



Occasional Paper Series

Number 22

# **Federalism and Education: Cross-National Lessons on Governance, Standards, and Accountability for the 21st Century**

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ISSN: 1922-558X (online ISSN 1922-5598)

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# Federalism and Education: Cross-National Lessons on Governance, Standards, and Accountability for the 21st Century<sup>1</sup>

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## *1. Introduction*

Federalism matters. Federalism is formally institutionalized in approximately 25 countries, encompassing about 40 percent of the world's population. Federalism is a system of government that divides power and functions between the central authority and its decentralized units. The distribution of power and functions is framed by a nation's constitutional framework. Federalism allows for a certain degree of fiscal autonomy at the subnational level and supports electoral independence at the regional and local levels. The constitutional framework places constraints on the exercise of centralized power in education.

To be sure, political and policy tension puts ongoing pressure on federalism. In the U.S., the arrival of the Donald Trump administration has created new intergovernmental conflict. Many states and cities have declared their status as sanctuaries in defiance of federal enforcement of immigration policy. State and local leaders have indicated their commitment to the Paris Accord on meeting the international standards to temper global warming, despite President Trump's withdrawal from the agreement. When a federal commission of electoral practices requested individual voting data, states categorically refused to submit the information.

<sup>1</sup> The co-editors acknowledge the generous support of the Forum of Federations in Ottawa, Canada, and Fundación Manuel Giménez Abad in Zaragoza, Spain for this project. The co-editors appreciate the helpful comments from several reviewers of the chapters as well as the excellent research assistance from Asher Lehrer-Small at Brown University.

Across the Atlantic Ocean, Brexit has generated new uncertainties regarding the structure of the United Kingdom, as the Scottish public pushes for independence. In Spain, the government of Catalonia promoted a referendum to gain voters' support for provincial independence. But a move for provincial independence requires constitutional action by a two-thirds vote in the Spanish parliament. In other words, federalism continues to evolve.

Federalism has played a central role in charting educational progress in many countries. With an evolving balance between centralization and decentralization, federalism is designed to promote accountability standards without tempering regional and local preferences. Federalism facilitates negotiations both vertically between the central authority and local entities as well as horizontally among diverse interests. Innovative educational practices are often validated by a few local entities prior to scaling up to the national level. Because of the division of revenue sources between central authority and decentralized entities, federalism encourages a certain degree of fiscal competition at the local and regional level. In contrast to the unitary system, federalism values local and regional control of public education (Tucker 2011). Locally elected entities govern local school systems. In other words, decentralized control places substantial constraints on the exercise of centralized power. According to some analysts, decentralization is found to have contributed to student achievement. Blöchliger, Egert and Fredriksen (2013) showed that a 10% increase in measures of "decentralization" is associated with a 4-point increase in the results in the Program for International Student Assessment (PISA) for 15-year-old students.

To be sure, the division of responsibilities varies from one federal system to another. The balance of centralization and decentralization also varies across institutional and policy domains, such as the legislative framework for education, drafting of curricula, benchmarking for accountability, accreditation, teacher training, and administrative responsibilities at the primary, secondary, and tertiary levels. Further, decentralization enables regional variation in policy and practice. Innovative practices at the local level can be scaled up to the national level.

Financing of education is particularly important in federal countries due to discrepancies in regional wealth, and thus discrepancies in available resources for education between jurisdictions. For this reason, many countries include federal equalization and transfer schemes as part of the financial framework of their education system (Cameron and Hofferbert 1974). Consequently, researchers have paid attention to how different federal countries address the division of authority, quality of services, and efficiency in the use of resources (Lauglo, 1995; Manna and McGuinn 2013)).

Canada, Italy, the United States, and the United Kingdom, for example, have developed funding transfer schemes as part of their education system. In Australia, 2012 legislation promotes needs-based funding, providing supplemental funding for students with disabilities, students from lower socio-economic backgrounds, and students of indigenous background. Finally, federalism allows for policy stakeholders to revisit the appropriate balance of power between layers of government. In Australia, for example, the national government and states are revisiting the funding arrangement to support parental choice. In the United States, Congress has replaced the No Child Left Behind Act (2001) with the Every Student Succeeds Act (2015), granting more authority to the states in measuring progress and ensuring quality.

