

0 Chapter 19 – How Can Education Promote Social Progress?

Chapter *Chapter 19 – How Can Education Promote Social Progress?* has been updated.

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- 5 **Abstract:** [Abstract 200 words]
- 6 **Summary**
- 7 There are many reasons to believe that increased educational opportunity and achievement lead to social progress. The aim of this chapter is to examine how education can promote social progress. Answering this question is not straightforward. Education has multiple aims, and the way in which education is provided – educational governance, educational institutions, educators, curriculum, and pedagogy – all matter a great deal. We cover each of these topics in this chapter, looking at trends across the globe and seeking ascertain what scholars know about better and worse forms of educational provision.

- 8 To understand the connection between education and social progress, we distinguish among four distinct aims of education: *economic, civic, humanistic, and equity promotion*.
- 9 Each of these goals can be understood from an individual and collective perspective.
- 10
1. Education develops productive skills, and this is valuable for the individual, to advance in the labor market and for society, to improve and maintain prosperity and compete in a globalized economy.
 2. Education develops civic skills, and this is valuable for the individual, to allow for meaningful participation in civil society and political life, and for society, to benefit from an informed and engaged citizenship.
 3. Education develops human talents and interests, and this is valuable for the individual, allowing for personal flourishing, and for society, since the expansion of knowledge and human achievement are valuable for their own sake.
 4. Education can be a vehicle for equity and greater social inclusion, or when absent, poorly delivered or unfairly distributed, a vehicle for injustice and greater social exclusion.
- 11 These distinct purposes of education connect in multiple ways to the definition of social progress provided in chapter 2. Some of these connections are obvious. The basic values of human progress include well-being, freedom, solidarity, social relations, esteem and recognition, and cultural goods. The humanistic purpose – developing human talents and interests – facilitates well-being (some might say actually *constitutes* well-being), cultivates capacities essential to freedom, promotes esteem and recognition, and contributes to cultural goods. The civic purpose – developing civic skills and dispositions – help establish the basis of social relations, develop bonds of solidarity among citizens, and encourage esteem and recognition. And insofar as education is a vehicle for equity and social inclusion, it is an essential mechanism for nearly every value on the list.
- 12 Overall, education is about the unleashing of human capabilities: economic, civic, and humanistic. When education is successful, it enables individuals not merely to exercise their agency in participating in economic, civic, and humanistic activity but also to shape or re-shape economic, civic, and humanistic life. When we think about the relationship between education and justice, we reach two additional conclusions. First, justice demands that every individual be afforded equitable educational opportunities. Second,

the provision of educational opportunity, across all four goals, is essential to social progress and the advancement of justice. This includes access to education, experiences within it, and outcomes from it.

- 13 In the first part of the chapter, we present a broad view of education in the world today, showing how formal education has expanded in the last decades, and emphasizing how it relates to citizenship, growing opportunities for social mobility, economic development and equity. We take stock of what has been achieved and is still to be done to improve access to quality education in the poorer parts of the world, through the Sustainable Development Goals fostered by global community, which is mostly concerned with initial and mandatory education; and take a closer look at the special roles played by vocational and tertiary education. Each of these dimensions are subject to controversies, which we try to take into account, while emphasizing the overall positive effects of education for social progress.
- 14 The crucial role education can play in promoting social progress obviously depends on the governance of education, on educational institutions and educators, as well as on the content and pedagogy of education. Consequently, it is necessary to consider at least three levels of effects, which are strongly interconnected: the level of concrete instruction in class (microlevel). Educators are the main actors at this level; the level of institutions (schools, pre-schools, kindergartens, universities, etc.; the mesolevel). Here principals have a substantial influence; and the level of the educational system (the macrolevel). Educational policymakers and authorities are the central actors here.
- 15 In the second part of the chapter we discuss facilitators and barriers to education as a means for social progress in three subsections. The first subsection focuses on governance of education and therefore the macrolevel. Here we discuss how modes of governance affect the potential of education to contribute to social progress. The second subsection targets institutions and educators. That means it focuses the meso- and microlevel. This subsection describes characteristics of successful educational institutions and competencies educators and principals should have to contribute to the four goals of education. The third and final subsection focuses on content of education and pedagogy and targets all three levels. Concretely, it discusses the core curriculum for the 21st century and especially identity formation as an important basic theme in education, as well as two important trends in pedagogy: learner-centred education and the role of technology. All three subsections provide final recommendations.

