

# Learning Dysfunction, Disability and Diversity as the New Normal in Education Reform

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## Abstract

Policy makers need to recognize that the historically comfortable education environment is changing. The present model of managing the new environment has a growing number of non-achieving student customers being labelled as being dysfunctional. The dysfunctional collective is becoming the new normal as it expands to accommodate students of diversity, who are classified as having a disability. The student customers, are the input that the education value chain is expected to transform into good and useful citizens. They are becoming increasingly diverse and volatile inputs to handle and shape. Our society is demonstrating increasingly higher level of incivility, lawlessness, antisocial attitudes and behaviors. This suggests that the existing learning system is inadequate. The education system needs to continually adapt to serve the needs of a changing society, if it is to remain relevant. The continuous improvement model of business management and the global sustainability models of economic development can provide a sound framework for satisfying student development goals and objectives, could be the bases for the reform of the complex educational process. Both are process models that will guide the educational community to think more deeply on all aspects of its system, about the benefits of inclusion, and about redefining the notion of the dysfunctional. The student who is empowered to learn, will emerge from the school system with emphasis on education for life, and will be more than ready and fully capable of making a unique and meaningful contribution to self and society.

*Keywords:* sustainability, continuous improvement in education, disability in education

## Learning Dysfunction, Disability and Diversity as the New Normal in Education Reform

The continuous improvement management model and the sustainability model of economic development are applied by businesses to track current, emerging and future value demands on an ongoing basis. The models help businesses to stay relevant by delivering more value than competitors. Both are models that can provide a comprehensive strategic approach in planning for success in education outcomes and reforms in educational services.

Globalization models of economic development, including the United Nations Millennium Development Goals (MDGs), and Sustainable Development Goals (SDGs), are intended to influence the modernizing of the national education system. These models promote liberalization, privatization, partnerships, sustainability and inclusion of the disadvantaged. However, the prerequisite for sustainability and quality improvement is the capacity to measure and track key processes and outcomes, in order to determine whether a change has happened. Most educational measurement systems have centered on either inputs or outcomes, with limited regard for system performance management, as the guiding framework.

The educational product is the result of a process-driven system. That system includes a complex mix of activities requiring the intervention of many diverse groups of stakeholders, working toward the same general outcome. Schools and districts, are not organized in ways that promote continuous learning. Those stakeholders often work in silos, applying metrics primarily at input and outcome levels and using those results to inform policy. Systems data are not provided frequently or rapidly, so cannot meaningfully be measured to inform and change practice. Ultimately, the customers of the process

rather than a misaligned system are blamed for poor outcomes.

The discipline of Psychology provides the definition of ‘disability’ – a term common to the disadvantaged customers in the education system. Traditional, historical and present notions in education see disability as an abnormality that arises out of some maladaptation of dysfunctional individuals to the environment. The disadvantaged are but one subset of customers on the education value chain. The Education system embraces learning theories and strategies as well as multiple levels of partnerships. Success measures that are indicated in these areas appear to lend credibility to the process.

Nevertheless, within the existing education process, there are a vast majority of children and adolescents in schools across every region, who are not learning. This has tremendous policy implications regarding the quality of education, and the ability to keep pace with a rapidly changing world. The initial United Nations Education, Science and Culture Organization (UNESCO) Constitution as agreed over 70 years ago, reflected the then ‘new’ times and demands. It indicated four pillars of learning – to know, to do, to be, and to live together, and set access goals for the international education system, based on expanding learning opportunities for all. These goals, although still relevant today, are threatened by deepening globalization processes and modernization.<sup>1</sup> UNESCO recognizes that in these modern times, access is not enough. Education, as an essential common good, must change, and a new focus on the quality of education and the relevance of learning, throughout and for life is required. The education system has to provide a learning environment that is built on new approaches to learning and cultural literacy, on the basis of respect and equal dignity, and on the social, economic and environmental dimensions of sustainable development.