Given these critical issues in federalism and education, the Forum of Federations, Ottawa, Canada, in collaboration the Fundación Manuel Giménez Abad in Zaragoza, Spain, has organized a Program on “Federalism and Education: Governance, Standards, and Innovation for the 21st Century.” The Program on Federalism and Education aims to examine how countries with federal systems of government design, govern, finance, and assure quality in their educational systems spanning from early childhood to secondary school graduation. Particular attention is given to functional division between governmental layers of the federal system as well as mechanisms of intergovernmental cooperation both vertically and horizontally. The Forum aims to draw out comparative lessons and experiences in an area of great importance to not only federal countries but also countries that are emerging toward a federal system.

The Federalism and Education Program hosted a 2-day invitational conference in Zaragoza, Spain in April 2016, when researchers, governmental officials, and other policy stakeholders engaged in extensive exchanges on education governance and policy issues. Researchers presented their research papers on federalism and education in Australia, Austria, Belgium, Canada, Germany, Italy, Spain, Switzerland, United Kingdom, and the United States. The following ten chapters are the revised version of the conference presentations.

To facilitate our common understanding of federal-state arrangements across the ten countries, Table 1.1 below provides the official names of the countries and the subnational entities that employ shared governance in their education systems.

<i>Country</i>	<i>Federal/Central Government</i>	<i>State/Subnational Entities with Statutory Autonomy</i>
Commonwealth of Australia	Federal Commonwealth	6 States and 2 Territories
Republic of Austria	Federal Government	9 States (Länder)
Kingdom of Belgium	Federal Government	3 Regions (Flemish, Walloon, Brussels) and 3 Communities (Flemish Speaking, French Speaking, and German Speaking)
Canada	Federal Government	10 Provinces
Federal Republic of Germany	Federal Government	16 Federal States (Länder)
Italian Republic	Government of the Republic	20 Regions
Kingdom of Spain	Government of Spain	17 Autonomous Communities and 2 Autonomous Cities
Switzerland	Swiss Confederation	26 Cantons
United Kingdom of Great Britain and Northern Ireland	Government of the United Kingdom	Greater London Authority, Northern Ireland Executive, Scottish Government, and Welsh Government
United States of America	Federal Government	50 States, 1 Federal District, and 5 Self Governing Territories

Table 1.1

The 10 case studies examine several key issues:

- On education governance, what types of authorities and power reside with the national government? What types of authorities and power remain at the regional or local level? What is the relative balance of power between the national and subna-



tional government in education? Is the trend moving toward greater centralization?

- On education finance, how are the funding responsibilities in elementary and secondary education distributed among the different levels of government? How does fiscal federalism work in education? What is the intergovernmental trend in education funding?
- On academic standards and quality assurance, which levels of government exercise the control? Is this an area of shared responsibility among levels of government? Is the trend moving toward nationalization?
- On performance-based accountability, how does the case-study country perform in PISA and country-specific assessments on core subject matters in the benchmarking age groups and/or grades? What are some of the key factors in explaining these outcomes? What are areas that need greater policy attention in promoting better academic outcomes?
- As the school-age population becomes growingly diverse, how does the country's education system address the changing needs? Are there effective policies and practices in this area?
- What are key areas of current policy debate in the case study country? For example, is teacher development policy a concern? Does the system create sufficient incentives for innovation? Are learning technologies integrated to teaching practices? Has the system been effective in improving lower performing schools and students (Mourshed, Chijioke and Barber 2010)?
- What are key lessons on functional division among layers of government from the case study that may be shared with other systems?
- What role will federalism play in promoting educational quality and progress in the 21st century?

In the following sections, we highlight some of the key lessons learned from the 10 federal systems as well as synthesize the current literature on federalism and education.

2. Key Lessons

*Federalism Exists in Countries of Different Population Size*

Federalism prevails in countries with different population size, as suggested in Table 1.2. The smaller federal systems include Austria, Belgium, and Switzerland. These countries have between 1.2 million to 2.4 million students at the pre-primary, primary, and secondary levels. Further, Australia, Canada, Italy, and Spain each have a student population approximately between 5 million and 9 million. Finally, larger federal systems include Germany (12.4 million students), the United Kingdom (12.4 million), and the United States (57.2 million).

