

**THE GLOBAL EDUCATIONAL  
POLICY ENVIRONMENT IN THE  
FOURTH INDUSTRIAL  
REVOLUTION: GATED,  
REGULATED AND GOVERNED**

# PUBLIC POLICY AND GOVERNANCE

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INVESTOR IN PEOPLE

*To Hakim Mohandas Amani Williams*

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# INTRODUCTION: CONCEPTUALIZING EDUCATION GOVERNANCE AT THE GENESIS OF THE FOURTH INDUSTRIAL REVOLUTION

As the title of this edited volume suggest, we are entering the dawn of the “fourth industrial revolution” – the digital age (see Schwab, 2016) or “Industry 4.0”<sup>1</sup> (discussed in detail below) and the ensuing governance activities (ownership, provision, regulation, and funding) of national educational systems are becoming *gated*, *regulated*, and *governed* as new non-states actors continue to penetrate, recalibrate, and distort the educational policy environment. As the authors in this volume demonstrate, education governance is:

*Gated* commencing with the onset of the new “master of mankind” (Smith, 2005) with the emergence of the General Agreement on Trade in Services (GATS)<sup>2</sup> and the subsequent transition toward servitisation<sup>3</sup> – the drive toward “product-as-a-service providers” (Probst, Frideres, Cambier, Ankeræa, & Lidé, 2016). In this way, the classification, embracement, and trade in education services under Mode 4 of GATS shifts its focus from the discretion of educational providers and state governments to education as a commodity. The commodification of education services in turn redesign national education systems by shifting the trajectories and influences of non-state actors as the global trade system has been overhauled to put workers in direct competition with one another.

*Regulated* by neo-classical ideologies that strip education systems down to the bones through policies of managerialism, corporatism, and neo-Taylorism in education, leading to a focus on competition, benchmarks, indicators, and assessments. Education regulation has its ascendancy in the 1980s during the scaling back of egalitarianism, while actively perusing capital liberalization. Thus, education regulation offers an *à la carte* menu of choices by which governments can now measure and assess themselves against each other.

*Governed* in the sense that the role of the nation state continues to be reduced to one based on the coordination and steering of educational activities that are supplied by a variety of actors.

Rhodes (1997) notes that governance implies an evolution in the meaning of government, suggesting new methods of governing; or a transformation in the rule of law; or the new method through which humanity is overseen. In this volume, the authors explore the intersectionality of the fourth industrial revolution and the *gated, regulated, and governed* aspect of the governance of national educational systems. While it provides insights for the Global South, this volume's lessons are applicable to the changing global education landscape. The authors in this volume, focusing on the "newer" modes and mechanism of governance in education in the Global South, are able to clearly articulate how international knowledge banks, donor agencies, and financial cooperations are using emerging and frontier markets as testing beds for innovation in education governance.

## GOVERNANCE MECHANISMS AND GOVERNING SYSTEMS IN EDUCATION

As Maroy (2009) explains, in the field of Comparative and International Education, "by 'governance models' we mean the theoretical and normative models serving as cognitive and normative references, especially for decision-makers, in defining 'good ways to steer or govern' the education system" (p. 76). Therefore, with the move to horizontal management, education governance now involves the "coordination of differentiated institutional orders or functional systems" or "de-centred, context-mediated inter-systemic steering" (Jessop, 1998, p. 30). To gain legitimacy, governance requires broadly defined complex steering "mechanisms" or "tools" or "procedures" or "instruments" and "governing systems" that are linked to policy decisions. Therefore, "governance tools" (Jules, 2012) and "governance mechanisms" (Dale, 1999) are used interchangeably to describe the means and governability through which national educational systems are coordinated, steered, and regulated. Governance mechanisms (as opposed to markets or hierarchy), Jessop (1997) argues, coordinate complex organizations and systems that constitute governing agents, identities, interests, and strategies. Governing systems are based on the ability to "organize and carry out governing interactions in the face of diversity, complexity and

dynamics” (Kooiman, Bavinck, Chuenpagdee, Mahon, & Pullin, 2008). In education, Dale (1999) suggests that “mechanisms of external policy influence” in the era of globalization and its ensuing activities can be broken down into conventional mechanisms (e.g., policy borrowing and policy learning) and new mechanisms (e.g., teaching, harmonization, dissemination, standardization, installing interdependence, and imposition).

Here a distinction is made between the institutions and agents, that is government, and the modes of coordination, that is governance, that are used to structure complex organizations and systems. The core argument that this volume makes is that educational providers (state or non-state or hybrid modes) are using the “modes” of governing systems or governance interventions (collaborative governance, interactive governance, networked governance, performance-based governance, evidence-based governance) simultaneously with new types of educational governance mechanisms. By “governance modes” I mean the theoretical and normative models serving as cognitive and normative references, especially for decision makers, in defining “good ways to steer or govern” the education system. These types include core values and norms and are simultaneously instruments for interpreting the real situation and guides for action.<sup>4</sup> The strength of this volume is that authors can explain the rise of more modern “modes” of education governance that are driven by external actors. It not only shows that education governance is no longer viewed as a statist obligation or mandate, but it is also seen as being diffused, dynamic, and multiscalar. In this way, education governance systems comprise one or more steering mechanisms.

