

Six School Systems

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This paper seeks to highlight each country's context, trajectory, and character of the twenty-first century-education including Singapore, China, Chile, Mexico, India, and the United States. In this review, I will point the commonalities and areas of distinction between six school systems. This report outlines the different approaches to the educational goals, policies, and curricula for the twenty-first-century education, details the critical character, support, and develops the core competencies that students will need in preparation for an ever-changing world.

Singapore

Context

Singapore reformed its education system due to the aftermaths of the 1997 Asian financial crisis (Tan & Low, 2016). The leaders in the education system came up with a new vision, Thinking Schools, Learning Nation, which stressed the "importance of innovation, creativity, and lifelong learning" (Tan & Low, 2016). These elements highlighted in the PISA 2015 Assessment; and these crucial skills will prepare the students for upcoming challenges and hurdles in the twenty-first century.

Trajectory

Over time, Singapore has pivoted its economy away from one based on manufacturing to one focused on high-value services. The education system increased its curriculum offerings and variety to achieve this shift, and as a result; Singapore continues to be a top performer in the 2015 PISA assessment (OECD, 2018). Also, this shift will allow the youth to be prepared and to thrive in the twenty-first-century careers.

Character

Tan and Low (2016) wrote communication is key to Singapore's strength in educational reform, and the ability to clearly communicate its policy goals and to ensure the implementation

stays on course. The crucial element is to share the same vision of change among the stakeholders involved. The education system is successful due to its openness to view new ideas and to interact with consultation beyond the educational sector (Tan & Low, 2016, p. 61). Moreover, having a high-quality and robust staff is paramount to Singapore's success, but the education system also has a systematic framework in place to ensure the policy initiatives are delivered uniformly across the country.

China

Context

China has the largest education system in the world, with over 260 million students and over 15 million teachers in 2014 (OECD, 2016, p.9), but the overall quality of education varied across the country. The Ministry of Education has made its top priority to improve the management of the education system, for schools to have access to resources that would overall enhance the learning environment, proposed the National Long-Term Education Reform and Development Plan (2010-2020) to address the deficiencies, this document detailed the national strategies and highlighted the key system reforms (OECD, 2016, p.13). The Chinese government has devoted significant resources including technology-aided hardware and software in classrooms to narrow the inequality in the education system and to raise the learning standards for all students across the country.

Trajectory

China has made a top priority to close the inequality gap in the education system among the remote and minority areas so all people can share in the prosperous growth of the country. Education is seen as a critical mean to support China's economic progress (Wang, 2016). The Ministry of Education has carried out the following for remote, poor, and rural areas, by ensuring students in these areas have access to preschool, primary, and vocational educations. Also, the government has provided subsidies to students of low-income families for essential learning tools and has checked on the progress to make sure the school administrator is building a high-

quality teaching staff. Furthermore, in 2016, the Bureau of Education Inspections is tasked to monitor and to evaluate the quality of the implementation and to ensure all standards and procedures are carried out according to policies (OECD, 2016, p.14), and reviews are performed periodically on the collected evaluation surveys.

Character

China realized its education system needed a major rework to meet the demands of the twenty-first century. According to Deng Xiaoping in 1983, he noted that education should be geared toward modernization and the world, to fulfill these steps, the following needed to happen: First, knowledge is the medium to generate the talents and skills needed for economic development. Second, education is necessary to draw on the expertise and experience of other developing countries. Third, change the way will look at teaching and learning to support the knowledge and competencies that could meet the needs of the future (Wang, 2016). Also, the China education system has implemented numerous strategies and updated its priorities to improve the country's ability to innovate and enhance its competitiveness. China has been fulfilling and updating the necessary policies to meet the future demands of the nation.

Chile

Context

Chile failed to deliver excellence even through an educational reform initiated in 1996, following the end of military rule in 1990 (Bellei & Morawietz, 2016, p.96). The Ministry of Education implemented curriculum reform for primary and secondary education, along with retraining the teachers to adopt the new curriculum. The implementation was not successful, since 2006, students protested to demand a shake-up in the education framework. The demand was for the Ministry of Education to design a quality assurance system that assessed schools according to their performances. The education in Chile continued to struggle due to weaknesses in the implementation from the extreme decentralization of the education system

(Bellei & Morawietz, 2016, p.97). Once again, new policies were on the drawing board to deliver the excellence expected from the students.