The United Nations (UN) in its Sustainable Development Goals (SDG 4 – Inclusive and equitable quality education and lifelong learning opportunities for all), and its Millennium Development Goals (MDG 4 - Quality Education), outlines the vision of a modern education system that embraces a humanist vision of continuous learning. That vision demands a shift from narrow utilitarian teaching models to learning models that integrate multiple dimensions of human existence. This vision changes the historical and outdated business ideal of an educational process being managed as mechanical and industrial school mills.<sup>2</sup>

The humanistic approach emphasizes the inclusion of people who are often subject to discrimination, including indigenous people, persons with disabilities, migrants, and people living in countries affected by conflict. It requires an open and flexible approach to learning. Such an approach has implications for the definition of learning content and pedagogies, as well as for the role of teachers and other educators. However, when well executed, it will provide the opportunity for all student customers to realize their potential for a sustainable future and a life of dignity.

The performance of the education system is of interest globally, and education reforms are planned to move countries into a knowledge economy. Students with disabilities, learning difficulties and disadvantages are not to be left behind, and programs have been developed to help those students to improve their skills and be more fully included into society and work. Every student is entitled to a base education that is appropriate for his or her unique needs and that is provided free of charge.<sup>3</sup> Inclusion secures opportunities for students with disabilities to learn inside mainstream classrooms and to not be segregated into special education teaching environments. Universal Design is the approach that makes a curriculum accessible to all students, regardless of their backgrounds, learning styles and abilities.<sup>4</sup>

Traditional, historical and present notions in education see disability as an abnormality that arises out of some maladaptation of dysfunctional individuals to the environment. Students with emotional and behavioral disorders (EBD) have traditionally been educated in self-contained special education settings. Recent legislative changes such as the No Child Left Behind (NCLB) Act of 2001 and the Individuals with Disabilities Education Act (IDEA) 2004 have led to increased inclusion of students with EBD in general education classrooms. Further, The Organisation for Economic Co-operation and Development (OECD) standards for classifying education systems (ISCED), updated the definition of special needs education. In 2006 OECD reported that this resulted in a wider range of students in all types of schools being brought under that net, and marked an ‘apparent rise’ in the numbers of students described as having behavior difficulties.

The UNESCO Institute for Statistics (UIS) (2017), SDG4 requires primary and secondary education to result in minimum proficiency levels. Their achievement report has indicated that more than six out of ten children and adolescents worldwide (over 617 million, ranging from a high of 85% in sub-Saharan

Africa, to a low of 25% in North America and Europe), are not achieving the expected learning outcomes.<sup>5</sup> The study does not identify reasons for the low achievement or include data on disabilities, but does suggest that in every instance, the children who are not learning, are in school. This reflects negatively on the quality of education.

The Results for Development Institute (R4D) (2012) reviewed the progress on the education Millennium Development Goals (MDGs) and Education for All Goals (EFA) to 2015. There is agreement that while there has been improvement in access, that primary school enrolment goal is an inadequate measure of actual learning. The growing momentum around learning has in turn raised concern about the lack of best practices for learning in the classroom and how best to design metrics that have global applicability in measuring learning. The R4D suggested that learning was being defined too narrowly – being equated with basic reading skills, and failing to account for the importance of non-cognitive skills like problem solving, critical reasoning, communication, and teamwork. Nevertheless, the Global Partnership for Education (GPE) continues to redefine measures for English language learning that will ensure that countries with substantial language diversity will fall short of learning targets. The question thus becomes how to set progressive benchmarks for learning while accounting for diversity and regional differences.<sup>6</sup>

The existing metrics that track achievement, uncover major performance disparities among children from different socioeconomic backgrounds. These students represent about 10 percent of the global primary school age population, of whom, 40 percent are disabled.<sup>7</sup> However the burden is greatest for those who are classified as victims of ‘educational poverty’, and who are not always included in the metrics. These members of multiple marginalized groups, include females who are also an ethnic minority, displaced urban youth affected by conflict or disaster, and minorities attending schools that teach in what for the students is a second or third language.<sup>8</sup>

In a liberalized economy, governments are more effective when they regulate and work with rather than dominate the productive sectors. In a modern liberalized education process, inflexible, authoritarian leadership does not encourage a dynamic or creative environment for learning. Success at both levels is dependent on building robust partnerships between those who manage, build and live in the society. That means, the integration of ideas, information, social and

cultural activities by an intelligent, democratic State, productive sectors, and a vibrant civil society.

Historically, political and economic needs have dictated the function of American education. The article suggests that as the nature of the student input changes, and in the light of the increasing population of dysfunctional, this inclusive model should rethink the definition of what is classified as ‘normal’.