While both conventional and new mechanisms are complex regulatory instruments, the interaction is coevolutionary but not linear, since they are designed to reduce inefficiency. In other words, governance should be viewed as the coordination and regulation of functional systems such as education. Thus, education governance involves a wide range of actors and actions that use policy as their principle mechanism to generate controlled structural transformations and reforms across national systems. Much of this new discourse has its heredity in the use of new public management (NPM) techniques in education systems to make them more effective and efficient. Thus, governance interventions or governing systems aim at shaping the meaning and practices of the mechanisms for education governance. Broadly, education governance has come to symbolize “the institutions with the authority to make and implement education policies, plus the processes through which this authority is granted and exercised” (Zeehandelaar & Griffith, 2015, p. 12). While some suggest that education

governance explains the “extent to which power and decision-making are concentrated in a central authority or dispersed toward local authorities or schools” (Watson, 2003 p. 4), others contend that education governance is the product of application of “the managerialist approach” (Popkewitz & Lindblad, 2000) to education. At the most general level, education governance symbolizes patterns of social coordination, which are based on networks and markets and places less emphasis on hierarchy and the state. Such a broad definition seeks to situate education theories and practices after the metamorphosis, which occurred in the late twentieth century as the relationship and role between the state and society changed. In today’s changing global climate, I conceive of education governance, as the rules and mechanisms by which various internal and external stakeholders, actors, and institutions influence policy decisions within the governance system, how they are held accountable, and to whom.

But at the end of the day, the aim of all governance mechanisms and tools proposed for education, in theory, is to make the existing system better. Of course, the question arises: Who benefits the most from the use of governance interventions throughout national education systems – clients (students), regulators (governments), providers (state and non-state actors), and/or market (competition)? All the authors in this volume take up this question in one form or another to illustrate the costs, consequences, countermeasures, and complexities of a global policy environment that is increasingly becoming gated, regulated, and governed. The authors in this volume focus on conceptualizing the foundations of governability and the mechanisms upon which they are based. In this context, the governability of national educational systems is closely aligned to the type, scale, and complexity of the educational mechanisms involved. In this way, chapters in this volume focus on both the steering mechanism of educational governance and the elements, modes, and orders that constitute the educational governing system.

## **COMPLEX GUIDANCE AND EXTRA-EDUCATIONAL FACTORS**

In today’s post-global recessionary world, education continues to be cast as the great savior for achieving sustainable growth and harnessing the perceived benefits of the fourth industrial revolution. At the conclusion of the 2016 World Economic Forum, Schwab (2016) argues that the so-called

fourth industrial revolution, the digital revolution, has commenced. At its heart, the fourth industrial revolution is the seamless integration of horizontal and vertical physical, digital, and biological worlds. In making this argument, Schwab (2016) makes a distinction between the first industrial revolution, of the late eighteenth century, that was driven by mechanized production and powered by water and steam. The second industrial revolution, one hundred years later, relied *inter alia* upon the division of labor and used electric power to facilitate mass production. Again one hundred years later, the third industrial revolution automated production through electronics and information technology (IT). Now, the fourth industrial revolution expands upon the digital revolution of the third industrial revolution by using cyber-physical systems that blur the lines between the physical, digital, and biological spheres. The emergence of another flashy catchphrase, in this case, the fourth industrial revolution or Industry 4.0 – the digital age – is symbolizing the ways in which we are describing the movement from the knowledge-based economic systems of globalization to new and evolving systems driven by innovation and disruption within core industries and sectors, such as, education, health, and business. We are being told that we are entering a new era defined by “capitalism 3.0” (Barnes, 2006) or “globalization 3.0”<sup>5</sup> (Friedman, 2005) as automation converges with data exchange technologies through the blending of the cyber-physical systems.

Educational priorities across the globe are experiencing profound shifts marked by new business models (public-private partnerships), disruption of incumbents (arrival of non-state actors), and the reshaping of educational delivery services and modes (in the form of open educational resources<sup>6</sup> – i.e., open sources, open practices, open courses, and open access). As such, the fourth industrial revolution and its ensuing mechanisms have the potential to revolutionize national education systems for good or for worse. By mechanisms, I mean new technological capabilities, such as, (i) “disruptive innovation” (Christensen, 2013), that is, the displacement of historical static systems, and (ii) the “Internet of Things” (IoT) (Ashton, 2009),<sup>7</sup> that is, the movement away from human-to-human or human-to-computer interaction – that are transforming national education governance activities (Abu Mezied, 2016; Schwab, 2016). It is even more important that if the globally agreed upon Sustainable Development Goals (SDG) are to be successful, they must be aligned with the technological advances of the fourth industrial revolution. Before I highlight, with the aid of examples, the impact of educational mechanisms of third industrial revolution and, to some extent, the rise of fourth industrial revolution educational mechanism, I will first discuss the role of education in the previous industrial revolutions.

*Education and the Industrial Revolutions*

Under the first industrial revolution, the industrial age propelled by steam power, public education was massified to meet the industrial demands, and post-colonial societies and cities expanded as people migrated from farms to factories. During this period, education “for the industrial age, [focused on] the hidden curriculum [which] had components like following directions, showing up on time, respecting authority, and sticking to the standard modes of learning and doing” (as cited in [Blinder, 2006](#), p. 5). Education during the second industrial revolution, energized by mass production, cemented the shift from manufacturing to services. The advances in Information and Communications Technology (ICT) lead to the third industrial revolution, or the *Information Age*, transforming national education systems by extending the service offerings available to “clients” and “consumers.” The third industrial revolution facilitated the movement in universities from focusing on creating well-rounded and critical thinking citizens to a student-as-customer model. Under these models, the offshoring of national education systems and products were developed as the new orthodoxy as educational services became one of twelve core service sectors under the GATS. This implies that the shift from the third industrial revolution (founded on IT) to the fourth industrial revolution that amalgamates technologies across different fields – health, transport, and education – and blurs the lines between physical, digital, and biological spheres in an era premised upon high technology and a demand economy. These new technologies that distort the lines between reality and cyberspace will disrupt the governance activities of national educational systems.