Country	Pre-Primary	Primary	Secondary	Total
Australia	334,387	2,127,730	2,384,025	4,846,142
Austria	239,904	327,246	697,388	1,264,538
Belgium	456,989	764,137	1,206,574	2,427,700
Canada	536,812	2,182,843	2,734,631	5,454,286
Germany	2,207,123	2,890,468	7,289,386	12,386,977
Italy	1,686,095	2,860,957	4,594,302	9,141,354
Spain	1,465,571	2,934,648	3,296,359	7,696,578
Switzerland	149,660	483,466	606,162	1,239,288
United Kingdom	1,258,174	4,622,158	6,496,973	12,377,305
United States	8,721,127	24,417,652	24,095,460	57,234,239

Source: World Bank Databank:  
<http://databank.worldbank.org/data/reports.aspx?source=Education%20Statistics&preview=off>

Table 1.2:  
*Student Population in Pre-Primary, Primary, and Secondary Public Schools, 2012*

*Education Involves Shared Responsibilities Between Layers of Government*

Federalism has played a key role in shaping the division of responsibilities in education between levels of government. With an evolving balance between centralization and decentralization, federalism is designed to promote quality-based accountability standards without sacrificing the involvement of local governmental. In Spain, the implementation and inspection of education quality standards involve all levels of the government. While the Belgian national government estab-

lishes the quality assurance standards, each of the three language-based Communities assumes primary responsibility in monitoring educational progress and quality.

In Switzerland, while Cantons and communes assume the primary responsibilities of compulsory and upper-secondary education, these entities collaborate with the Confederation to produce an education report on educational quality and progress every four years. In Germany, quality assurance standards are decided by the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* (Germany's states). Because of its control over admissions to higher education institutions, the German federal government exercises its general influence on educational accountability. In Austria, schools are governed by recently adopted federal standards on German, English, and mathematics.

Federalism also creates incentives for horizontal cooperation. Horizontal federalism is gaining prominence as seen by both the quality and quantity of sub-national collaboration efforts. Interstate or interprovincial exchange and transfer of human capital, financial resources, and professional knowledge is growing. In Switzerland, for example, the transfer of education funding among the 27 Cantons has increased by several times in recent years. And across the 13 provinces and territories in Canada, the Council for Ministers of Education in Canada (CMEC) supervises the Pan-Canadian Assessment Program (PCAP), which is conducted in both English and French. The PCAP aims to "complement existing jurisdictional assessments with comparative Canada-wide data on achievement levels attained by Grade 8-Secondary II students across the country."

The Canadian version of federalism is particularly illuminating. The Canadian system allows the provinces and territories to maintain high levels of autonomy from the federal government, yet they themselves are highly centralized with parallel governance structures in the area of education. Some analysts use the notion of "deconcentration" to describe this high degree of state control in education. The Canadian system ensures common standards and comparable funding, which makes it easy to transfer insights and effective practices across systems. But despite provinces and territories having high levels of autonomy, Canada maintains high levels of geographic equality (although the northern territories do lag behind in

achievement). This comes largely because transfer payments are distributed to areas with higher costs of operation on an unconditional basis. The Canadian federal government, like its U.S. counterpart, uses its redistributive function to address regional disparities.

Some of the particularly promising Canadian practices include a model of Outcomes Based Learning, employed by all provinces and territories, in which decision makers specify specific learning targets, but teachers then decide how the materials should be instructed. This minimizes tracking and heightens teacher autonomy. Another practice comes from the province of Quebec and lies at the structural level where students attend a two-year program after 11th grade that can prepare them for university, for technical colleges, or for the workforce. There is no rift with the other provinces and territories because students from Quebec who go on to university only attend university for three years rather than the traditional four. Finally, the testing and assessment methods used in Canada are also important to highlight. Mandatory low-stakes testing is common to provide information on what instruction areas need attention and improvement. The results of these tests constitute a small to medium-sized percentage of students' grades and do not impact school funding. Additionally, all students aged 13 and up participate in the Pan-Canadian Assessment Program at the beginning of the school year as a means for common testing measures across provinces and territories. It is run by CMEC in association with Statistics Canada.

These practices have led to strong student achievement. On the 2015 international PISA exams, Canada's student scores ranked second in reading, seventh in science, and tenth in math. Canadian scores were notable for their particularly high levels of consistency across provinces and territories, despite their autonomy from the federal government. While Canada has some work to do to improve educational opportunities for indigenous peoples and in the northern territories, its federal system of governance functions effectively and will provide the means for making those improvements through increased unconditional funds and greater autonomy for the territories – changes that have already yielded improvements in recent years.