- 16 A final cautionary note: Education can be studied from a vast array of disciplinary approaches, the issues and priorities for education policies vary enormously among developed and developing societies and social groups, different cultural contexts and philosophical orientations, and are often controversial. This chapter cannot expect account for this enormous variety, nor gloss over the different and opposing views that may exist. It can, however, provide a broad view of the relevance of education for social progress, what has been achieved, what are the pending issues in different contexts, and identify some of the main issues raised by the social sciences to make education more accessible and meaningful for all.
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17 1. Introduction

- 18 The twentieth century witnessed a major growth in the provision of educational opportunity across the globe, which is a good thing. Landmark multinational agreements such as the 1948 Declaration of Human Rights and the more recent United Nations Sustainable Development Goals (SDGs) put forward a right for all children to be educated.
- 19 There are many reasons to believe that increased educational opportunity and achievement lead to social progress. The aim of this chapter is to examine how can education promote social progress.
- 20 Answering this question is not straightforward. Education has multiple aims, and the way in which education is provided – educational governance, educational institutions and educators, curriculum, and pedagogy – all matter a great deal. We will cover each of these topics in this chapter, looking at trends across the globe and seeking ascertain what scholars know about better and worse forms of educational provision.
- 21 To understand the connection between education and social progress, we must first distinguish among four distinct aims of education: *economic*, *civic*, *humanistic*, and *equity promotion*.
- 22 Each of these goals can be understood from an individual and collective perspective.
- 23 1. Education develops productive skills, and this is valuable for the individual, to advance in the labor market and for society,

to improve and maintain prosperity and compete in a globalized economy.

2. Education develops civic skills, and this is valuable for the individual, to allow for meaningful participation in civil society and political life, and for society, to benefit from an informed and engaged citizenship.

3. Education develops human talents and interests, and this is valuable for the individual, allowing for personal flourishing, and for society, since the expansion of knowledge and human achievement are valuable for their own sake.

4. Education can be a vehicle for equity and greater social inclusion, or when absent, poorly delivered or unfairly distributed, a vehicle for injustice and greater social exclusion.

24 These distinct purposes of education connect in multiple ways to the definition of social progress provided in chapter 2. Some of these connections are obvious. The basic values of human progress include well-being, freedom, solidarity, social relations, esteem and recognition, and cultural goods. The humanistic purpose – developing human talents and interests – facilitates well-being (some might say actually *constitutes* well-being), cultivates capacities essential to freedom, promotes esteem and recognition, and contributes to cultural goods. The civic purpose – developing civic skills and dispositions – help establish the basis of social relations, develop bonds of solidarity among citizens, and encourage esteem and recognition. And insofar as education is a vehicle for equity and social inclusion, it is an essential mechanism for nearly every value on the list.

25 The definition of social progress also includes a list of basic principles. Once again, there are multiple connections to the distinct purposes of education. The most obvious connection is the identification of “educating and supporting citizens” as a basic principle. Here education is defended mainly for its essential civic role, preparing children for their participation in political life and in civil society and to assume the responsibilities of citizenship.

26 Two additional principles are important to mention, basic rights and distributive justice. Various United Nations declarations consider primary and secondary education as a basic right that must be guaranteed to every child. And since educational opportunity is not something that an individual can provide on his or her own, we must consider it within the scope of distributive justice. The task of a theory of distributive justice is to identify what principle or principles should structure the distribution of benefits and burdens in a society and to identify to whom -- what people or class of persons -- these

benefits and burdens are to be distributed. The provision of schooling is a paradigmatic example of a good that is distributed in some manner or another by virtually every society. So to address the question of education as an important dimension of measuring social progress is to explore the question of how it should be distributed to people.

- 27 Overall, education is about the unleashing of human capabilities: economic, civic, and humanistic. When education is successful, it enables individuals not merely to exercise their agency in participating in economic, civic, and humanistic activity but also to shape or re-shape economic, civic, and humanistic life. Education for professional skills not merely prepares people for the workforce; it shapes the labor market itself. Education for citizenship not merely prepares people to participate in civic and political life; it enables social participation that shape political institutions. Education for human talents not merely develops the vast domain of human potential; it advances humanity's storehouse of knowledge and cultural achievement.
- 28 When we think about the relationship between education and justice, we reach two additional conclusions.
- 29 First, justice demands that every individual be afforded equitable educational opportunities.
- 30 Second, the provision of educational opportunity, across all four goals, is essential to social progress and the advancement of justice. This includes access to education, experiences within it, and outcomes from it.
- 31 When we observe education across the world today, we see two clear patterns. First, educational opportunity is not everywhere provided to all. Equity is routinely violated. Second, educational policies often weight the economic purpose of schooling with comparatively little attention paid to civic and humanistic aims. Discussion of these observations constitutes the major part of the remainder of this chapter.
- 32 The chapter has three further sections. In section 2, we take stock of current conditions and challenges in educational provision and distribution on a global scale. In section 3, we consider facilitators and barriers to education as a means to social progress. We examine here three separate domains: (1) governance of education; (2) institutions and educators; and (3) content and pedagogy. In section 4 we provide our conclusions and recommendations.