The dynamics of emergent technological innovations in an era of increased competition are giving rise to rapid changes in fields, such as, artificial intelligence, robotics, autonomous vehicles, 3-D printing or additive manufacturing, nanotechnology, biotechnology, materials science, energy storage, and quantum computing. The fourth industrial revolution suggests that in education we might see new “mechanisms of ‘parallel organization’, operating on the basis of multilevel consensus, often functioning side-by-side with traditional [educational] bureaucracy” ([Heckscher & Applegate, 1994](#), p. 2). The two mechanisms (IoT and disruptive innovation) of external effects of the fourth industrial revolution are likely to impact national education developments.

On the one hand, disruptive innovation is reshaping how businesses and other organizations function. Unlike sustaining innovation, which focuses on improving existing products, disruptive innovation creates innovative

markets and products and reshapes entire industries, as occurred, for example, with television (Netflix), hotel (Airbnb), classified ads (Craigslist), telephone calls (Skype), record stores (iTunes), research libraries (Google), local stores (eBay), taxis (Uber), and newspapers (Twitter) (see Economist, 2013). As Christensen, Horn, Caldera, and Soares (2011) note,

[Disruptive education] is the process by which a sector that has previously served only a limited few because its products and services were complicated, expensive and inaccessible, is transformed into one whose products and services are simple, affordable, and convenient and serves many no matter their wealth or expertise. (p. 2)

Disruptive innovation is also making its ways into higher education where it is for, for example, redefining traditional ways in which universities deliver content, curriculum, and teaching and gradually replacing them with new alternatives (Dennis, 2016; Robinson, Morgan, & Reed, 2016; Thompson, 2016).

On the other hand, IoT, where “things” are wirelessly connected via smart sensors (Ashton, 2009; Pretz, 2013), is a relatively new phenomenon that has expanded in several sectors ranging from transportation and healthcare to the automotive industries (He, Yan, & Xu, 2014; Joshi & Kim, 2013; Li, Xu, & Zhao, 2015; Pretz, 2013). Li et al. (2015) argue that “the words ‘Internet’ and ‘Things’ mean an inter-connected world-wide network based on sensory, communication, networking, and information-processing technologies, which might be the new version of information and communications technology (ICT)” (p. 244). Numerous analysts claim that the IoT will bring vast societal changes and economic growth driven by the “ubiquitous connectivity and intelligence, where a set of components, products, service and platforms connects, virtualizes and integrates everything in a communication network for digital processing” (Friess & Riemenschneider, 2014, pp. 5–6), which in turn will connect people’s professional and private lives. It is the connectability and the harnessing of services across the IoT that is likely to greatly impact national educational developments as well. With the liberalizing and commercializing of all kinds of educational services under the so-called four modes of supply of GATS, which “rearticulate the nature and form of education and its governance through [...] to make education systems and education provision within nation-states more amenable to a global accumulation strategy” (Robertson, Bonal, & Dale, 2002, p. 479), national systems are likely to increasingly become susceptible to the IoT. In commenting on the damage done in the wake of liberalizing education in small (and micro) states, Mayo, Pace, and Zammit (2008) suggest that distance learning “with its

flexibility, individually tailored programmes and liability for yet another form of cultural invasion, occupies the space left vacant because of the non-existence of universities (potential providers of extension learning services and continuing education) in many small states” (p. 223). It is known that the IoT creates an “open, global network connecting people, data, and things” through the “use of synergies that are generated by the convergence of Consumer, Business and Industrial Internet” (Vermesan et al., 2014, p. 17). In education, the IoT has already given rise to new forms of interaction between teachers and students, for example, by expanding teaching and learning processes and broadening the environments in which students learn (Marquez, Villanueva, Solarte, & Garcia, 2016). Thus, in education, the IoT implies a movement toward a “new ecology, [that will be] transformed by everything being connected” (Manu, 2015, p. 6). While there is no evidence that current models of education will be replaced quickly with robust and other forms of artificial intelligence, there is growing consensus that the “smart teacher” will have to adapt to more user interface driven technological systems that use sensors and embedded systems (see Bloem et al., 2014; Sorensen, 2016). The integration of IT and Operational Technology (OT) is giving rise to “ubiquitous computing” (Weiser, 1991)<sup>8</sup> now called “pervasive computing”<sup>9</sup> where micro-processors are implanted within objects that remain consistently available to communicate information.

The ability to use information collected from Big Data, mobile devices, sensors, machine learning, and the IoT and the usage of this information in new ways is a core characteristic of the fourth industrial revolution. This so-called “sensor-derived data” is based on real-time analytics where people want technology to do more for them than just be communication tools. This in turn allows companies, businesses, schools, and universities to obtain, hold, and interrogate enormous volumes of data to increase efficiency, customization, and automate decision-making as they respond to the changing patterns of consumer behaviors. In education, students are already treated as “customers” needing “unique experiences” that are tailored to them. In education, an ever increasing datafication (Ozga, 2009; Resnik, 2016) of policy-making decisions – cf. “evidence-based” and “evaluative state” models that rely on league tables, rankings, and other international comparative target achievements (ICTAs) (Meyer & Benavot, 2013)<sup>10</sup> – is expanding the “global education industry” by allowing new non-state actors to compete (Ball, 2012; Steiner-Khamsi, 2016). These new non-state actors (e.g., transnational corporations, civil society organizations, credit rating agencies, consultancies, and public-private partnerships)



are changing the governance environment as they are increasingly contracted to deliver educational services and educational governance that were once provided by the state. Within this new educational reality, there is also a movement away from the development of certain skills for a knowledge-based economy toward credentialization, that is, the earning of degrees to advance in the job market. Given the transformation of the delivery modes of education, education systems today are expected to be “testbeds for innovation.” For example, in higher education, the rise of Massive Open Online Courses (MOOCs) – a term that was coined in 2008 to describe the pedagogical modes of Connectivism and Connective Knowledge (CCK) – is often replacing traditional “place-based” teaching modes (Abu Mezied, 2016). The rapid rise of MOOCs has created new business models and new markets for providers of higher education. While studying the impact of new mechanisms of external effects is a relatively new field of inquiry in Comparative and International Education, there is growing consensus that these new mechanisms are the new game changers, particularly given the rise of non-state actors in education.