Further, Switzerland illuminates the dynamic interplay between vertical and horizontal relationship among governmental entities. Though Switzerland prides itself on providing strong public services, in 2000, the country tested significantly below expectations on the first international PISA examinations. This shock spurred changes in the education system ranging from more targeted reforms such as language training for disadvantaged groups (including students with migrant backgrounds) to larger attempts at harmonizing curriculum across Cantons (the Swiss version of states). As a result, scores improved in the ensuing years, especially in reading and science where Switzerland had tested particularly poorly in 2000. Data suggest that programs targeted at specific groups were particularly effective: the percentage of students with weak reading competency declined by five percent (from 18% to 13%) between the years 2000 and 2012.

Despite these improvements, there is controversy over the role of the Swiss Confederation in education. Cantonal sovereignty is one of the most cherished rights in Switzerland, and thus, movements towards standardization have been strongly resisted in many Cantons. To avoid the federal government taking on an expansive role in the Swiss education system, many Cantons have formed agreements for inter-cantonal cooperation through mutually supporting teachers' colleges, setting up systems for transfer payments from wealthier Cantons to financially strapped Cantons, and other strategies. But despite these strategies, the Confederation plays a rather active role in determining which subjects receive the most attention through monitoring learning objectives in the subjects of language, math, and science. Following a similar pattern as the U.S. did after its increases in standardized testing, Cantons have tended to skew their resources away from history, geography, religion, music, and sports because those subjects are not tested or monitored. Such changes disturb many Swiss citizens who believe the classic humanistic curriculum provided the proper balance. However, given international pressures, it seems that further vertical coordination will be all but inevitable.

### *Institutional Reconfiguration Takes Time*

In countries with a history of strong central authority, the process of de-centralizing power in education takes several decades. A good example is Spain, where the post-Franco dictatorship has been replaced by a gradual transition toward regional

autonomy. The “historic Autonomous Communities” where co-official languages are maintained, namely, Catalonia, Basque Country, and Galicia assumed the competences in education (non-university education) at the beginning of the eighties. Autonomy in education was granted to the remaining 14 Autonomous Communities between the early 1990s and 2000. In other words, the Spanish experience suggests a multi-phase in the transition from centralization to decentralization.

Similarly, Austria faces the challenge of finding the proper balance between its central authority and the states. A formerly centralized structure rooted in the Austro-Hungarian Empire, Australian federalism tries to move toward a “hybrid” with greater state autonomy. However, states’ policy preferences are often overshadowed by larger federal objectives, with laws limiting local school control to influencing only 15% of instructional hours or to only elective courses (in the case of vocational education). Nonetheless, centralization is found to foster successful pre-school activities, foreign language classes in elementary schools, and various remedial programs.

As a formerly centralized state, Italy has been moving towards distributing governance powers to localities; however, the transition has been mixed with the central state maintaining control of key policy areas such as the setting of general rules, the recruitment of personnel, and the distribution of finances. The Ministry of Education, University, and Research (MUIR) creates framework laws, which set guidelines that individual schools must follow in the creation of their POFs (Educational Offer Plans). Though the POFs must comply with MUIR standards, they also act as a mechanism of local control: the plans are created by a teachers’ council at each individual school and allow for some wiggle room for the council to shape the plan to the specific needs of the region (such as using flexible schedules or including personalized courses). But despite such apparent local control, the central state’s control over education finance restricts the regions’ power to truly cater education to their own needs. Based on 2007 figures, the central state pays for about 82% of the total national education budget. And despite a promise to function based on the “subsidiarity principle” in which local entities dictate and run most school administration, in practice, the “parallelism principle” has proved dominant in which those that have legislative competence actually deliver the services in education. Thus, because of the central state’s dominant role in school funding, it

maintains a strong role in school administration.

*Constitutional and Legislative Framework at Different Governmental Levels Plays a Key Role*

Federal systems do not always highlight education as a national responsibility. In the United States, Canada, Germany, and Switzerland, education is explicitly reserved in the domain of state government. State or provincial constitutions in these countries provide more details on the government's responsibilities and their citizens' right to education. At the same time, several federal systems rely on the national constitution and national legislation to specify the power and function of the shared responsibility between the national and the subnational jurisdictions. In Spain, the 2013 Organic Act on Education Standards expands the Constitution by providing clarifications on the distribution of powers between the Central Government and the Autonomous Communities. The Spanish Constitutional Court arbitrates policy disagreements between layers of the federal system.