33 A final cautionary note: Education can be studied from a vast array of disciplinary approaches, the issues and priorities for education policies vary enormously among developed and developing societies and social groups, different cultural contexts and philosophical orientations, and are often controversial. This chapter cannot expect account for this enormous variety, nor gloss over the different and opposing views that may exist. It can, however, provide a broad view of the relevance of education for social progress, what has been achieved, what are the pending issues in different contexts, and identify some of the main issues raised by the social sciences to make education more accessible and meaningful for all.

34 2. Current conditions and challenges

35 In this section, we present a broad view of education in the world today, showing how formal education has expanded in the last decades, and emphasizing how it relates to citizenship, growing opportunities for social mobility, economic development and equity. We take stock of what has been achieved and is still to be done to improve access to quality education in the poorer parts of the world, through the Sustainable Development Goals fostered by global community, which is mostly concerned with initial and mandatory education; and take a closer look at the special roles played by vocational and tertiary education. Each of these dimensions are subject to controversies, which we try to take into account, while emphasizing the overall positive effects of education for social progress.

36 2.1 Education and social progress

37 Culture, "that complex whole which includes knowledge, belief, art, morals, law, custom and any other capabilities and habits" (Tylor 1870) is the most distinctive element of human societies, and in its broadest sense education is the process of facilitating learning or the acquisition of culture. Education takes place informally, starting with the interaction of children with their parents and relatives, but becomes to a large extent formal in complex societies, as it is codified (in primers, manuals, catechisms, handbooks) and provided by specialized institutions (churches, schools, universities, professional guilds, academies) according to specific methods (lecturing, memorization, demonstration, interpretation, collaboration, practice, experimentation).

38 In most societies, education is a valued asset: more education is expected to enhance specific dimensions of culture (religious beliefs, citizenship, professional skills, humanistic values, critical thinking), fostered by different institutions and sought by individuals and families as a means of achieving or securing social and economic standing and prestige. As the notion of social progress becomes entrenched, more and better education becomes considered one of its main instruments.

39 The expansion of formal education, which followed the emergence of the nation state and the modern economy, is one of the most visible indicators of social progress. Until the early 19th century, advanced learning was limited to a small elite of priests, bureaucrats and specialists, provided by universities and other prestigious learning centers, usually associated with the churches. The notion that all persons should be able to read the sacred books was part of the Jewish, Christian and Muslim traditions, but was never fully practiced and mostly limited to men (Hanna 2007, Vincent 2000, Gawthrop and Strauss 1984, Botticini and Eckstein 2012). This notion was adapted and spread out by the modern, industrialized Western nation states, and exported to some degree to their colonies and areas of influence. By the end of the 19th Century, the United States, Australia, Canada and New Zealand had already reached universal schooling, followed closely by Northern Europe. In Asia, expansion of primary education started in Japan, followed later by Taiwan, Thailand, Sri Lanka and the Philippines. In Latin American and Africa, it expanded first in areas with strong European immigration, such as Argentina, Chile, Uruguay and Southern Brazil, as well as in South Africa and Zimbabwe (Benavot and Riddle 1988).

40 **2.2 Education and citizenship**

41 The initial drive for the expansion of public education in the modern era was a concern for the need to imbue the population with the knowledge, values and habits of citizenship. Thomas Jefferson believed that "If a nation expects to be ignorant and free, it expects what never was and never will be." In Latin America, Andres Bello and Domingo Sarmiento established the first public school systems in the 1840s, arguing for the importance of public education for nation building and economic well-being (Jaksic 2006). The role of the schools, as expressed by Émile Durkheim in France, was to make the student to understand his country and his times, to make him feel his responsibilities, to initiate him into life and thus to prepare him to take his part in the collective tasks awaiting him, providing a link between the private life in the family and the public life in society; a fully educated citizen should be disciplined, attached to his social group, and endowed with autonomy and self-determination, provided by rationality (Durkheim 1922, Wesselingh 2002, Nisbet

1965). Sociologists developed the concepts of civic culture, social cohesion, social trust and social capital as key ingredients for the proper functioning of modern democracies and complex economies almond (Almond and Verba 1963, Putnam 2001, 2002, Harrison and Huntington 2000, Lipset 1960). Reactions to the conservative tone of the Durkheimian tradition, in the context of a changing world, led to alternative pedagogical approaches putting more emphasis on critical thinking, communitarian values, and individual liberation and self-determination (Peterson 2011, Biesta, De Bie, and Wildemeersch 2014, Benson, Harkavy, and Puckett 2007, Apple 1996, Freire 1970, Dalton and Welzel 2014).