Universal education needs to continually adapt to serve society’s needs, to pass on knowledge and skills. It needs to transform the learners by bringing together people from diverse backgrounds who can make beneficial contributions in an ordered and cohesive fashion. This treatment suggests that the business concepts of continuous improvement can provide a sound framework for doing this, as it would take the needs of all stakeholders into account in shaping a quality product. The continuous improvement process will ensure that the student input is fairly measured and shaped to emerge from a viable school system, more than ready and fully capable of making a unique and meaningful contribution to self and economic development. The intention will be to ensure that the three factors of production, labor, capital, and land identified in traditional economic theory are supported by that key element, knowledge, which is a critical factor in development, growth and sustainability.

Private schools and tertiary institutions which are operated as for-profit businesses, are acknowledged as a natural fit for the application of full business models, and many of these institutions have begun to use business models to maintain and improve on their value. The business models that these institutions have applied, would need to be adapted in the social good public-school setting. The continuous improvement business models, applies measuring tools that are relevant at each stage of a process, identify stakeholders and customers in the value chain and build in a correction process to ensure that objectives are being met. Such a model will ensure that customers with all aspects of defined disability remain central in the value analysis.

The built-in measurement process will track numbers and progress. As their numbers increase, the need to mainstream and normalize learning approaches for this sub sector of customers will become apparent and have to be addressed, and learning approaches modified to produce the indicated result. With this continuous improvement method, it is not inconceivable that the present normal will eventually

become the outliers and the disabled trend towards a redefined normal. The paper ends with some conclusions and recommendations for further study.

### Existing Practices in Education

Education systems are complex and multifaceted networks, thus the challenges for their reform and improvement will also be complex, as changes or improvement at one level will impact on all other areas of the network. The process of continuous improvement requires sustained commitment of all the stakeholders, who need to guide, evaluate and improve educational results to ensure that improvements are both sustained and incremental. Thus, issues related to the expertise of school leaders, teachers, faculties, and staffs, and commitment of educators to develop and apply solutions and improvement strategies, as well as tools of measurement, become important.<sup>9</sup>

### Governance Framework

Thomas E. Downey (2000) is often cited as a pioneer in promoting reform of the current governance and practical models. Currently, the state and national governments share power over public education, with the states exercising most of the control. Power to exercise control over a school district may then be delegated to county, city or township-level school boards. Some school districts, such as those who have adopted the new school improvement strategy called the portfolio strategy, may further delegate to the school principals.<sup>10</sup> The adoption of Charter Schools has been a fairly recent method of the privatization of the public-school system. All models appear to focus on the financial viability of the operations rather than the quality of the final student product.

The 2017 conference of the Center on Reinventing Public Education (CRPE) discussed the declining enrollment in Public Schools and its negative effect on district revenues, teacher and student morale and course offerings. The conference of superintendents, charter leaders, finance experts, and other education thought leaders acknowledged that the education process is fixed on maintaining a system that has been in place for the last 50 years.

The consensus was that while districts labor under rigidities in law, habit, and thinking, they remain responsible for providing a quality education and buffering children from the effects of changes in funding, enrollment, and other administrative needs. The conference discussed ‘embracing a broader measure of success for reform, (to ensure) the well-being of all students’. The focus of the discussion

however remained at the level of short-term district fixes for revenue declines, and not on sustaining or improving the quality of instruction. Just one of eight recommendations from the conference, suggested that public education needed to commit to long-term decision-making to help manage decline.

**Reforms in education.** The urgency to educate students for an internationally competitive and changing workforce is impacting the need to reform, and there have been many recommendations and ‘fixes’. The recommendations define measures of quality based on at redirecting resources (teachers and technical), academic standards, technology application and student assessment models. The education system has to implement comprehensive strategic measures to slow further downward spiral and to work effectively and sustainably, without harming students.