To improve the structure of the Italian school system, the legislature passed the "good school reform" in 2015. In its planning, it was open to public consultation online, and the main results are an empowering of school principals to give teachers merit-based pay bonuses and to hire qualified local teachers from pre-approved MUIR lists. The 2015 reform also allows schools to seek voluntary tax donations (which would likely widen the gap between affluent public schools and poorer public schools) and gives tax breaks to families enrolling their children in private schools. These measures reflect an effort to get rid of the centralized requirements on local schools, yet they may widen inequity in the process.

*Competencies in Education across Levels are in Flux*

In federal systems, education involves competencies at both the national and the subnational levels. However, the distribution of those competencies varies case by case. Austria, for example, exhibits higher levels of centralization through maintaining national standards and assessment, while Switzerland and the U.S. are, on balance, more decentralized, granting stronger autonomy at the subnational level. Over the last 150 years, the 26 cantonal school systems have continued to "harmo-

nize” their competencies and autonomy with the Confederation. Between 2007 and 2016, for example, 7 cantons rejected the national education framework, suggesting substantial cantonal power.

Further, the distribution of competencies is in flux. In Italy, for example, the 2015 national legislation on “Great School Reform” is in favour of re-centralization by empowering the national Ministry of Education, University and Research (MUIR) to establish uniform learning standards, criteria on certificates and diplomas, and the definition on the scope of school autonomy.

In contrast to Italy, Belgium provides an example in which education policy-making power is non-centralized, yet a history of centralized control has placed limits in the development of local policies. Belgium has two simultaneous sub-state levels of government: there are three Communities (which group Belgians culturally and linguistically into a French, Flemish and German Community) and also three Regions (which group Belgians geographically into Wallonia, Flanders and Brussels) and in 1995, the question of language of instruction in school drove education policy to become a competence of the Communities (rather than a federal competence). However, funding still comes primarily through block grants from the federal government, so Communities are somewhat limited in their financial power. The Flemish Community augments the money coming from the government and organizes itself in a decentralized manner in which religious schools are included as recipients of public funds. The French Community remains much more centralized and does not add to the sum of money that comes from the federal level. As a result, they are constantly strained financially, and OECD testing has found results in the French Community to be significantly lower than in the Flemish Community. Innovation is an Ongoing Process

Education policy priorities have continued to be shaped by regional and local needs, which reflect the changing demographic and cultural characteristics of the local communities and their school age populations. Further, as a “laboratory” of diverse practices, federalism enables governmental and non-governmental organizations at all levels of government to “experiment” with innovative ideas (Council on Foreign Relations 2012). For example, states in the U.S. have played an active role in launching charter schools and urban districts have embarked on



the diverse service providers' model that enters into contracts with both non-profit and for-profit organizations. Non-governmental organizations, such as the Bill and Melinda Gates Foundation, are promoting the integration of technology in teaching and learning and developing new tools for professional development.

In the devolved system of United Kingdom, England and Northern Ireland are expanding their school choice initiatives, including "free schools" in England that are similar to charter schools in the U.S. In contrast, Scotland and Wales are dominated by principles of democratic socialism, where standardization remains in place to support their substantial number of low-income students. Interestingly, Wales moved away from publishing the annual Transparent Public Rankings (TPR) of school performance following devolution as a symbol of its divergence from central policy. However, Wales reinstituted TPR in 2010 when PISA showed declining test scores, especially in the lowest-performing schools.

In Australia, private schools are included in state and Commonwealth funding schemes. States spend about a third of their budgets on private schools and the Commonwealth allocates a majority of its funding to private schools. The result of this funding is that private schools receive, on average, about 85% as much government funding as do public schools. This support for private schools represents Australia's efforts to promote school choice, yet these private institutions retain the right to charge tuition and select their student bodies. As a result, far fewer percentages of students from disadvantaged backgrounds end up in the private school system. However, when public and private schools serving similar student populations are compared, public schools often outperform private ones. With so many surprising and almost contradictory realities, the Australian education system can be deemed highly complex.

Further, Italy has five regions that have special statutes granting them policy discretion. These regions have linguistic minorities that require instruction in languages other than Italian. Consequently, these regions have produced innovations in multi-lingual schooling (in Ladin, for example, they have achieved remarkable success in teaching students three or more languages) and areas such as vocational education (as is the case in South Tyrol, where their system is held up as a best practice). In supporting such innovation, Italy will have to figure out how to maintain

a level of equity from region to region.