Unlike previous industrial revolutions, the fourth industrial revolution differs in its speed, scale, complexity, and the power of transformation since it is based upon disruption, knowledge-sharing, and servitisation. The convergence of traditional industries and the digital sector has given rise to the fourth industrial revolution that blurs the lines between reality and cyberspace. In this new model, the customer is placed at the center of personalized services that are integrated into smart products. The current education climate is failing to prepare an embattled generation for work and, therefore, education governance is in a crisis of legitimacy and new innovations are being sought. In fact, the youth entering today’s turbulent and rapidly evolving labor market must also conform to the “speed of change” – less time to adopt – and “the ubiquity of change” – all sectors will be impacted – that will disrupt how we work (Infosys, 2016). Thus, national educational systems will have to adjust to new modes of governance as:

Emerging technologies in Artificial Intelligence, deep neural networking, and machine learning enable us to reimagine the possibilities of human creativity, innovation and productivity. As technology continues its rise, absorbing our mundane and routinized tasks, we must understand our calling to something greater – to be better, something more. This is the promise of our great human potential – that we are more than the sum of our knowledge of the past: it is precisely our learnability, on the things we don’t know, that will open a new future for all of us (as cited in Infosys, 2016)

As Schwab (2016) notes, “... talent, more than capital, will represent the critical factor of production ...[giving] rise to a job market increasingly

segregated into “low-skill/low-pay” and “high-skill/high-pay” segments, which in turn will lead to an increase in social tensions” (p. 12). Under this model there is a movement away from education for knowledge-based industries toward education-for-innovation and education-for-creativity<sup>11</sup> as machines continue to play more intelligent roles in our lives. For example, in education, Cyber-Physical Systems (cps) can be created by combining machine-to-machine communications (m2m) and IoT to determine whether or not pupils are attending school. This data on education tracking and attendance, this so-called *M-education*, captures, analyzes, and patterns data for more efficient decision-making. In fact, national governments are being told that they should embrace the “velocity, scope, and systems impact” of the innovations and disruptions that the fourth industrial revolution will unleash, given that it “is evolving at an exponential rather than a linear pace” (Schwab, 2016, pp. 10–11). Thus, the fourth industrial revolution calls for governance modes and mechanisms that operate to produce the desired skill sets that labor markets need – technological and liquid skills – adoptive and flexible skill sets.

## CONTENTS OF THE BOOK

This book is divided into three parts. Part I discusses how the hollowing out of the state under NPM has given rise to post-bureaucratic practices and contemporary *modi operandi* (or modes, styles, and arrangements) of education governance. The chapter suggests that NPM is a disruptive innovation and explains how it displaced the prominence of the welfare state education strategies through external and internal pressures. It explains how education governance is framed globally by managerialist principles and procedures. This chapter argues that education governance is sustained by a multitude of entities, actors, and institutions and it occurs across different scales. The chapter then describes the intensifying of education governance and highlights how the widening of the education landscape to include newer actors is creating a progressively global public sphere where policy decision-making is transnational and multilevel. The chapter concludes by posing that governance of education is now ascending as a “wicked problem.”

Part II, “Educational Mechanism of Governance,” explores the processes (or mechanisms) of governance that both private and public, states and non-states actors, agents and institutions exploit in reforming education

systems. Attention is given to policy tools that shape, regulate, steer, and coordinate the activities of education governance. Authors in this section illuminate “how” and “why” certain educational mechanisms emerge as solutions to problems and where legitimacy is derived from when educational mechanisms face local contestations. The educational steering mechanisms discussed in these chapters are path dependent in that they are disrupting national education systems while seeking to construct a “global education industry” (Verger, Lubienski, & Steiner-Khamsi, 2016).

Gita Steiner-Khamsi explains how the education governance mechanism of policy borrowing – reception and translation – is reshaping teacher accountability in Kyrgyzstan. In drawing attention to local adaptation of global reforms, she shows how the different education governance mechanisms of educational policy borrowing and lending are shaping, and in some instances giving rise to, new and emergent forms of education governance. In making this claim, she focuses on what can be called a “banking model” of education transfer – where countries are viewed by international knowledge banks (IMF, World Bank, and OECD, etc.) as pure recipients of policy prescriptions – and its consequent effect on national education governance structures. She argues that education governance mechanisms are multiscalar and multispatial and they are inspired by the policy actors operating simultaneously across different educational spaces, such as, the local, regional, or global. Unlike previous research that has concentrated on the recontextualization of international policies at the national level and the impact on education governance, in this chapter Steiner-Khamsi advances a methodological approach of the governance mechanism of policy borrowing research to decipher the temporal and spatial metamorphoses that transpire during transitory policy periods. In using post-socialist education systems as an example, Steiner-Khamsi argues that since policy actors operate simultaneously in two or more educational spaces or Umwelt (environment), they are part of the “socio-logic” of “reference societies,” since they find themselves in situations where they have “to retroactively define the local problem that fits the already existing global solution or reform package” (p. 37). In recognizing the multiplicity and multiscalearity of the changing educational policy landscape, she discusses the precursory policy conditions that cross-national policy attraction creates, thereby generating fertile ground for the emergence of new forms of education governance to arise. Most prominently, her contribution underlines how exogenous actors and institutions influence the use of distinctive internal governance mechanisms that are generated depending on the policy crisis narrative that is induced locally. When read alongside

the other chapters in this volume, Steiner-Khamsi's focus on reception and translation raises fascinating theoretical and methodological questions for comparative policy and the rise of new education governance mechanisms.

