The Learner-Centered Revolution: Shifting Paradigms in Education

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Introduction

In nations around the world there are two very different paradigms in existence for educating children. The dominant system of formal schooling since the beginning of the last century is sometimes called *teacher-centered education* (教師中心型教育), *test-driven education* (テスト主導型教育), *direct instruction, factory model schooling* or *industrial era schooling*. This is where teachers administer "essential knowledge" to large batches of same-age children simultaneously, the students listening quietly while seated at desks (Chase, 2018; Gatto, 2003; Montessori, 1972; Robinson, 2010). After instruction has been completed the children are given tests. They are then measured and compared, ranked and graded according to how much of the knowledge they were able to understand and remember.

This system of testing and measurement has similarities with the way factories and scientific experiments are designed. While on the surface this approach seems to be about transmitting "knowledge" to children, there is also an unspoken "hidden curriculum" being taught (Chomsky, 2015; Gatto, 2003; Robinson, 2010). Such schooling teaches youth to obey authority, to comply with instructions, to be willing to engage in difficult activities that often seem meaningless, and to accept that society is comprised of people with different levels of talent, rank, power and social status (Chase, 2018;

Chomsky, 2015; Denning, 2011; Gatto, 2001 & 2003; Gray, 2013; Montessori, 1972; Robinson, 2010; Robinson & Aronica, 2016).

Alongside the test-driven factory model, a very different educational paradigm has co-existed. This is sometimes called *learner-centered education* (学習者中心型教育), *child-centered education* (児童中心教育), *student-centered learning, progressive education, whole child education* or *the mastery model of education* (Chase, 2018; Comer, 1988; Dewey, 1938; Hopfenberg et al., 1993; Gray, 2013; Montessori, 1966; O'Neil, 1995; Robinson & Aronica, 2016; Senge et al., 2000). Learner-centered education takes a constructivist approach—focused on deep understanding, collaboration, autonomy, creative thinking, skill development and support for each child's personal interests (Chase, 2018; Bruner, 1974; Kolb, 2014; Piaget, 1972). Maria Montessori's schools were set up this way, beginning with the assumption that children must be in control of their own learning, and that the happiness of the child is a sign that education is effective (Montessori, 1966 & 1972). Adults shape the learning environment, but in a way that encourages exploration, curiosity, creativity, learner autonomy and skill mastery.

Over the last decades, research in education, psychology and child development indicates that the learner-centered approach is more effective while the test-driven factory model is based on numerous faulty assumptions. Teacher-centered education assumes that learning can be measured by standardized tests, that a child's interests and feelings do not matter and that all children can learn at the same rate and in the same manner (Chase, 2018; Gatto, 2003; Robinson, 2010). The fact that research shows children learn best when something is meaningful, enjoyable and interesting for them is ignored. The importance of curiosity, independence, creative collaboration, free play, and self-directed learning are also not considered relevant (Chase, 2000 & 2018; Chomsky, 2015; Denning, 2011; Gray, 2013; Montessori, 1972 & 1986; Robinson & Aronica, 2016; Senge et al., 2000).

While the teacher-centered model is currently dominant around the world, a wide range of innovative learner-centered approaches has arisen over the last decades, proving themselves to be effective with previously unmotivated learners (Chase, 2018). Since the late 1980s, Hank Levin's *Accelerated Schools* successfully implemented a learner-centered model (Chase, 2018; Brandt, 1992; Hopfenberg, et al., 1993). There is also *Project Zero*, developed by Harvard psychologist Howard Gardner (Gardner & Hatch, 1989), and Yale University psychiatrist James Comer's *School Development Program* (Comer, 1988; Dubin, 2013), which has proven its effectiveness since the late 1960s.

Deborah Meier's *Mission Hill School* (Tom Valens, 2013), Peter Senge's *Schools as Learning Organizations* (O'Neil, 1995; Senge et al., 2000), and the *Reggio Emilia* method in Italy (Gandini, 1993) have all applied progressive constructivist approaches creatively and effectively. Child-centered methods have been implemented with great success in Finland (Dalporto, 2013), and their education system has come to be respected around the world. Although not as well known, educator Vicky Colbert's *Escuela Nueva* (New School) model of *democratic education* (Kirp, 2015) has been effectively educating rural children in the hills and villages of Central America for almost half a century. Or rather, it is the children who have been collaboratively educating themselves:

> Escuela Nueva turns the schoolhouse into a laboratory for democracy. Rather than being run as a mini-dictatorship, with the principal as its unquestioned leader, the school operates as a self-governing community, where teachers, parents and students have a real say in how it is run. When teachers unfamiliar with this approach are assigned to these schools, it's often the students themselves who teach them how to apply the method. "In these schools, citizenship isn't abstract theory," Ms. Colbert told me. "It's daily practice." (Kirp, 2015).