42 Whether access to formal schooling actually develops citizenship, or any other goal of education, is an entirely different question. In the 1990s, the International Association for the Evaluation of Education Achievement carried on a comparative survey of civic education in 38 countries, assessing to which extent 14-year-old students gained the knowledge, engagement and attitudes expected from citizenship in a modern society. One of their findings was that "in most countries, young people's views of political parties are relatively negative. In place of giving allegiance to parties and to what many perceive as hierarchical political organizations ruled by an older generation, they are instead gravitating to social movements as the arenas in which good citizenship can be manifested" (Torney-Purta et al. 2001 p. 189); it shows that the role of formal education to shape values and social participation is smaller than most educators would like it to be.

43 **2.3 Expansion and increased access**

44 In the last century, and especially after World War II, access to formal education expanded dramatically. In the same period, governments shifted their priorities from education for citizenship to education for productivity, with great consequence.

45 In 1950, about 47% of the children aged 5-14 in the world were enrolled in some kind of school. In 2010, 89.1% of the children were, varying from 98.7% in the European Union to 84.2% in the Middle East. Secondary education, which used to be mostly a preparatory stage for the universities, became part of the regular school system, starting with the "high school movement" in the United States and spreading later to Europe and other countries. Worldwide, the number of secondary school students went from 187 to 545 million between 1970 and 1910, a threefold growth, capturing 63% of the relevant age group worldwide. Higher education, once limited to a tiny elite for specialized universities, became a mass phenomenon in the second half of the 20th century, reaching 32 million students

worldwide in 1970 and 182 million in 2010. (World Bank 2015, Trow 2000, Schwartzman, Pinheiro, and Pillay 2015, Schofer and Meyer 2005, Goldin and Katz 1997).

46 This extraordinary expansion of education resulted from a combination of factors. On the supply side, for the modern nation states, public education was considered a tool for social cohesion and citizenship, and a means to develop the human resources necessary for running the state and enhancing the economy. Religious organizations and churches continued to participate strongly in education, sometimes in partnership and sometimes in dispute with the nation states. Business sectors also got involved, either creating their own systems of vocational education or participating in the shaping of education policies.

47 It was also a response to expanding aspirations. For a growing number of persons, access to education was perceived as a channel for social mobility. More than a tool for access to public and private jobs, education came to be perceived as an individual right, expected to pave the way for other forms of participation, including the benefits of individual choice, good employment and income, as well as social prestige. After World War II, the right to education was enshrined in Article 26 of the Universal Declaration of Human Rights, and embodied in the work of international organizations such as UNESCO, that not only spread the gospel of expanding education, but also helped the countries to organize their school systems. In 1990 the *Jomtien World Conference on Education for All* set the target to provide free and compulsory primary education for all children in the world, with the financial and technical support of public and private donors. This was inscribed through UN Millennium Development Goal 2, which aimed to achieve universal completion of a full cycle of primary education by 2015, and by the new Sustainable Development Goal 4, with the headline 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.' Since the 1990s, different institutions started to implement worldwide assessments of student achievement in language, mathematics and science, with the assumption that, beyond the local languages and cultural traditions, all persons in the world were supposed to acquire the same set of broad cognitive and also non-cognitive competencies, required for full citizenship in modern societies (Spring 2008, Kautz et al. 2014a, OECD 2004, Mullis et al. 2003).

48 **2.4 Education and the economy**

49 As education expanded, the amount of public and private investments in education increased everywhere, reaching now between 4 and 10% of GDP in most countries.