Tore Bernt Sorensen, on the other hand, explicates a different aspect of teacher professionalism policy by drawing attention to how international knowledge banks are redrawing the national geometries of education governance through assessment models, such as, the Organization for Economic Co-operation and Development's (OECD) program Teaching and Learning International Survey (TALIS). In discussing a new era of regulatory governance that has consequences for the post-Brexit (the withdrawal of the United Kingdom for the European Union) European project, Sorensen explains how education cooperation or "educational diplomacy" (Jules, 2016) in teacher education policy is emerging as the new orthodoxy. As the global educational policy field recalibrates itself after the post-2008 global recession, cooperation in education is producing new policy bedfellows that are creating, managing, and promulgating "Knowledge-Based Regulation Tools" (Rinne & Ozga, 2013). He elucidates that teacher policy and teacher workforce has now caught to market-based regulatory spaces that place emphasis on competition and comparison through the development of benchmarks and indicators for teachers. In discussing the rise of new governance mechanisms in education, Sorensen explains how the use of statistical indicators to measure teacher quality and effectiveness have catapulted TALIS as a new type of educational regulatory regime. He describes how during the last 50 years, international knowledge banks have been using problem-solving theory to promote teacher reforms as way to achieve national goals (quality and efficiency of education systems) and internationally agreed upon benchmarks (e.g., Education for All, Millennium Development Goals, and the Sustainability Development Goals). He views the political cooperation that engulfs TALIS as a distinctive macro-phenomena and seeks to capture the underlying dynamics of its processes by focusing on the generative mechanism, information-processing policy instruments, and two contextual conditions – knowledge-based economy and education will remain a labor-intensive sector – involved in regulating and governing TALIS. First, as an information-processing policy instrument, TALIS is geared toward the creation of a common space of educational measurement that is governed extraterritorially. Second, two contextual conditions are at the center of TALIS's role in promoting market-based teacher education policy reforms. In this way, he advances that the focus on a mechanism, from an anamorphous critical perspective that views events, structures, and powers as defining factors of contextual conditions, allows us

to understand how comparison (through common measurements) become the basis for policy intervention. Thus, within the global education policy field, we are witnessing a new regulatory mechanism (information-processing policy instruments) that measures learning outcomes to dedicate policy interventions.

Halima-Sa'adia Kassim explores the rise of collaborative governance in higher education by using the example of a Gender Equality (GE) Scorecard which seeks to measure accountability, build awareness of a problem, interpret the meaning of (in)equities, and move to action. Kassim convincingly articulates that exogenous policy pressures are cementing the GE Scorecard as an emerging example of collaborative governance interventions education. As an education governance mechanism, collaborative governance in higher educational institutions (HEIs) is not only a management practice but also a performance monitoring apparatus embedded within the consultative process of participation. Her work draws attention to the rise of quasi-market regulatory instruments in education that are rooted in new forms of data-driven education governance and decision-making mechanisms; in this case, the use of collaborative governance. In exploring the *raison d'être* for establishing performance monitoring governance interventions, such as GE Scorecards, in HEIs, she advances that it is rooted in the "politics of comparison," which relies on maximizing the use of existing data that universities are already collecting through different information-gathering processes. In focusing on gender, she uses the experiences of GE Scorecards that have been advanced by international development agencies and universities and applies their lessons to the University of the West Indies (UWI). She discusses how UWI, for the first time, in articulating gender in its Strategic Plan, 2012–2017, is seeking to develop a form of collaborative governance. Kassim poignantly articulates that within HEIs, GE Scorecards not only measures institutional effectiveness and market-based approaches to education governance but it also allows HEIs to track student and faculty performance through the use of ratings and rankings. Kassim suggests that any HIEs seeking to use its strategic plans to promote gender equality and equity needs to develop a "new conceptual grammar and creat[e] a legitimate organizational gender space" (p. 88). Moreover, a GE Scorecard is an active governance tool for influencing the outcome of policy-making priorities. GE Scorecards are governance interventions that rely on the governance mechanisms such as collaborative governance and interactive governance. In other words, HEIs are using collaborative educational governance mechanisms (such as gender scorecards) to track, monitor, and evaluate student's and faculty's

performance related to the appropriate structures and processes to institutionalize gender.

Tavis D. Jules and Sadie Stockdale Jefferson explore the events that have given rise to an untraditional set of actors into the fora of education governance. Their chapter chronicles the corporatization of educational governance through regulatory mechanisms, such as, benchmarks, league tables, indicators, and credit rating agencies. Jules and Stockdale Jefferson suggest that whereas older actors in education, such as aid donors and international financial institutions, provided technical assistance that was linked to “loan conditionalities,” today national governments are hiring professional management consultants to regulate, steer, and govern their national education systems. They argue that the use of NPM to strip away bloated bureaucratic practices has left national governments with no other choice but to use the services of external actors or what they call “educational brokers” who will often recommend neoliberal educational governance mechanisms as policy solutions. In the second part of the chapter, Jules and Stockdale Jefferson broadly explain, with the aid of examples, the various mechanisms (knowledge-based, hybrid, performance-based, and extra-territorial) of education governance that newer actors are employing. In short, these more modern mechanisms of governance are premised upon steering, cooperation, and collaboration between equals.

Part III, “Modes of Educational Governance,” draws attention to the governing systems that often employ different mechanisms in their role of governability and steering of national educational systems. In other words, chapters in this section focus on the *modi operandi* (or modes or interventions or governing systems) of governance rather than the processes (or mechanisms) of governance that both private and public, states and non-states actors, agents and institutions utilize. These chapters examine the “flipside” of the education governance; that is, those responsible for steering, coordination, and regulating policy activities.