### Recommended Business Models

#### The Value Chain

Performing a value chain analysis is no longer the domain of seasoned businesses or corporate players. All organizations can use it as a strategic evaluation tool, to address gaps in business development and identify opportunities for growth. The value chain identifies the key business driver concepts or core competencies, and the primary interlocking range of activities that are implemented by various actors and stakeholders (primary producers, processors, traders, service providers), to transform the inputs into the final product. Concrete action plans are developed for each activity. Metrics that are appropriate for the business, are assigned and weighted according to the impact value of the activity on the business. This is necessary to track the level of success in carrying out the activities, and to link all the stakeholders in the chain in such a way as to maximize the generation of value along the chain. Value chain analysis looks at how to contain costs while improving the outcomes and productivity.

**Service value chain.** The Service Value Chain clearly integrates all functions that influence the ability of a company to provide service to its customers. It emphasizes value for money spent (the cost advantage); supports a cross-functional approach that can enhance cost efficiency, maximize capital utilization, improve brand image, and enhance customer satisfaction. There has been some relevant research on service value chains by Nooteboom (2006), Gabriel (2006), Makkar, Gabriel & Tripathi (2008), and Van der Merwe & Cronje (2004).

The global value chain service development models emphasize building sustainable relationships between all the members of these chains in order to deliver the value expected by the end-consumer. Other researchers, including Rathee & Rajain (2013), Sison & Pablo (2000, p.2), Pathak & Pathak (2010, p. 170), and Hutaibat (2011), mapped several Service Value Chain Models for application in Higher Education. Although there are no publications which explicitly look at methods of value chain analysis from the angle of the primary and secondary education system, the Higher Education models could be a base for developing a primary and secondary education system value chain model.

### Continuous Improvement

In recent years, there has been a groundswell of discussion in respect of Continuous Quality Improvement (CQI) in Education, using hybrid business / services or non-profit education model. CQI models, which were first applied in business, are both applicable and adaptable to the education process, and are critical in enabling flexible-learning and technology-based environments. CQI's facilitates the increasing awareness of what students need to succeed in the workplace and reducing operating costs, while maintaining quality and demand.

There are several CQI models. Thomas Downey (2000) proposed a macro-model for quality and CQI in student learning, as a comprehensive approach for strategic planning and management of "educational products." The model is student centered, promotes self-paced anytime, anyplace learning; standardization; supports reduced operational costs; and development of "virtual team" social skills in students. It aims to promote customer satisfaction by giving the customers what they want, not what we think they should have. Useful components of the model are a program quality assurance system, and the assessment of learning from a distance and in the classroom. The model is applicable to compulsory 'social good' education.

**CQI models.** Boyle (1997) suggested that CQI models may be used to develop an Educational-based Quality Assurance Model. The Deming Wheel (Plan-Do-Check-Action (PDCA) cycle provides the basis for all CQI models. The PDCA is a reiterative process which focuses on results, collaborative planning, and implementing the improved process which has been defined through the planning step. A critical stage in this process is the use of quantitative and qualitative measures to determine efficiency and

effectiveness, and to continually refine the process. Other useful CQI models which were introduced as early as 1954, include the works of Juran - the Trilogy model, (Quality Planning, Quality Control and Quality Improvement), Total Quality Management (TQM), and Sig Sigma. More recent models are the Balanced Scorecard which is a consumer satisfaction model; and Kaizen Quality – a process driven model that applies small but incremental steps of improvement to build quality into the process.

### The Value Chain input: Students with disabilities, learning difficulties and disadvantages

#### Metrics and Quality.

Quality parameters have to be used to measure achievements at each stage of the process. The education process applies competency-based as opposed to knowledge-based or "recall" based assessments to measure the ability of students to achieve relevant core competencies. The Ministry of Education in British Columbia (BC), Canada, includes positive personal and cultural identity competencies, defined as '...The awareness, understanding, and appreciation of all the facets that contribute to a healthy sense of oneself .... awareness and understanding of one's family background, heritage(s), language(s), beliefs, and perspectives in a pluralistic society' (BC Ministry of Education, 2014).

The system pays attention to measuring the student output, but the existing education strategy does not reflect the interconnected network. There is some disconnect in the measuring, review, and improvement of all the other inputs and outputs that shape the student. These would include the governance model, the teaching professionals, administrators, environment, training, technology and financial resources, as well as the businesses, families and community.