- 50 The broad links between education and productivity are clear, but, when education keeps expanding and the economy changes or stagnates, millions of educated persons find themselves without jobs, and uncertain of their places in society. The expansion of education has been much more rapid and intense than the expansion of the economy and the reduction of social inequality, leading to issues in the global north of "over education" or "education surplus", in which persons with formal qualifications cannot find jobs or have to work in activities below their expectations, and countries that invest heavily in the expansion of education without reaping its expected benefits (Hersch 1991). One explanation is that, beyond its value in terms of skills and competencies, formal education is also a "positional good", meaning that individual benefits depend on one's position within the distribution of educational access and attainment, which results in intense pressure and competition for more education and credentials, regardless of the actual requirements or possibilities of the job market (Brighouse and Swift 2006, Brown 2003, Hollis 1982)
- 51 Education systems are stratified in terms of the prestige and opportunities provided by different types of schools and universities, and access and achievement are strongly correlated with the social conditions of the students and their families, leading some authors to argue that the main role of education is to reinforce existing social inequalities and the monopolies of social status through the administration of credentials (Bourdieu and Passeron 1970, Collins 1979, Wolf 2002). Even rich economies, such as the United States, cannot eliminate the achievement and opportunity gaps related to race and poverty, and the quality of most education in low income countries is extremely low by international standards, leading to the creation of small segments of highly selective schools for the upper classes (Coleman 1966, Jencks and Phillips 1998).
- 52 Economists coined the expression "human capital" to refer to their interpretation of education as a factor of production. Since the pioneering work of Schultz, Becker and Mincer, empirical research has shown again and again that individual investments in education leads to higher income, and that countries that expand and improve the quality of education are more likely to develop their economy (Becker 1973, Schultz 1970, Mincer 1974).
- 53 If education is an economic investment, it should be possible to measure its rate of return, both for individuals and for societies, and use this data to establish priorities in education policies, for instance by comparing the returns of investment in primary, secondary or higher education, as advocated by the World Bank until the 1990s and widely used since then (Leslie 1990, Psacharopoulos 1994). Thus, a recent study found that, across 140 countries, there has been a significant shift in the rate of private (individual) returns to

education. Returns to schooling have declined from the early 1980s to post-2011 (from 13% to around 10%) and they ascribe this mainly to the unprecedented increase in schooling (three more years globally). The study also found that, with the exception of high-income economies, primary education has higher returns than secondary education and that tertiary education has the highest returns, in spite of the large increase in the number of students and graduates, with sub-Saharan Africa with the highest rates of return in the world (21% vs. 14.6%) (Montenegro and Patrinos 2014).

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In spite of its intriguing finds, the use of rates of return for establishing priorities and assessing the quality of investments in education is controversial. The rates of return are calculated from the wages the individuals get in their life-time, compared with their investments to complete their education. In most countries, education is subsidized with public resources, and the measurement of the social benefits of these are usually calculated as private returns net of public costs. In an extensive discussion of the approach, British sociologist Alison Wolf argues that “wages reflect a great deal more than productivity. The amount paid to different groups and different individuals also depend heavily on the way in which a society is organized overall: how it runs services such as health and education; how much its public and civic culture values equality; how professionals’ fees are regulated” (Wolf 2002). The Mincer model used to measure rates of return has also been questioned by economists, who have shown that its general assumptions are untenable (Heckman, Lochner, and Todd 2006).

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There are important differences in the ways the labor market is organized and relates to the education sector, depending in part on whether the countries have a tradition of market coordination or liberalization, and how they react to the technological changes related to deindustrialization and the expansion of the services sector (Thelen 2007, 2012). In the former Soviet Union, education was tightly linked to the productive sector and unemployment by definition did not exist, but this arrangement proved to be inefficient and did not survive the opening of the economy (Froumin and Kouzminov 2015, Soltys 1997). A usual pattern is for countries to protect the better organized sectors of the market with the legal benefits of job stability and unemployment benefits, while allowing other parts of the labor market to remain unprotected, with low salaries, in the “informal” economy or excluded from the labor market altogether, establishing segmented job markets enforced by legal and sometimes ethnic or social barriers (Carnoy 1978, Wilkinson 2013).

56 When the labor market is regulated, it also extends this regulation to education. A classic example is the link between the industrial sector and the apprenticeship system in Germany, Austria and Switzerland, and the role played by the medical and legal corporations in defining the numbers, duration, resources and content of education in their respective careers, while other may be left unattended and unfunded (Rosenbaum 2001). In some countries, the regulation and protection of the job and professional markets and of education may be part of a broader political consensus on the values of social equity, implemented by the prevailing political parties; in other, the segmentation of the job market may derive from the political power of specific professional and economic groups.

57 2.5 Inequality

58 In its simplest form, inequality in education can be understood by measuring what 'good education' and 'poor education' are and how this is distributed across the population as a whole. This can then be debated through concepts such as 'equality of outcomes' and 'equality of opportunity'. Schmidt and McKnight (2012) suggest that "the ultimate test of an educational system is whether it makes sure that every student, whatever their background, is exposed to the content they need to compete in today's society". But the very fact of having been admitted to school cannot be taken to represent the same opportunity to all in the classroom, as the burden to compensate for a home disadvantage is then placed on the student. This perspective complements the position that grade attainment (completing more and more grades) will not improve educational outcomes or downstream income earnings if little learning happens per grade. More schooling is therefore not necessarily equal to a better education.