Alexandra McCormick discusses the changing dynamic of regional integration in the Oceania and the Pacific region and the types of new actors that are emerging as education is integrated into regional systems. She employs a critical educational policy approach to discuss how civil society organizations (CSO) and coalition participation in education and development policy processes are utilizing network education governance in Oceania and the Pacific region. By focusing on the governing system of networked governance instead of its ensuing mechanism that actors (in this case CSOs) employ, she observes the multiple level education policy activities that players undertake when using a new mode of governance. In

drawing on Steven Carney's notion of "policyscapes," McCormick dissects the intricacies of the rise of modes of multilevel networks and processes within education. The chapter reflects how external actors steer educational mechanisms of development for their own benefit. In considering the role of various stakeholders and exogenous actors, she suggests that these CSOs represent new forms of multilevel networked governance. She focuses on how the ongoing processes and spaces of decolonization are being transformed by new modes of networked governance. As new CSOs are entering the educational aid landscape, the chapter draws attention to the manner in which these new modes of governance are being employed to measure success. Additionally, McCormick explains how the ascendancy of global regulatory mechanisms, such as EFA, MDG, and SDG, are distinctive forms of actor-driven regulatory facets of education governance that have given rise to "new" donors and actors. She points out that changing relationships in the global architecture has allowed for the proliferation of unexperienced actors. Yet, much of the regulation of education in Oceania and the Pacific region is dictated by former colonial powers. As such, the chapter discusses how, historically, CSO participation has been missing from educational mechanisms in development, such as sector-wide approaches (SWAps), that takes stock of the role and influence of actors in advancing different modes of governance.

Kristina Hinds articulates how the disruption of the post-colonial "social contract" between the Government of Barbados and its citizens is giving rise to the ascendancy of collaborative educational governance as the *de facto* mode of steering. She explains how the indigenous "Barbados Model" of social provisions steeped collaborative educational governance and, "institutionalized [in a] tripartite 'Social Partnership' between the state, private sector, and labor representatives" (p. 181). Now seen as an exportable governance model by international knowledge banks, such as the Economic Commission for Latin America and the Caribbean and International Labor Organization, to other small island developing states. Using the introduction of tuition fees at the Cave Hill campus of the University of the West Indies, she explains that governance modes such as collaborative governance that were responsible for shaping the "Barbados Model" were altered once the country began to experience crisis. Hinds notes that the crisis was the impetus for the shift from collaborative educational governance based on participation to educational governance grounded on "decision-making by surprise" (p. 177). She explained how the emergence of the post-colonial development bargain in Barbados after independence paved the way for the development of a "Social Partnership"

based on mode of collaborative governance. Under the collaborative mode of governance, the Barbados government promised its citizens that it would pay its obligations (and student tuition fees) to UWI so that Barbadians students could attend UWI for free. When the Barbadian government reneged on its promise and became delinquent on its UWI obligations, the government changed the *modus operandi* of its governance mode from one centered on participation by the electorate to one grounded in strategic choice without citizenry consultations. Ultimately, she shows that the movement from one mode of governance to another is driven by external actors.

Huma Kidwai and Monisha Bajaj in their chapter draw attention to how regions and the political projects of regionalism are shaping nations' educational frameworks. They show how the emergence of new (or open) regionalism in South Asia is creating regional spaces for education that are driven by cooperation and collaboration as there has been a retreat toward regional trading agreements (RTAs). As International Non-governmental Organizations (INGO) seek to fill the implementation void left by state-lead regional projects, Kidwai and Bajaj suggest, that we are witnessing the rise of a mode of governance in education based on "informal regionalism" across transnational and advocacy networks. What makes this chapter unique is that in treating regionalization as sub-level processes that are part of the movement from regionalism toward interregionalism, they clearly articulate how new regional actors, such as Asia Europe Meeting (ASEM), enter and influence the education governance landscape. Education governance is no longer controlled, except for global projects such as globalization and international knowledge banks; according to Kidwai and Bajaj, South Asian governments are moving away for the "rhetoric of regional cooperation" toward intensive forms of regionalism that are not state-lead but non-state-actors-driven configurations. While this chapter does not draw attention to the specific education governance mechanisms (regional standards, benchmarks, and targets) that are used to facilitate non-state-led regionalism, Kidwai and Bajaj suggest that non-state actors, in unifying national interests at regional level, are also competing with each other. To illustrate this point, they discuss the role of South Asia University, founded in 2010, which is open to citizens from the eight counties of the South Asian Association for Regional Cooperation (SAARC). To this end, they highlight how non-state actors are shifting the geometries and trajectories from regionalism to interregionalism and how this change is reshaping the traditional contours of South-South Cooperation in education. In essence, CSOs and the new actors of "informal regionalism" are not only acting



and promoting newer forms of education governance mechanisms (such as cooperation and collaboration) at a regional level, but these entities are also shaping interregionalism by applying technical expertise learned at home to cross-border and neighboring contexts, settings, and space. Thus, the education governance mode of informal regionalism is driven by intra-regional and inter-regional partnerships that are steeped in the processes of interregionalism.