### *Fiscal Federalism Fosters Institutional Commitment and Stability*

The percentage of GDP allocated to primary and secondary education remains quite stable across the ten countries. In 2013, on average, OECD countries allocated 3.4% of the GDP to primary and secondary education. To be sure, there are variations across countries. As indicated in Table 1.3 below, the 10 case-study countries allocate between 2.7% and 4.3% of the GDP to primary and secondary education. These percentages are higher if tertiary and higher education are included. For example, Switzerland allocates about 6% of its GDP and Canada allocates about 6.7% of the GDP to all educational purposes. Further, per pupil spending in secondary education is higher than per pupil spending in primary education, with variations among the 10 countries, ranging from Switzerland's \$18,994 per pupil in secondary education to Spain's \$8,520. Overall, when compared with the OECD average, three case-study countries show a lower per pupil spending in primary education and two case-study countries have a lower per pupil spending in secondary education.

Table 1.3:

*Public Spending on Primary and Secondary Education 2013, in percent GDP and 2013 USD per pupil*

Country	Percent GDP	Primary Per Pupil in USD	Secondary Per Pupil in USD
Australia	3.4	\$8,289	\$10,932
Austria	3.2	\$10,780	\$15,024
Belgium	4.3	\$9,957	\$12,763
Canada	3.2*	\$9,130	\$12,086
Germany	2.9	\$8,103	\$11,106
Italy	2.9	\$8,392	\$9,023
Spain	2.7	\$6,956	\$8,520
Switzerland	3.5	\$15,930	\$18,994
United Kingdom	4.1	\$10,669	\$12,200
United States	3.3	\$10,959	\$12,740
OECD Average	3.4	\$8,477	\$9,911

Sources: OECD, *Education at a Glance (OECD Paris)*, Table B1.1, "Annual Expenditure Per Student by Educational Institutions for All Services (2013)." OECD Data:

<https://data.oecd.org/eduresource/public-spending-on-education.htm#indicator-chart>. OECD (2017) Public Spending on Education (Indicator). Doi:10.1787/f99b45d0-en (Accessed on 09 August 2017).

In Spain, the Central Government provides about 15% of the education spending and the Autonomous Communities provide about 85%. In the U.S., the federal government provides about 10% and the state and local communities make up the remaining 90% of education spending.

In Switzerland, the federal government provides about 10% of the education spending, while the Cantons provide 63% and the municipalities 27%. Among the 26 Cantons, education expenditures range from 2.4% to 7.8% of the GDP. Interestingly, there is a growth in horizontal transfers of funding between Cantons due to inter-cantonal collaboration in education.

In Australia, while states retain authority over primary and secondary education, the Commonwealth (Australia's central government) is taking on increasing power in the name of standardization. Increasing amounts of "tied grants," earmarked grants that come from the federal government for specific purposes, have allowed the Commonwealth to exercise greater control over funding decisions of states and localities. At the same time, internal reviews such as the "Gonski Review" of 2010 have concluded that the states are in the most advantageous position to carry out school funding and policy decisions, leading to ongoing dispute over the federal role.

*Education is a Key Policy Instrument to Address Regional and Socio-economic Disparity*

Federalism, while recognizing regional and local autonomy, involves some degree of allocating resources to "equalize" the fiscal disparity among local communities. Canada, Italy, the United States, and the United Kingdom, for example, have developed funding transfer schemes as part of their education system. In Australia, 2012 legislation promotes needs-based funding, providing supplemental funding for students with disabilities, students from lower socio-economic backgrounds, and the indigenous populations. In Canada and the United States, special appropriations are directed at Natives or Aboriginal peoples given their unique challenges. The Canadian federal government maintains several allocation streams, including the Canada Health Transfer, the Canada Social Transfer, the Territorial Formula Financing, and equalization grant. Finally, federalism allows for policy stakeholders to revisit the appropriate balance of power between layers of government. In the

United States, the Congress has recently replaced the 15-year No Child Left Behind Act (NCLB) by granting more authority to the states in measuring progress and ensuring quality in the 2015 Every Student Succeeds Act (ESSA).