Trajectory

Policy initiatives were slow to deliver the expected outcomes, but students were on top of the educational reform to ensure goals met. The educational reforms initiated in 2006 in response to the student's protest failed once again to deliver the results and expectations, students started another rally in 2011, ordered more changes be made due to the insufficient of the previously proposed policies (Bellei & Morawietz, 2016). In response, a reform of the school leadership was critical, offering higher salaries to teaching staff and more assistance for professional development and granting administrator more flexibility in letting go of poor performance teachers (OECD, 2015). According to the Programme for International Student Assessment (PISA) 2015 assessment, Chile continued to perform below the Organisation for Economic Co-operation Development (OECD) average (OECD, 2018). The education reform continued to make piecemeal progress, but the students were monitoring the outcomes very closely.

Character

Leadership and communication skills were the elements lacking among the school staff that needed a revamp. The failure to introduce the twenty-first-century-competencies in the education reform was the result from the fallout from the lack of communication. Although the Ministry of Education made the best efforts to deliver the educational goals, school principals lacked the educational leadership skills needed to address the importance of the message explicitly to their teaching staff, and as a result; led to the difficulty in implementing the new concepts into their daily teaching activities. Therefore, the Good School Leadership Framework introduced in 2005 to raise the standards for teachers and school leaders underwent more professional development to the cover the weaknesses areas including leadership, curricular management, resource management, and management of school environment (OECD, 2015).

Both leadership and communication skills are vital to delivering equity and quality in education and propel students to the next level of excellence.

Mexico

Context

The Mexico education system has become a top priority focus for the country due to the poor performance from students on international tests; proof needed to revamp the public education system (Cardenas, 2016). Thus, the National Congress wanted to increase its influence over the allocation of resources to public education. Public debate among the education stakeholders to come to a consensus of competencies needed to incorporate in the national curriculum. Unfortunately, the government could not come up with the ideal reform plan due to the lack of familiarity with the concept of 21CC (Carrdenas, 2016, p. 133), the lack of understanding translated into a lack of devotion from the education stakeholders to push for the new competencies to be part of the national curriculum.

Trajectory

A substantial investment in the education framework is urgently needed to move up the value chain including reforms aimed to modernize Mexico's infrastructure and to strength their opportunities to develop innovations. Mexico had two parts of the workforce, one which employed high-skilled and well-educated workers, whereas, the other one used with low-skilled work with dated technologies. Therefore, Mexico was willing to invest in the education reform to increase the quality and relevance of education to give all Mexicans equal access and opportunity to succeed (OECD, 2015).

Character

The leaders in Mexico education focused on policies to improve the success of students from diverse backgrounds and delivered quality education across all schools (OECD, 2015). A high-quality education led to a qualified workforce that can foster innovation and support Mexico's transition to a knowledge economy. The importance of allocating the right resources to

provide the most meaningful impact. The Ministry of Education noted the importance to incorporate the digital competencies as part of the new curriculum reform. Mexico has been taking steps to improve their innovation hubs by addressing the weakness through the Special Programme for Science, Technology, and Innovation (2014-2018).

India

Context

According to Natraj, Jayaram, Contrator, & Agrawal (2016), unemployment and socioeconomic inequities marked the post-liberalized era (1990 to Present), the policymakers in the India education pushed for policies to focus on innovation and entrepreneurship, to reduce rural-urban disparities, and to increase employment opportunities. The changing landscape of India pushed education as a top priority in the national agenda; to address the inequality issues and lack of economic opportunities.

Trajectory

Chamie & Mirkin (2017) reported that India is unprepared to accommodate the growing working-age population. Implemented education policies failed to deliver the return necessary to spur the growth of job creations in the economy. An essential review of the implemented systems to ensure there is enough job creation to accommodate the growing demand.