Nigel O. M. Brissett chronicles the movement from a mode of education governance system based upon enabling (“growth driven education governance”) to once categorized by regulating and controlling (“regulatory control education governance”) of the tertiary (or higher education) sector of Jamaica. In essence, he suggests that Structural adjustment programmes (SAPs) and NPM are the core educational mechanisms of growth-driven education governance, while regulatory control educational governance is based on market mechanism. In making this argument, he shows how the uncritical transfer of global discourse and their mechanisms of governance, such as, NPM, knowledge-based economy, and GATS, have given rise to national and regional regulation and control in education. He discusses how the rise of governance modes at the national (and regional) levels are emerging and changing as new players enter the tertiary education market in Jamaica. He does this by drawing on the rich traditions in critical education policy studies to establish an analytical framework for understanding the conditions, process, history, and power that stakeholders have in shaping tertiary educational governance. In doing so, he explains how the policy environment in which governance issues are framed, the numerous stakeholders involved, and their relative levels of power and interests in various governance policy outcomes are responsible for ultimately shaping the educational policy values of stakeholders that in turn dictate the modes of education governance that arise. In this way, he shows how different policy values are validated and how these values are then used to inform the development of education governance mechanisms by actors across different scales. For Brissett, the policy circumstances that shape stakeholder action at various levels shed light on the emergence of various forms of governance. In describing the commencement of growth-driven models of education governance, Brissett discusses how regional and international policy discourses challenged the traditional university system and thus resulting in expanded education arrangements. This expansion has led to the entry of new public and private universities into the market, inter-institutional collaborations, and creation of new programs. Brissett suggests that regulatory control of tertiary educational governance was the

byproduct of the twin forces of: (i) the Jamaican government seeking to fulfill its regional commitments to the Caribbean Community (CARICOM), particularly under the provisions that call for the movement of people to establish the Caribbean Single Market and Economy (CSME) and (ii) the Jamaican government's undertaking of its World Trade Organization/General Agreement on Trade in Services (WTO/GATS) modes of service delivery commitment itself to providing equal treatment for indigenous and "offshore" tertiary institutions that are domiciled outside of Jamaica.

Emel Thomas and Peter Clegg compare and contrast the different modes of education governance that Dutch and British exercise over their sovereign overseas territories. They explain that while both the Dutch and British governments use the discourse of "partnership," "prosperity," and "renewal" to describe their governance approach in their overseas territories, in reality the mode of governance the British use is a slightly more detached approach, while the Dutch are more hands-on. While this chapter focuses on the Caribbean, it is unique in that it compares how two different metropolitan powers govern their foreign systems. Employing different modes of education governance in their respective metropolises sheds light on how metropolitan powers view the role of educational systems in their respective colonies although education policy-making falls under the jurisdiction of a territory's government. Thomas and Clegg suggest that when taken together, the governance modes in metropolises are never intended to be permanent features but they are merely stepping stones toward independence. Thomas and Clegg highlight the tricky situation of overseas territories. On the one hand they are sovereign and autonomous (in domestic matters). On the other hand, their foreign policy is externally controlled and they are subsidized by foreign aid from metropolitan parents. However, in some cases, particularly in the Dutch territories, where self-governing autonomy is the norm, there are isolated examples of collaborative governance at work, as in the case of Aruba. However, the new orthodoxy has been governing education at distance, whether or not territories are integrated into the metropole (as in the Dutch case), where mainland policies now dictate the standards of governance that overseas territories must uphold. The mode of governing educational systems from a distance allowed the Dutch government in 2010 to incorporate the educational systems of the Dutch territories into the mainland of Netherlands located more than 7,000 kilometers away. Education governance from a distance, Thomas and Clegg claim, is premised upon the governance mechanism of "intervention" and "control." Intervention in the sense that

the metropolises dictates the modes of education governance to be used locally. Control in that the metropolises steers the activation of education governance – funding, provision, ownership, and regulation. Thus, education governance from a distance in the overseas territories has resulted in a watered-down system that is being pulled in different directions.

Rolf Straubhaar discusses the educational evaluative state as a mode of education governance in an era denominated by the “hyperbureaucratic state” that is fixated upon the mechanism of accountability. In analyzing the Hispanophone and Lusophone academic education literatures of Latin America, he suggests that there is a movement from the governing of educational systems toward to the evaluation of educational systems. In essence, the newer mode of education governance arising in Latin America is premised upon the evaluative criteria that is incorporated into evidence-based policy-making rather than focusing on steering or coordinating the mechanisms of governance. Straubhaar proposes that the change in the mode of governance in education throughout the region can be attributed to rise of competitive international assessments and the need by governments to provide better social safety nets to alleviate inequality. Straubhaar in using a critical policy genealogy argues that the shifting contours of education governance driven by the mechanism of accountability is not an outcome of deeper regionalism but one based upon the application of neoliberal solutions to indigenous challenges. In asserting that the regional discourse, around the mode of education governance that nation states employ, is driven by external actors he is claiming that the accountability-driven mechanism is emerging as “best means of enforcing and measuring educational rigor, ... to the point where their enforcement becomes the state’s primary reason for being”. In essence, the evaluatively driven mode of governance has been accepted as being legitimate way to correct financial crisis that gave rise to the lost decade of 1980s – where foreign debt exceeded national income. At the end of the day, Straubhaar argues that although the educational evaluative state is greatly influenced by neoliberal and neoconservative ideologies in national and regional ministries of education, it has not brought about the intended results of distributive equity.

## **CONCLUDING THOUGHTS**

Competitive forms of market regulation, education liberalization, and neo-corporate approaches to the management of education systems became the

dominant prescription to fix the failure of national education systems. To solve many of the challenges associated with governance, national education systems have turned to the market, civil society, and public-private partnership for universal responses to local and global difficulties. Thus, new styles of governance have arisen as a stopgap mechanism to plug the perceived failures of government in education. The central thinking was that the “hollowing out” of national governance was occurring, and the state’s role in governing education was shifting correspondently as the role of the state changed. This trend suggests that as *de jure* sovereignty of nation states was gradually lost, old and new state powers were being displaced by the denationalization of statehood, de-stratification of politics, and the internationalization of policy (Jessop, 2002, 2004). While the relationship may be asymmetrical, state and non-state actors share a high level of interdependence.