#### *Students with disabilities (special (not normal) education students).*

Cognitive, behavioral, and social learning theories provide a framework for sorting and discussing interventions with students, and for identifying and analyzing intervention types as general (normal) or special (not normal) education students. The Individuals with Disabilities Act (IDEA, 1990) defines thirteen disabilities including cognitive disabilities, physical disabilities, speech/language impairments and emotional behavioral difficulties. In 2005, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and the

Organisation for Economic Co-operation and Development (OECD) updated the definition of special needs education in its international standards for classifying education systems (ISCED). A wider range of students with special needs are now being classified within the ISCED categories as follows:

- A/Disabilities - Students with medical disabilities or impairments.
- B/Difficulties - Students with behavioral or emotional disorders, or specific difficulties in learning as a result of ‘technical’ problems in the interaction between the student and the educational content.
- C/Disadvantages - Students with disadvantages arising primarily from socio-economic, cultural, and/or linguistic factors.

#### Categories related to C/Disadvantage.

The term ‘special needs education’, replaced the term special education, to extend beyond A and B disabilities. These C/Disadvantage special-needs children fail at school for a variety of other reasons that impede their optimal progress. They include second language, mother tongue students and socially disadvantaged students. The few countries that have data for these students, recorded between ten and 35 percent in the second tongue category. The US at approximately 27 percent reported 300 times more than the Czech Republic at 0.09 percent.

English language learners (ELLs), present the fastest growing diverse population in PreK.12, with one out of every ten public school children learning to speak English (Migration Policy Institute, 2016). Immigrant children account for almost a quarter of the juveniles in America, with some 23 percent of students in public schools coming from immigrant households, trending to between 93 to 80 percent in Miami-Dade County, Florida, and 75 percent in Los Angeles County.<sup>11</sup>

There is no quick solution to this second language problem. ELLs take between 2 years to 7 years under ideal conditions to acquire both Basic Interpersonal Communication Skills (BICS) and fluent native speaking skills (Cummins, 1984, Utley et al., 2011, Krashen and Terrell, 1983, Diaz-Rico & Weed, 2006, Flynn & Hill, 2006). ELLs who are in the process of acquiring a second language will experience language and literacy development challenges similar to their peers with a language learning disability (Pierangelo & Giuliani, 2010).

An increasing number of students with disadvantages arising primarily from socio-economic, cultural, and/or linguistic factors, will continue to be counted as part of the student population with a disability, as the migrant population continues to rise. As the definition of the disabled expands to embrace behaviors outside the present normal, those students that are labelled as ‘dysfunctional’ and ‘disadvantaged’ are overwhelming the present system and becoming the new normal. The education system is hard pressed to adjust its production process to reshape the inputs into its system. Thus these ‘disabilities’ are accounting for incivility, lawlessness, antisocial attitudes and behaviors, and need special attention to avoid negative consequences for the next generation.

#### Conclusions

*‘There is no more powerful transformative force than education – to ... deepen sustainability, to build a better future for all, founded on equal rights and social justice, respect for cultural diversity, and international solidarity and shared responsibility, all of which are fundamental aspects of our common humanity...’*

(Irina Bokova Director-General UNESCO 2015)

The education services system which is supposed to promote learning that is deliberate, intentional, purposeful and organized, is being more deeply fragmented by liberalization, privatization and globalization models. This has resulted in tensions between stakeholders in the education process, and requires a new look at the business of education as a common good. In spite of the buy-in to the world vision as defined through MDG 4 and SDG 4, the public education sector is feeling the effects of limited resources and poor customer service. Marginalization of the customer is becoming more and more of the norm, as issues with the education process begin to overwhelm.

The children who are not learning, are in school, thus the quality of education is not satisfactory. The concept of ‘no child left behind’ is becoming more difficult to manage in tandem with improving the quality of education delivered, in the face of increasing waves of immigrants and a widening economic divide. Intolerance and social issues continue to strain good intentions and resources, while the growing population of disadvantaged, exacerbates the struggle to maintain respect for cultural diversity, international solidarity and shared responsibility.

The challenge for national education systems is to work with the three regulators of social behavior - society, state and market, to shape an increasing number of diverse inputs, to provide both knowledge and education common goods. The ultimate goal is to deliver a product with a sense of good citizenship and regard for others in our pluralistic society.

Ultimately the education process needs to be guided by a process driven frame work, with measurable activities. This process would help reduce costs, promote the partnership and inclusion of primary customers in the education network, and add quality and value to the education offering. The value-added quality-focused method of embedding sustainability is an obvious choice for enhanced management growth of the education system.