With the decentralization of their education system as a measure imposed by the allied powers after the end of WWII, many elements of the German system seem contradictory. Germany is caught in the middle of assuring the constitutionally guaranteed “cultural sovereignty” to their states and at the same time moving towards harmonizing their curriculum and system to minimize disparities. As it stands, some Länder have far better education systems than others. Top states spent an average of over 5,000 euros per pupil between 2005 and 2012 while poorer states could only invest 1,500 per pupil over that time span. These disparities are reinforced by the fact that wealthier districts can offer teachers higher salaries and better benefits, thus causing instructional quality in poorer areas to suffer. In efforts to fix such problems, Germany employs a method of power-sharing known as “cooperative federalism.” This means that the Länder and the federal government share responsibility in legislating and administrating basic functions such as teacher hiring and curricular development. However, cooperative federalism has led to difficulties in supporting the 1.1 million immigrants who entered the country in 2015-16 as well as students with special needs because although these populations obviously require greater resources, the ambiguous balance between the federal and state government has led to inefficient services. Programs run and funded more fully from the federal level such as pre-school expansions have been hailed as clear successes. In short, public demand for accountability, benchmarks, and standards seem to call for a stronger unitary structure, which threatens the cultural sovereignty of the Länder.

The Australian system offers a complex picture of the role of education in addressing different types of disparities. Student outcomes differ along geographic lines (78% of young Australians from urban areas gain year 12 qualifications whereas for those in remote areas, only 43% of students gain such qualifications), socio-economic status (30 percentage point gap between the top and bottom quartile for achievement of year 12 qualifications), and Indigeneity (32 percentage point gap between non-Indigenous and Indigenous students). These gaps occur

despite the fact that states spend a comparable amount of school funding per pupil.

Achievement gaps for specific student populations notwithstanding, Australia's school system has narrowed the gap for several groups. For one, Australia has ensured schooling opportunities for a very diverse population. More than half of all Australians were either born overseas or have a parent who was born overseas, and contrary to Germany or Austria, Australia has been highly successful with students of migrant backgrounds from non-English speaking countries. A higher percentage of this population completes tertiary education than non-migrants. This may in part be because of state and commonwealth policies including free translation services in schools and fully-paid English language learning tuition at many worksites. Additionally, some states have found success despite overall trends of stagnation or decline on international exams. Queensland, for example, made improvements through investing in preschool education and adding an extra year of primary school.

### *Regulatory Oversight Occurs at the State or Regional Level*

A decentralized system relies on the capacity at the state or regional level to monitor and ensure schooling quality and success. At issue is regional and local utilization of resources to pursue educational goals. In Canada, for example, the 13 provinces and territories closely regulate their districts and schools to ensure the local implementation of the common curriculum, comparable levels of funding, and the professional quality of the instructional staff across the province and territory. In the United States, the 2015 legislation on the Every Student Succeeds Act has weakened direct federal intervention. Instead, states are now given the primary responsibility in developing their accountability policy to oversee school performance, even though the legislation preserves the federal role on civil rights issue.

The evolution of Belgium's School Inspectorate offers an alternative form of accountability to the strategy of relying on high-stakes standardized testing as employed in the United States. Before federalization, the Inspector was responsible for making sure state standards were achieved in schools and did so primarily through site visits and administrative evaluation. Since federalization, the Flemish Community has given much of this responsibility to the schools themselves, who simply have to clear their inspection strategies with the Central Inspector. In the

French Community, however, inspection remains centralized.

*Federal Systems Support Substantial School-level Autonomy*

Federal systems seem to facilitate school level autonomy. This project examines the extent to which school principals are granted responsibilities in teacher hiring/firing and school budgeting, based on the 2012 PISA survey. As indicated in Table 1.4 below, an overwhelming percentage of school principals in 7 countries indicated that they hold the responsibility of hiring teachers.

However, a lower percentage of the school principals reported that they have the responsibility to fire teachers. Finally, on budgetary decisions within the school building, only Italy showed fewer than 50% of the school principals having this responsibility.

Table 1.4:  
*Responsibilities Granted to the School Principal on Teaching Hiring and Firing and on School Budgetary Matters, as reported in the principal 2012 PISA survey (numbers are the percentages of principals reported having the particular responsibility)*  
*Disparities in Student Academic Success Persist across Countries and Regions within Countries*

Country	Teacher Hiring (A)	Teacher Firing (B)	Difference A-B	Within-School Budget
Australia	82	55	27	93
Austria	48	25	23	89
Belgium	82	73	9	77
Canada	84	37	47	91
Germany	63	22	41	73
Italy	12	16	-4	43
Spain	31	30	1	52
Switzerland	88	70	18	81
United Kingdom	98	85	13	99
United States	94	87	7	72

When comparing the PISA mean scale scores in reading mathematics, and science between 2000 and 2015, the 10 countries show mixed results. As indicated in Table 1.5 below, in reading, 2 countries show improvement. In mathematics,

3 countries show improvement. In science, 5 countries improve in the mean scores.

