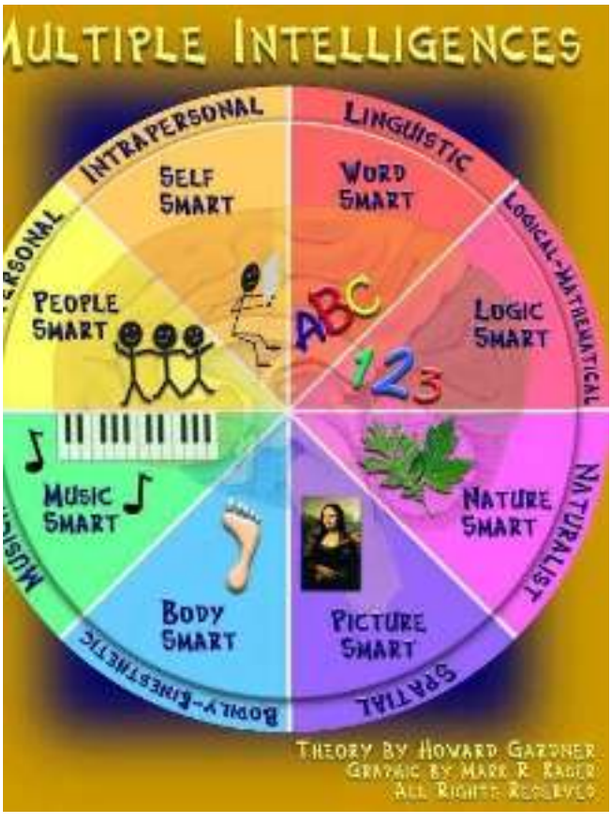

About Christopher Chase

Co-creator and Admin of the Facebook pages "Tao & Zen" "Art of Learning" & "Creative Systems Thinking." Majored in Studio Art at SUNY, Oneonta. Graduated in 1993 from the Child & Adolescent Development program at Stanford University's School of Education. Since 1994, have been teaching at Seinan Gakuin University, in Fukuoka, Japan.