### Recommendations

The overall intent of education reform would be to deliver the best value to its customers. This would require the adoption of a process that develops, improves and sustains a modern education system that embraces a humanist vision of education of continuous learning as the best education business model. International experience with diversity and inclusion provide models for applying best practices for learning in the classroom and how to better design metrics that have global applicability, to measure learning. The education community has to:

- Examine the existing mission, business model and value chain, to ensure that they are complementary and delivering a valuable product or service to the market.
- Adopt an appropriate model that builds sustainability, quality improvement and a robust evidence-based methodology at each level of the mix of value added activities.
- Use relevant and internationally accepted standards, measures, protocols and guidelines to track key processes and outcomes. Embed these standards into the day-to-day activities of the education system.
- Implement a robust data system to collect metrics that track achievement among children from different socioeconomic backgrounds and those classified as victims of 'educational poverty'. Data produced in a more timely and accurate fashion, would guide planning in this area.
- Create classrooms that provide more equitable learning spaces, in which every student has the

opportunity to have a voice, can participate, can shine and will learn.

- Remove the disability label from students who do not have debilitating medical conditions, to integrate them fully into the general classroom as is successfully done in some countries. This would free up resources that could be used to provide a learning environment to fully support and engage all students.

Education officials across the world believe that learning can be increased for all students regardless of heritage or income, through the setting of clear, achievable, higher standards, aligning the curriculum, and assessing outcomes. Such students they expect, will pass tests and succeed within the established system. Historical research shows that all ethnic and income groups score differently on all standardized tests and standards-based assessments.

The percentage of differently abled students in the system continues to grow. The education system has to acknowledge that its base norm has changed and is continually changing. It has to properly define and consider the diversity of its base student customers, in establishing standards, realigning the curriculum and in the assessment process. Continuous improvement and sustainable excellence of the education system and product, can only be achieved by refocus and the involvement of all areas of the diverse value chain.

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## Footnotes

- <sup>1</sup> The 1996 Delors Report proposed this integrated vision of education based on, which was adopted by UNESCO.
- <sup>2</sup> The 1972 Faure Report, established the interrelated notions of the learning society and lifelong education to challenge traditional education systems.
- <sup>3</sup> No Child Left Behind (NCLB) Act of 2001 and the Individuals with Disabilities Education Act (IDEA) 2004
- <sup>4</sup> Universal Design here means the design of instructional materials and activities that allows the learning goals to be achievable by individuals with wide differences in their abilities to see, hear, speak, move, read, write, understand English, attend, organize, engage, and remember (Orkwis & McLane, 1998, What is Universal Design section, para. 3).
- <sup>5</sup> To measure progress globally, the international community uses indicators: Proportion of children: (a) in Grades 2 or 3; (b) at the end of primary education; and (c) at the end of lower secondary education achieving at least a minimum proficiency level in (i) reading and (ii) mathematics.
- <sup>6</sup> The Global Partnership for Education (GPE) is setting a target of reading fluency by grade two. Some teachers will need to be able to master over 80 languages.
- <sup>7</sup> The challenges are particularly acute in countries affected by violence, which account for 77% of children not in primary school and 59% of children not in secondary school (World Development Report 2011: Conflict, Security, and Development).
- <sup>8</sup> The Education for All Global Monitoring Report (EFA GMR) (2015) has developed a “deprivation and marginalization in education (DME) indicator” which demonstrates the overlap between education poverty (i.e. those with fewer than four years of education) and inequality (UNESCO, 2010).
- <sup>9</sup> Systemic reform; the Glossary of Education Reform, Last updated: 08.29.13.
- <sup>10</sup> In 2013, California had the highest density of ELLs enrollment (22.8%), followed by New Mexico (15.8), Nevada (15.7%), and Texas (15.1%) (U.S. Department of Education, 2015). In Texas, of the 739,639 ELs, 17% are enrolled in Bilingual/ ESL programs, and 18% are enrolled in ELL programs; and there are 70,510 special education ELLs (Texas Education Agency (TEA); 2015).
- <sup>11</sup> Stephen Dinan reporting in The Washington Times - Wednesday, March 15, 2017.