59 Inequality is impacted by *equity in access* to distinct forms/types of schooling (public fee-paying, public no fee-paying, self-funded private or grant-funded private schools); by *equity in provision* in respect to dosage (class size, student-teacher ratios, teaching and learning time, ability to learn at home, language choice, technology, infrastructure); and by *equity in quality* (teaching standards, pedagogical methodology, materials, curriculum and curriculum coverage). *More schooling does not automatically make a better education*. Thus, reducing inequality does not necessarily correlate with universal enrolment (more children in schools) but in addressing the real challenge of how to ensure that the access to schools is matched by real learning happening in each classroom. It is therefore not necessarily about equalising resources, but rather concern for the core of schooling; that is, offering instruction in and coverage of academic content by teachers in a way that is meaningful to students. Educational governance, institutions (schools) and educators,

curriculum and pedagogy – the concerns of the following section – all matter a great deal. Where students from poor or marginalised communities are exposed to less rigorous content or to a less engaging pedagogical method, the risk of inequality in the opportunity to learn is high. In other words, educational equality of opportunity (in the wide sense) of outcomes is necessary, but not sufficient, for achieving equity.

- 60 Some countries have developed highly differentiated systems, with general and vocation and university and non-university institutions, in an effort to respond to the perceived needs of the economy, but also to protect the traditional education institutions from the pressures of mass enrollments.
- 61 Piketty (2014) pairs climate change with educational access as two of the greatest challenges to the human race. Ameliorating schooling is even more important than fixing governmental debt: “the more urgent need is to increase our educational capital” (ibid.: 568). Furthermore, he argues that the best way to reduce inequality and increase “the overall growth of the economy is to invest in education” (ibid.: 307-308). To maintain a competitive edge in a rapidly transforming knowledge economy, countries need to invest more in quality education. Not even minimum wage schedules can “multiply wages by factors of five or ten: to achieve that level of progress, education and technology are the decisive factors” (ibid.: 313).
- 62 With a clear link between education and high private returns to investment, particularly at the tertiary level, there is a rational assumption – stronger in low-income than in high-income countries – that education in general and higher education in particular is *the* route out of poverty. For this constituency, the main aim of education is not economic development as such but poverty reduction and social mobility.
- 63 Access to tertiary education is regarded by the ‘haves’ as a means to maintaining privilege, and by the ‘have-nots’ as a means of getting out of poverty. In the 1970s in the US, 10% of students from the lowest income quintile went to university in contrast to 40-50% from quintiles four and five. By 2010, still only 10% of quintile one went to university, but for quintiles four and five the percentage had increased to 80-90%. Higher education in the US has thus become part of the mechanism for maintaining privilege. Piketty points out that in the US, the level of wage inequality results directly from a failure to invest sufficiently in higher education. High tuition at both public and private universities keeps many individuals from receiving the training needed to shrink wage inequality and to make the country more equal and competitive globally. Given such trends,

Piketty anticipates that social mobility will decline even further in the future as income increasingly determines access to American higher education.

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2.6 The Millennium Goals of Education

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For low income countries, where access to minimum levels of education has still not been achieved, the global consensus and targeted support for the Millennium Development Goals established in 2000 by the United Nations meant considerable progress was made, with numbers of out-of-school children dropping from approximately 115 to 57 million between 1999 and 2012. Among all regions, South Asia experienced the most accelerated progress. However, the rate of progress has significantly stagnated since 2007, with virtually no change in the global rate of number of out of school children (OOSC), while the percentage of OOSC in conflict-affected countries has increased. Almost 30% of low-and middle-income countries are off-track to meet goal of universal primary education and more than 20% are off-track to meet goal of gender parity (World Bank, 2012). Those remaining out of school are among the most disadvantaged: children in conflict-affected countries; children with disabilities; and children from the poorest families, where even apparently 'free' education comes with opportunity costs. In the majority of countries with data, disparities by wealth in primary school attendance have narrowed – with the greatest gains among children from the poorest quintile. However, in a number of countries, the wealth gap remains large, and disadvantages based on gender, disability and other markers persist. For instance, in West and Central Africa, children of primary school age from the poorest quintile are on average six times more likely to be out of school as those from the richest. Disparities are also seen in learning outcomes.