The question then arises, if progressive learner-centered models have proven to be innovative, democratic and effective—and the authoritarian high-stakes testing approach of the factory model has not—why is the standardized model still dominant in many "leading" nations around the world? Are political leaders and education policy makers unaware of the questionable pedagogy, negative social consequences and lack of research evidence supporting the standardized approach, or do they seek to perpetuate it for other reasons?

Factory Model Education: An Authoritarian System

As John Taylor Gatto (2003), Ken Robinson (2010) and others have described, the industrial model of education seems to be a form of social engineering that creates many problems. It is not aligned with how the human brain constructs knowledge or the natural way children actually learn (Chase, 2018; Chomsky, 2015; Comer, 1988; Gray, 2013; Montessori, 1972; O'Neil, 1995; Senge et al., 2000). It does not reward creativity, innovation, independence, compassion, intuition, confidence, cooperation and many other essential character strengths; instead, it fosters social class rankings, competition, alienation and (for countless children) a sense of personal failure and incompetence (Chomsky, 2015; Comer, 1988; Dubin, 2013; Gatto, 2003; Robinson, 2010).

> The assessment itself is completely artificial. It's a rank that's mostly meaningless. And the very ranking itself is harmful. It's turning us into individuals who devote our lives to achieving a rank. Not into doing things that are valuable and important. (Chomsky, 2015).

In a somewhat subversive way, the love of learning and natural curiosity that children bring into this world have been re-programmed by industrial era

institutions of schooling, so that children can be taught to work hard in order to please others (and to do things for utilitarian reasons, to obtain external rewards and status) rather than for personal growth, healthy social development and intrinsic happiness (Chase, 2018; Chomsky, 2015; Comer, 1988; Gatto, 2001 & 2003; Hopfenberg et al., 1993; Gray, 2013; Montessori, 1986; Robinson, 2010; Senge et al., 2000).

Factory model schools divide and rank children, effectively creating a social "underclass" of potentially bright learners, who become unmotivated and unskilled. Those with low skills, status and self-esteem may then be drawn toward harmful activities, such as gangs, crime and illegal drugs (Comer, 1988; Dubin, 2013; Gatto, 2003). Just as troublesome, "approved" drugs are now being given to children to force compliance and attentiveness in schools, the future consequences of which are unknown (Robinson, 2010). Standardized teacher-centered education is an authoritarian system that seems to be designed to produce obedient workers for the modern industrial economy, rather than nurturing true creativity, independence, skillfulness and learning (Chase, 2018; Chomsky, 2015; Gatto, 2003; Robinson, 2010).

As a long-time educator living and working in Japan, I have seen the negative affects of high-stakes testing, rote learning and standardized teaching first-hand. Many students in Asia do very well on tests, but at what cost and for what purpose? The education systems of China, Korea and Japan use high school and college entrance exams as a way of determining a child's future social rank and subsequent economic status. In China (CNN, 2012), some high school students have been given medical drips in their classrooms, to help them cram for college exams without passing out from physical exhaustion. As Yale lecturer Se-Woong Koo (2014) described in the *NY Times*, in South Korea there are high rates of suicide, physical illness and depression associated with education pressures.

> The world may look to South Korea as a model for education — its students rank among the best on international education tests — but the system's dark side casts a long shadow. Dominated by Tiger Moms, cram schools and highly authoritarian teachers, South Korean education produces ranks of overachieving students who pay a stiff price in health and happiness. The entire program amounts to child abuse. It should be reformed and restructured without delay. (Koo, 2014).

Here in Japan, my sons and their friends have gone to cram schools to memorize volumes of "facts," only to forget most of the information within a year or less. As an example, even in the "top" high schools, students are expected to cram English grammar and vocabulary into their heads, without being given any opportunity to actually develop the communication skills that would allow them to use the language effectively (Chase, 2000). When asked why schools continue to teach English this way the answer given by most Japanese teachers that I have talked with is often the same: "There is no time to practice actual communication with the language, because they need to learn it for exams."