Character

Initiatives implemented in India education failed for several reasons. The following reasons included: the lack of qualified leaders to push out the implementation, these changes would push beyond the social-cultural and economic inequities; failure to prepare teachers to come out of their hierarchical mindsets; and the lacked in preparation to build a shared vision. When these deficiencies rectified; success is on the horizon.

The United States

Context

Reimers & Chung (2016) articulated the failure to address the low quality of public education in the United States, is going to affect the success of our national security. Also, education impacted other areas included employment, productivity, and growth, and the country's ability to compete on the global scale. Investment in the education system ensures the citizens are well-protected from danger and to help the country prosper.

Trajectory

Education leaders and business leaders were pointing out that schools are not preparing students for the jobs of the present and future. More studies needed to be done to review the curricula to ensure that students are coming out of the education system are prepared for the job market. Internship program would enhance the learning for students interested in fieldwork.

Character

The education objective of the United States is to prepare students for global competitiveness and to ensure students have equal access and available resource for them to be successful. Significant progress has been made to grant access to all, but there is room for improvement to ensure students are learning the necessary skills and knowledge to prepare them for future careers.

Commonalities

Government leaders made education a top priority on their agendas. The priority was to prepare students with critical competencies and to learn skills beyond the basics, such as digital, interpersonal competencies, and civic to get them ready for economic participation, citizenship in the new century; to address the issue that all students at least gained a fundamental education (Reimers & Chung, 2016). The importance of relevant learning to meet the permanent change in the job market around the world and to meet the demands that students will face throughout their lives. An excellent education is the most crucial element to improve the chances of landing opportunities. Furthermore, a good education leads to other benefits including healthy lives and to be an active participant in society.

The challenge for all leaders of education systems around the world was to evaluate whether the national curriculum in place was enough to prepare the students for the necessary competencies to shape their future opportunities. The PISA international exam could provide insights into whether students are learning the required competencies to compete in the global market. According to the PISA 2015 assessments, China and Singapore met above the OECD average across the three tested subject areas (math, reading, and science), while Chile and Mexico failed to meet the OECD average across the tested subject areas, whereas the United States scored above the OECD for both reading and math, except for science (OECD, 2018). Educators and policymakers referenced the PISA results to examine the outcomes achieved by other countries and offered the opportunity to learn from other countries' achievements.

Areas of Distinction

Education reforms varied for each country due to the size of the education system, the current educational framework, and the use of technology in their implementation strategies. In this review, we have a noticeable difference in the education system, four countries (China, India, Mexico, and the United States) have a large student population enrolled in the education systems compared to Chile and Singapore (Reimers & Chung, 2016), both countries made education a top developmental priority among their national policies. The small education system in Singapore, for example, has high levels of per capita income, represents a different context than those experienced by a more extensive system like India, with much lower levels of per capita income (Reimers & Chung, 2016). Singapore has a robust developed implementation framework (Tan & Low, 2016) compared to Mexico still working to finalize and to come to a consensus of what competencies needed to part of the education framework (Cardenas, 2016). Much more time is necessary to spend in preparation for the implementation and to develop a proper roadmap in the direction the education leaders are expecting to undertake. Furthermore, technology implementation included software and equipment played a crucial role in assisting education policymakers to narrow the learning gaps in classrooms

across each country. For instance, Mexico has invested a significant portion of their resources into creating technology hubs (OECD, 2018), to spruce up the lack of creativity and innovation, whereas, China, Singapore, and the United States are continuing to invest into their existing technology hubs to find solutions and to solve existing challenges.

Moreover, education stakeholders' expectations varied among the countries reviewed, which education policymakers have to consider when implementing their strategies. The differences in parental expectations influenced the way families engaged with schools and played a crucial role in the student's education. There is a noticeable difference in the involvement observed, "Americans are the most likely to say that parents do not put enough pressure on their children (64%); whereas Chinese are the most likely to say that parents put too much pressure on them (68%); in Mexico 42 percent of those surveyed think that parents don't put enough pressure on students" (Reimers & Connie, 2016, p. 17). The parental expectations will influence the developmental of the curriculum priorities among the different countries.