The “why” in education governance in Comparative and International Education has been explained by the fact that states are no longer the sole actors responsible for coordination of the activities of governance; that in addition to the orthodox modes of governance new ones are needed; that diverse, complex societal challenges across different scales need different forms of governance. Governance in our interconnected and interdependent society needs “interactive, social-political structures and processes stimulating communication between actors involved” (Kooiman, 2003, p. 3). In fact the intervention of international knowledge banks (IKBs) – World Bank, International Monterey Fund and UNESCO – in education has given rise to “educational fundamentalism” – the drastic increase in funding for education from the IKBs (Jones, 2007), “educational multilateralism” – the ascendancy of “embedded liberalism” as core attributes and mandated multilateralism institutions (Mundy, 1998, 1999, 2007) and “educational regionalism” – the coordination of resources at the regional level by supranational organizations or “trans-regional regimes” (Jules, 2012). As we become more interconnected so will national education problems and systems that are rooted within multifaceted local, national, and global political economies. In this context, the nature of governance is changing as non-state actors and institutions are expected to be the custodians of national reforms given that “the scalar division of education governance become new variables that introduce complexity to education reality and, consequently, to education analysis” (Verger, 2009, p. 381).

In sum, education governance now sits at the intersection of the activities that regulate the flow of transnational processes of the global commons; it now requires new strategies that are *hybrid* and *multi-judicial*

in scope that can connect *plural stakeholders* through networks (Bevir, 2011). Education governance *modi operandi* have evolved to the point that it combines market mechanisms with administrative arrangements. For example, under *hybrid education governance*, parents exercise quasi-market choices (voucher systems and charter schools) in existing administrative and bureaucratic arrangements (school district and ministry of education). *Multi-judicial education governance* occurs across different scales by combining people and institutions from various sectors. And since many third party organizations now deliver education services, *plural-stakeholders* operating under the banner of education governance, range from philanthropic organizations to advocacy collation, which uses a variety of new institutional designs that include public-private partnerships and collaborative governance. In fact, many modes of governance that have devolved to the education sector have their ascendancy in challenging the conceptualization of the nation state or have resulted from complex new practices that have produced unintended consequences.

The diversity and reach of different and new forms and modalities in the institutions and sectors of education are proliferating rapidly. These new forms and patterns of power are at the heart of institutional and political frames that comprise our educational institutions. Thus, education governance is a problematic phenomenon to describe since it has become an all-encompassing phrase and scapegoat for everything that is right or wrong about national educational systems. If educational systems are functioning correctly and meeting targets and benchmarks, be they national, regional, or global, we say that they are governed well. When educational systems do poorly or perform inadequately on league tables, international assessments, and benchmarks we blame it on poor “educational governance.”

Tavis D. Jules  
*Editor*

## NOTES

1. Industry 4.0 was coined in Germany as a way of defining the digitization of manufacturing and the impact of emerging technologies on automation and data exchange.

2. The four modes of supply are (i) cross-border supply: provision of education services at a distance, such as e-learning or in other distance learning programs; (ii) consumption abroad: the consumer (in educating the student) travels to another country to access the service; (iii) commercial presence: the service company

(university) sets up a subsidiary abroad, such as a branch campus; (iv) presence of natural persons: one person (education professional, researcher, consultant, and teacher) travels and provides a service in another country.

3. This term comes from the business world and it implies that manufactures are moving away from a transactional approach – making and selling of goods – to a more relational approach based on providing product-centric services that are integrated within their products.

4. This model is used in cognitive approaches to public policies and it is viewed as a close concept that is closely related to “*référentiel d’action publique*” or “policy paradigm” and it is used in emphasizing the existence of cognitive and normative orientations that often adjust the definition of political actors’ problems and solutions in various areas (Jobert, 1992; Maroy, 2009).

5. Friedman (2005) argues that globalization 1.0 commenced with the opening up of trade routes between the “old” and “new” worlds from the fifteenth century to the nineteenth century. Globalization 2.0, although interrupted by the great depression and two World Wars, is dated from the turn of nineteenth century to end of the millennium.

6. Open educational resources (OER) is defined as the “teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions. Open licensing is built within the existing framework of intellectual property rights as defined by relevant international conventions and respects the authorship of the work” (UNESCO, 2012, p. 1).

7. In 1999, Kevin Ashton coined the term Internet of Things to explain a new type of internet whereby we “empower computers with their own means of gathering information, so they can see, here and smell the world for themselves, in all its random glory” (Ashton, 2009, p. 1). While the European Union embraced the concept in 2009 with the creation of the European Internet of Things Research Cluster (IERC) it was not until the creation of the digital single market in 2015 that the concept gained wider recognition.

8. Weiser (1991) defines ubiquitous computing as “the most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it” (p. 1).

9. Earlier examples of pervasive computing projects at universities include Project Aura at Carnegie Mellon University, Endeavour at the University of California at Berkeley (UC Berkeley), Oxygen at the Massachusetts Institute of Technology (MIT), and Portalano at the University of Washington (see Satyanarayanan, 2001).

10. These include International Evaluation of Educational Achievement (IEA); International Adult Literacy Survey (IALS); Programme for International Student Assessment (PISA); Programme for the International Assessment of Adult Competencies (PIAAC); Progress in International Reading Literacy Study (PIRLS); Global Monitoring Report (GMR); First International Mathematics Study (FIMS); Second International Mathematics Study (SIMS); Trends in International Mathematics and Science Study (TIMMS); and Teaching and Learning International Survey (TALIS).

11. Other skills touted are complex problem solving, critical thinking, creativity, people management, coordination with other, emotional intelligence, judgement and decision-making, service orientation, negotiation and cognitive flexibility (see World Economic Forum, 2016).

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