Fortunately, while hearing about this from Japanese students and teachers for over thirty years, I have been able to implement the learner-centered model both in my university classrooms and at home with my sons. Most parents are familiar with the child-centered approach, for this is how we supported our children's native language learning at home and before they entered school. Although they went through the Japanese education system, both of my sons are bilingual because their parents gave them opportunities to practice and enjoy English by watching movies together, reading books, listening to music, meeting with American relatives in the United States and communicating daily with their father in English, at home. They learned two

languages because they practiced both languages and experienced both cultures in their lives. The learning was informal, they did not *study* English with me, but they *heard* it, *enjoyed* it and *used* it every single day of their lives.

Learner-centered approaches are aligned with how children naturally learn, respecting the child's need for creative engagement, independence, practice, collaboration, enjoyment and self-direction. Supported by a caring family and community, this kind of learning often happens for children informally and playfully, outside of schools (Chase, 2000; Gray, 2013; Rogoff, 1990). Research now supports what constructivists and progressive educators such as John Dewey, Jean Piaget and Maria Montessori described many decades ago (Kolb, 2014). Children have to be interested in what they are learning and have ample opportunities to practice and apply an area of knowledge in order to deeply comprehend it and develop real skills (Bronfenbrenner, 1993; Chase, 2000; Ford, 1992; Ford & Lerner, 1992; Kolb, 2014; Gardner, 1991; Rogoff, 1990 & 1993). Unfortunately, the standardized culture of education in many nations has resisted the implementation of this wisdom.

> Education is a personal process. Anybody who has children knows that... The trouble is that education currently, the culture of education, is all about standardizing. And it's alienating teachers, it's alienating kids. It's not doing its job. I never blame teachers or schools, I've worked with teachers my whole life. It's a fantastic profession, and most teachers I know don't like this either. But there is this deadly culture of standardizing, that's being pushed on them, politically. My core message here is that we have to personalize education, not standardize it. That all children are different, and we have to find their talents and cultivate them. (Robinson, 2015).

Most parents have seen this natural self-directed form of talent development with skills our children have mastered outside of school. Standardized tests had little to do with their success with sports, art or music; it was the love of learning, the joy of increasing competence and desire to master something they enjoyed doing that encouraged our children to develop their greatest talents and abilities. I think the majority of parents and teachers understand this, and yet we live in nations that prioritize standardized testing and impersonal learning. To do this, to emphasize a successful learning approach at home and an ineffective system in schools, seems very unwise.

Shifting Paradigms in Education

For the many reasons mentioned here, I believe that to continue with the psychologically and socially harmful approaches of standardized test-driven education borders on educational malpractice. While some government leaders and education policy makers want to update or maintain this approach, many parents, researchers and teachers who work directly with children are keenly aware of its defects (Bruner, 1974; Chase, 2018; Chomsky, 2015; Comer, 1988; Denning, 2011; Ford, 1992; Gardner, 1991; Gardner & Hatch, 1989; Gray, 2013; Montessori, 1966; Robinson, 2015; Robinson & Aronica, 2016). Children do better in school when they feel safe, loved, happy and supported by the people in their lives. With its authoritarian emphasis on compliance, competition and data collection, the factory model is undemocratic, soul-crushing and dehumanizing (Chomsky, 2015). It is a relic of the industrialized era that many believe needs to be dismantled as we move forward into the 21st century (Chase, 2018; Comer, 1988; Denning, 2011; Gatto, 2003; Robinson, 2015; Robinson & Aronica, 2016).

Education policies that emphasize student testing, teacher assessments

and uniform national standards are not supported by research evidence. Leaders in the business world and government might believe they will work, but experienced educators and researchers understand that such an approach is doomed to fail (Chase, 2015 & 2018; Comer, 1988; Gatto, 2001; Robinson, 2015; Sirota, 2011). Nations do not need more money for standardized tests and national standards; what is needed is greater investment in successful teaching approaches, support services and innovative student-centered programs, so that high quality learning opportunities can be provided to all children (Chase, 2018; Comer, 1988; Dubin, 2013; Robinson, 2015; Robinson & Aronica, 2016; Senge et al., 2000).

Decades of research has shown that solutions to education problems are not unknown or complicated; they just require a shift of priorities, and a willingness to put money into innovations that have proven themselves to be effective. They require a paradigm shift, providing financial support for evidence-based educational approaches that will nurture the healthy growth, creativity and learning of both teachers and children in each community (Chase, 2018; Chomsky, 2015; Comer, 1988; Dubin, 2013; Robinson, 2010; Robinson & Aronica, 2016; Senge et al., 2000).