Conclusion

Leaders from the six countries reviewed made education a top priority on their reform agenda in response to the perception that the demands for labor participation were changing. The investment in the education system will power their countries to the next level of excellence and prepare students for the twenty-first-century workforce. All countries have their difficulties of implementing the changes, whereas the countries that are achieving above the OECD average are still trying to find ways to make improvements to stay ahead of the everlasting changing global environment.

References

- Bellei, C. & Morawietz, L. (2016). Chapter 3: Strong content, weak tools: Twenty-first-century competencies in the Chilean educational reform. In F. Reimers & C. Chung (Eds.), *Teaching and learning for the twenty-first century: Educational goals, policies, and curricula from six nations* (pp. 93-125). Cambridge, MA: Harvard University Press.
- Cardenas, S. (2016). Chapter 4: Curriculum Reform and Twenty-First Century Skills in Mexico: Are Standards and Teacher Training Materials Aligned? In F. Reimers & C. Chung (Eds.), *Teaching and learning for the twenty-first century: Educational goals, policies, and curricula from six nations* (pp. 127-153). Cambridge, MA: Harvard University Press.
- Chamie, J. & Mirkin, B. (2017, August 14). India is unprepared for a near future when it will be the world's most populous country. Quartz. Retrieved from <https://qz.com/india/1051533/india-is-unprepared-for-a-near-future-when-it-will-be-the-worlds-most-populous-country/>
- Natraj, A., Jayaram, M., Contractor, J. & Agrawal, P. (2016). Chapter 5: Twenty-first-century competencies, the Indian national curriculum framework, and the history of education in India. In F. Reimers & C. Chung (Eds.). *Teaching and learning for the twenty-first century: Educational goals, policies, and curricula from six nations*. (pp. 155- 186). Cambridge MA: Harvard Education Press.
- Organization for Economic Co-operation and Development (2018). PISA 2015: Results in focus. Retrieved from <https://www.oecd.org/pisa/pisa-2015-results-in-focus.pdf>
- Organization for Economic Co-operation and Development (2016). Education in China: A Snapshot. Retrieved from <https://www.oecd.org/china/Education-in-China-a-snapshot.pdf>

Organization for Economic Co-operation and Development (2015). Mexico Policy Priorities to Upgrade the Skills and Knowledge of Mexicans for Greater Productivity and Innovation. Retrieved from <http://www.oecd.org/mexico/mexico-policy-priorities-to-upgrade-skills-and-knowledge-of-mexicans.pdf>

Reimers, F., & Chung, C. (2016). Introduction: A Comparative Study of the Purposes of Education in the Twenty-First Century. In F. Reimers & C. Chung (Eds.), *Teaching and Learning for the twenty-first century: Educational goals, policies, and curricula from six nations* (pp. 1-24). Cambridge, MA: Harvard University Press.

Reimers, F. & Chung, C. (2016). Chapter 6: Mapping the landscape of teaching and learning for the twenty-first century in Massachusetts in the context of US educational reform. In F. Reimers & C. Chung (Eds.). *Teaching and learning for the twenty-first century: Educational goals, policies, and curricula from six nations*. (pp. 187- 223). Cambridge MA: Harvard Education Press.

Reimers, F., & Chung, C. (2016). Conclusion: Theorizing Twenty-First Century Education. In F. Reimers & C. Chung (Eds.), *Teaching and Learning for the twenty-first century: Educational goals, policies, and curricula from six nations* (pp. 225-247). Cambridge, MA: Harvard University Press.

Tan, O., & Low, E. (2016). Chapter 1: Singapore's Systematic Approach to Teaching and Learning Twenty-First Century Competencies. In F. Reimers & C. Chung (Eds.), *Teaching and Learning for the twenty-first century: Educational goals, policies, and curricula from six nations* (pp. 25-68). Cambridge, MA: Harvard University Press.

Wang, Y. (2016). Chapter 2: Thinking Big, Acting Small: Lessons from Twenty-First Century Curriculum Reform in China. In F. Reimers & C. Chung (Eds.), *Teaching and Learning*

for the twenty-first century: Educational goals, policies, and curricula from six nations
(pp. 69-92). Cambridge, MA: Harvard University Press.