There is further variation in student performance across regions within individual countries. For example, in Spain, academic outcomes vary across the 17 Autonomous Communities. Graduation rates in compulsory secondary education range from 63.1% to 85.4%. The percentage of low-performing students with PISA 2013 reading skills below level 2 ranges from 10% to 30%. The percentage of low-performing students with PISA 2013 math skills below level 2 ranges from 14% to 33%. Similarly, in the United States, about one-third of all 50 states perform well above the PISA OECD average scores, while about one-third of the states are underperforming.

Austria provides an example of the multifaceted challenge of educational inequality in the context of federalism. While the federal government controls the vocational track, the Länder maintain the general education track. The former is disproportionately represented by students with lower SES background and maintains a low rate of educational upward mobility. At the same time, PISA results show a substantial gender gap in math and science. These challenges will require ongoing attention of federal and subnational policy makers.

Table 1.5:

*OECD PISA Mean Scale Scores on Reading, Mathematics, and Science, comparing 2000 and 2015*

Country	Reading 2000/2015	Mathematics 2000/2015	Science 2000/2015
Australia	528/503	533/494	528/510
Austria	492/485	503/497	505/495
Belgium	507/499	520/507	496/502
Canada	534/527	533/516	529/528
Germany	484/509	490/506	487/509
Italy	488/485	457/490	478/481
Spain	493/496	476/486	491/493
Switzerland	494/492	529/521	496/506
United Kingdom	523/498	529/492	532/509
United States	504/497	493/470	500/496

### *3. Ongoing Challenges and Promising Strategies in Education*

The 10 case studies suggest a number of trade-offs in federalism and they also offer promising strategies to manage some of the ongoing challenges in education. First, federalism, while providing incentives for subnational engagement, may create uncertainty on service quality. Autonomous entities tend to pursue their own priorities in education. Under these circumstances, families who move across regions and communities are likely to experience different educational standards. The case studies suggest several strategies in ensuring service quality across regions within a country. Austria, Australia, Italy, and the United States, among others, are developing statutory clarity on meeting standards on equal schooling opportunities. Federal transfers and earmarked grants tend to create fiscal incentives for states and localities to ensure service quality in exchange for additional funds.

Second, federalism may undermine national priority. Consultation and deliberation among regional entities often necessitate policy compromise and tend to slow down reform implementation. Germany, Switzerland, Canada, and other countries have invested in horizontal cooperation with the aim of achieving specific national goals. The central government also relies on regional and local entities to use national grants to support the learning needs of students with disadvantaged backgrounds.

Third, federalism tends to allow for duplication of administration and management at the subnational level. Consolidation of smaller, autonomous regional units may generate cost savings through capitalizing on economies of scale. States and local communities are making efforts to coordinate the use of school buildings and other facilities for cost savings.

Fourth, states and local communities need ongoing data collection to inform their policy and practice. Subnational entities can benefit from a coordinated data collection strategy across the country. Comparable measures of academic progress enable schools and communities to validate their efforts to ensure student success for all. With comparable data across regions and various student populations, Australia and Canada have sharpened their focus on achievement gaps among citizens of First Nations, and Austria has redoubled its efforts to



narrow the gender gap in science and math. Italy requires local schools to implement three sets of accountability systems: INVALSI (testing for student outcomes), INDIRE (evaluating internal school development), and the Ministry Inspectorate (evaluating schools and principals).

Finally, federalism offers a strong, diverse leadership pipeline. When state and local leaders show good results, they can anchor their regional success in policy development at the national level. Federalism remains a unique structure to allow for experimentation, validation, and scaling up of education programs.

#### *4. Conclusion*

Federalism is well-suited for countries with diversity of people, culture, and governing practices. In the 10 countries that are examined by this volume, federalism has fostered institutional commitment and stability to pursue educational goals. Federalism offers an institutional foundation for a multifaceted system of accountability. While subnational entities focus their accountability to serve regional and local needs, the central government can lead in setting learning standards, ensuring equal educational opportunities for all students, and holding educators and leaders accountability. Federalism also enables national and regional policy makers to develop specific instruments to address contemporary challenges of achievement gap, fiscal disparity, and innovation. Overall, the education sector is generally well-served by the system of federalism in the 10 countries.

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Cover design by Olakunle Adeniran

Cover photo courtesy of Pierre Alain Rinino, Lyceé Claudel, Ottawa Canada

ISSN: 1922-558X (online ISSN 1922-5598)

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