Experienced educators understand this; they are professionals who have been working directly with students, experimenting with various teaching approaches and reforms for decades. Most who interact with children every day know that fixed standards and test score benchmarks unfairly punish and psychologically harm children whose learning has fallen behind because of socioeconomic, developmental, home-life or poverty factors. Children do not magically do better when we test them more, they do better when adults back up higher expectations by creating supportive and enriched learning environments, that nurture children as whole human beings, with social, emotional and creative needs, not just as producers of data and test scores. Government education policy-makers need to consider this very seriously. As

Ken Robinson (2015) described on CBS News:

> A lot of the schools [that are effective] follow the same sorts of principles. They have a broad curriculum, because children have very different talents. It's important they should do math, language and so on, but music and theatre and dance are just as important for talents and for engaging kids. It's not just about that. It's about a creative approach to science. So it's a broad curriculum and they have flexibility in the way they teach individuals.

There are no international tests or "rigorous" national standards that will magically solve the complex problems in a community, because learning and growth happens locally, when children are guided, engaged, inspired, challenged, loved and supported directly by the adults in their lives (Chase, 2018; Comer, 1988; Denning, 2011; Dubin, 2013; Montessori, 1972; Robinson, 2015; Robinson & Aronica, 2016; Senge et al., 2000). The recipe for a *learner-centered revolution* around the world is quite simple in principle, but depends upon wisdom from those in leadership positions to be implemented effectively, as in Finland.

The most successful learner-centered programs require an investment of professional expertise, community involvement, love, time and money (Chase, 2018; Robinson & Aronica, 2016; Senge et al., 2000). They require freedom, experimentation and collaborative innovation from teachers, parents and children; designing school environments that fit the unique cultures, interests and needs of everyone in a community. Successful learner-centered schools are not one-size-fits-all models designed by CEOs in a boardroom, or financial investments for others (not living in a given community) to profit from; they are collaborative local creations and investments *in* children, for the benefit of *those* children and *their* families (Chase, 2018; Comer, 1988; Sirota, 2011).

Our challenge now is to transform authoritarian education institutions into creative and thriving learning communities, where teaching professionals are given the resources, time, guidance and autonomy they need in order to provide children with powerful learning experiences and opportunities (Chase, 2018; Comer, 1988; Denning, 2011; Hopfenberg et al., 1993; Robinson & Aronica, 2016; Senge et al., 2000). As we have seen with Montessori schools and in Finland, this will lead to higher levels of skill development, mastery, creativity and greater achievement by students on tests, but the focus needs to be on the children's healthy growth and their love of learning, *not* test scores.

Note: *Parts of this paper were originally shared as two blog posts written in 2014 & 2015, entitled "Educational Malpractice: The Child Manufacturing Process" and "Invest in Children, Not Testing. It's That Simple." The text has been merged together, expanded and edited, with citations added.*

References

Brandt, R. (1992, January). On Building Learning Communities: A Conversation with Hank Levin. *Educational leadership: Journal of the Department of Supervision and Curriculum Development, N.E.A. 50, (1).*

Bronfenbrenner, U. (1993). The ecology of cognitive development: Research and fugitive findings. In R. H. Wozniak and K. W. Fischer (Eds.), D*evelopment in context: Acting and thinking in specific environments* (pp. 3-44). Hillsdale, NJ: Lawrence Erlbaum Associates.

Bruner, J. (1974). *Toward a Theory of Instruction.* Harvard University Press.

Chase, C. (2000). Human Language Mastery: Essential Foundations and Processes. *Studies in English Language and Literature, 40 (1/2),* 137-154.

Chase, C. (2015, March 11). Flaws at the Heart of Current Education Reforms [blog post]. Retrieved from: https://creativesystemsthinking.wordpress.com/2015/03/11/flaws-at-the-heart-of-current-education-reforms/

Chase, C. (2018). Aligning Schools With How Children Naturally Learn. Studies in English Language and Literature, 59 (1), 37-53.

Chomsky, N. (2015, Febuary 21). Noam Chomsky on the Dangers of Standardized Testing [blog post]. Retrieved from: https://creativesystemsthinking.wordpress.com/2015/02/21/noam-chomsky-on-the-dangers-of-standardized-testing/

CNN (2012, May 10). Chinese High Schoolers use IV Drips to help Study for College. Retrieved from: https://www.youtube.com/watch?v=S6lfDbfcAlo

Comer, J. (1988). Educating poor minority students. *Scientific American, 259 (5),* 42-48.

Dalporto, D. (2013, April 4). Finland's A+ Schools [blog post]. Retrieved from: https://www.weareteachers.com/finlands-a-schools/

Denning, S. (2011, September 1). The Single Best Idea for Reforming K-12 Education. *Forbes*. Retrieved from: https://www.forbes.com/sites/stevedenning/2011/09/01/the-single-best-idea-for-reforming-k-12-education/#10091a856b40

Dewey, J. (1938). *Experience and education*. New York: Collier Books.

Dubin, J. (2013). School Ties: A Psychiatrist's Longtime Commitment to Education. *American Educator, 37 (1),* 20-25.

Ford, D. H., & Lerner, R. M. (1992). *Developmental systems theory: An integrative approach*. Newbury Park, CA: Sage.

Ford, M. E. (1992). *Motivating humans: Goals, emotions and personal agency beliefs*. Newbury Park: Sage.

Gandini, L. (1993). Fundamentals of the Reggio Emilia Approach to Early Childhood Education. *Young Children, 49 (1),* 4–8.

Gardner, H. (1991). *The unschooled mind: How children think & how schools should teach*. New York, NY: BasicBooks.

Gardner, H., & Hatch, T. (1989). Multiple intelligences go to school: Educational implications of the theory of multiple intelligences. *Educational Researcher, 18 (8),* 4-9.

Gatto, J. T. (2001). *A Different Kind of Teacher: Solving the Crisis of American Schooling*. Berkeley: Berkeley Hills Books.

Gatto, J. T. (2003). *The Underground History of American Education*. Oxford Village Press.

Gray, P. (2013). *Free to Learn: Why Unleashing the Instinct to Play Will Make Our Children Happier, More Self-Reliant, and Better Students for Life*. Basic Books.

Hopfenberg, W. S., Levin, H., Chase, C., Christensen, G., Moore, M., Soler, P., Brunner, I., Keller, B. & Rodriguez, G. (1993). *The Accelerated Schools Resource Guide*. San Francisco: Jossey-Bass.

Kirp, D. L. (2015, February 28). Make School a Democracy. *The New York Times*. Retrieved from: https://www.nytimes.com/2015/03/01/opinion/sunday/make-school-a-democracy.html

Kolb, D. A. (2014). *Experiential Learning: Experience as the Source of Learning and Development* (2nd Edition). Pearson FT Press.

Koo, S. W. (2014, August 1). An Assault Upon Our Children. *The New York Times*. Retrieved from: https://www.nytimes.com/2014/08/02/opinion/sunday/south-koreas-education-system-hurts-students.html

Montessori, M. (1966). *The Human Tendencies and Montessori Education*. Amsterdam:

Association Montessori Internationale.

Montessori, M. (1972). *The Discovery of the Child*. New York: Random House Publishing Group, Ballantine Books.

O'Neil, J. (1995). On Schools as Learning Organizations: A Conversation with Peter Senge. Educational Leadership, *52 (7),* 20-23.

Piaget, J. (1972), Some Aspects of Operations. In M. W. Piers (Ed.), *Play and Development: A Symposium with Contributions by Jean Piaget, Peter H. Wolff and Others*. New York: W. W. Norton & Company.

Robinson, K. (2010, October 14). RSA ANIMATE: Changing Education Paradigms. Retrieved from: https://www.youtube.com/watch?v=zDZFcDGpL4U

Robinson, K. (2015, April 23). Ken Robinson: Government "Standardization" Blocks Innovative Education Reform [blog post]. Retrieved from: https://creativesystemsthinking.wordpress.com/2015/04/23/ken-robinson-government-standardization-blocks-innovative-education-reform/

Robinson, K. & Aronica, L. (2016). *Creative Schools: The Grassroots Revolution That's Transforming Schools*. Penguin Books.

Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in a social context*. Oxford: Oxford University Press.

Rogoff, B. (1993). Children's guided participation and participatory appropriation in sociocultural activity. In R. H. Wozniak and K. W. Fischer (Eds.), *Development in context: Acting and thinking in specific environments* (pp. 121-153). Hillsdale, NJ: Lawrence Erlbaum Associates.

Senge, P., Cambron, N., Lucas, T., Smith, B., Dutton, J., & Kleiner, A. (2000). *Schools that learn: A fifth discipline fieldbook for educators, parents, and everyone who cares about education*. New York, NY: Doubleday.

Sirota, D. (2011, September 12). The bait and switch of school "reform." *Salon*. Retrieved from: https://www.salon.com/2011/09/12/reformmoney/

Tom Valens (2013, June 18). Good Morning Mission Hill: The freedom to teach, the freedom to learn. Retrieved from: https://www.youtube.com/watch?v=BulSOE9gmTU