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Progress was also made toward gender parity in terms of primary school enrolment, with approximately 70% of countries reaching this quantitative goal, but local cultural perspectives on the value of education to girls in some contexts have also led to exclusion. Providing girls with an education helps break the cycle of poverty: educated women are less likely to marry early; less likely to die in childbirth; more likely to have healthy babies; and more likely to send their children to school. Poverty and other forms of social disadvantage magnify gender disparities. In most sub-Saharan African countries, girls from the poorest households remain most disadvantaged in terms of school participation. The World Development Report on Gender Equality and Development draws attention to the fact that there are still 31 million girls out of school, nearly 4 million "missing" women annually (meaning the number of women in low-and middle-income countries who die relative to their

counterparts in high-income countries) and, average wage gaps of 20%, along with gaps in labor force participation. The systematic exclusion of girls and women from school and the labor force translates into a less educated work force, inefficient allocation of labor, lost productivity, and consequently diminished progress in economic development. Children with disabilities are among the most disadvantaged in terms of missing out on education, being “invisible” in the data and being overlooked in responses to OOSC. Children with disabilities aged 6 to 17 years are significantly less likely to be enrolled in school than their peers without disability (UNESCO Institute for Statistics and UNICEF 2015, World Bank 2012)

67 Additionally, the emphasis on the metrics associated with access rather than the more nebulous issue of quality education has contributed to a ‘learning crisis’, with an estimated 250 million children not learning basic skills, even if they are in school (UNESCO 2014). Data reveal significant gaps in children’s learning performance between the richest households and the poorest. While the learning levels remain low – even among children of primary school age in the richer countries –, children from the richest households are far more likely to achieve minimum learning standards in reading than those from the poorest households (UNESCO 2015a, b, UNICEF 2015, OECD 2016).

68 2.7 Vocational education

69 Vocational education, expected to provide specific competencies for medium and high skilled workers, developed in Europe from a long tradition of professional guilds, expanded with industrialization, reached its zenith in the 1990s, and started to decline in numbers since then. In 1995, 32.6% of the secondary school students in the European Union were enrolled in vocational education; in 2012, only 24.1 did. The percentages in other regions of the world are much smaller: 10% in middle income countries, 6% in lower income countries, 10% worldwide (World Bank 2015). One of the reasons for its limited reach and recent decline is that European vocational education, and more specially the apprenticeship system adopted in German speaking countries, although very successful in developing the skills and providing jobs for the industrial sector, was from the beginning part of a socially stratified education system, with tracking systems through which the children of the working class would be sent to vocational schools to be prepared to work in industry, while the children of the middle and upper classes would go to general education schools with the expectation of getting middle class jobs and entering the universities. As the relative size of the industrial sector diminished and access higher education expanded, opportunities for good quality vocational education were reduced,

and most students choose the general education path if they could. Vocational education changed in most places to adapt to the new circumstances, eliminating or postponing tracking to the end of compulsory education, creating paths from vocational to higher education, creating comprehensive schools, expected to combine general and vocational education, and putting more emphasis on general competencies, such as language and mathematics, in vocational schools. The United States never developed a distinctive vocational education sector, but, in practice, provided it to some extent within the high schools and community colleges, as an option for students unwilling or not able to follow the path to full college education. Less developed countries lacked the well-established industrial and business sectors that allowed for good quality vocational education in the richer countries. For them, vocational education remained at best very limited in size, and at worse a kind of second-class education for the poor.

70 The limitations of vocational education, associated with the dominance of general education and growing aspirations for higher education degrees, raises the issue of how to deal with the large number of students that, in most countries, never acquire the minimum competencies required by compulsory education. A recent study by OECD found that "one in four 15-year-old students in OECD countries have not attained a baseline level of proficiency in at least one of the three core subjects PISA assesses: reading, mathematics and science. In absolute numbers, this means that about 13 million 15-year-old students in the 64 countries and economies that participated in PISA 2012 were low performers in at least one subject; in some countries, more than one in two students were" (OECD 2016, 3). The situation in low income societies is much worse. There are many strategies to make education more attractive, meaningful and accessible for the students, but the fact remains that millions of students, in rich and mostly in low income countries, go through school without learning to read and understand a simple text, to solve a simple arithmetical problem, or to have a grasp of very simple scientific facts.

71 **2.8 Tertiary education**

72 There is widespread recognition that tertiary education is a major contributor to economic competitiveness in an increasingly knowledge-driven global economy, which has made high-quality tertiary education more important than ever in both industrialised and developing countries (World Bank 2007). As the Organisation for Economic Cooperation and Development (OECD 2008) has pointed out, tertiary education contributes to social and economic development through four major missions:

- 73
- The formation of human capital (primarily through teaching)
 - The building of knowledge bases (primarily through research and knowledge development)
 - The dissemination and use of knowledge (primarily through interactions with knowledge users), and
 - The maintenance of knowledge (primarily through inter-generational storage and transmission of knowledge).
- 74
- Increasingly, tertiary education is also becoming more diversified, including new types of institutions such as polytechnics, university colleges, technological institutes and a plethora of private and distance (e-learning) providers. Facilities such as these have been created for a number of reasons: to develop a closer relationship between tertiary education and the external world, including greater responsiveness to labour-market needs; to enhance social and geographical access to tertiary education; to provide high-level occupational preparation in a more applied and less theoretical way; and to accommodate the growing diversity of qualifications and expectations of school graduates (Pillay 2011).
- 75
- World Economic Forum (WEF) data measure education participation rates, primary school quality rankings (for secondary education, quality ranking includes maths and science scores), rate of return for tertiary education, and global competitiveness ranking. In its commentary on the relationship between unemployment as an indicator of the status of the country's economic growth, the WEF report reflects on the complex relationship between unemployment and competitiveness, as well as on the underlying influence of the adequacy of the education system (from primary through secondary to tertiary education) and the efficiency of its labour market. In the most competitive economies, high rankings against most of the human capital-related indicators were observed, even in cases where unemployment had increased. Thus, while weaknesses in these economies may centre on issues such as higher education, the skills gap in the labour market and wage performance, lesser developed economies have weaknesses centred on issues such as health and basic schooling. This may be the case even where the participation rate in primary and secondary education is high but where the quality is low, lessening the efficiency of the labour market in absorbing the youth exiting these systems.
- 76
- In one of the most comprehensive analyses of the relationship between tertiary education and economic development Bloom, Canning, and Chan (2006) support the idea that expanding tertiary education may promote faster technological catch-up and improve a country's ability to boost its economic output. Their detailed study of sub-Saharan Africa found that a one-year increase in the tertiary

education stock would raise the long-run steady-state level of African GDP per capita by 12.2%. The data suggest that a one-year increase in tertiary education stock may boost incomes by roughly 3% after five years and by 12% eventually. Considering that incomes have been falling in some African countries, such growth would be significant. It strongly suggests that tertiary education plays a recognisable role in promoting economic growth.

- 77 Where there are high-cost barriers associated with higher levels of education, and where economic resources are distributed with high inequality, this may contribute to inequality in educational outcomes. The finding that the wage gap between those with higher education and workers with low levels of education has widened in the OECD over the past decade, despite the fact that the wages of the former have stagnated, is because those of the latter group have declined in real terms. More recent evidence has also shown that there is some complementarity between home background and schooling; in other words, that children from higher status families may derive a greater benefit from a given school input.

78 **3. Facilitators and Barriers to education as a means for social progress**

- 79 The crucial role education can play in promoting social progress obviously depends on the governance of education, on educational institutions and educators, as well as on the content and pedagogy of education. Consequently, it is necessary to consider at least three levels of effects, which are strongly interconnected (Spiel, Reimann, Wagner & Schober, 2008): (A) the level of concrete instruction in class (microlevel). Educators are the main actors at this level; (B) the level of institutions (schools, pre-schools, kindergartens, universities, etc.; the mesolevel). Here principals have a substantial influence; and (C) the level of the educational system (the macrolevel). Educational policymakers and authorities are the central actors here.
- 80 In the following facilitators and barriers to education as a means for social progress are discussed in three subsections. The first one focuses on governance of education and therefore the macrolevel. Here we discuss how modes of governance affect the potential of education to contribute to social progress. The second subsection targets institutions and educators. That means it focuses the meso- and microlevel. This subsection describes characteristics of

successful educational institutions and competencies educators and principals should have to contribute to the four goals of education. The third and final subsection focuses on content of education and pedagogy and targets all three levels. Concretely, it discusses the core curriculum for the 21st century and especially identity formation as an important basic theme in education, as well as two important trends in pedagogy: learner-centred education and the role of technology. All three subsections provide final recommendations.

81 **3.1 Governance of education**

82 While education is poised to play a crucial role in promoting social progress, any effective contribution of education very much depends on *how exactly educational institutions are designed*. On the one hand, education indeed can be, and has been, an effective instrument for social progress by promoting humanistic values, nurturing collective conceptions of democratic citizenship, providing skills with labor market value, as well as supporting educational and social equality if access to education is open and fair. On the other hand, education systems can also become, and historically often have been, instruments to reinforce or magnify socio-economic inequality across generations, to nurture nationalistic and autocratic tendencies by promoting exclusionary or hierarchical conceptions of citizenship, or to fuel labor market stratification by limiting access to higher levels of education. On the whole, the governance of education is the institutional mode designed to direct education by setting its goals and standards, to provide the necessary means for deliverance of education, and to monitor, assess and redraft policy with the aim of harnessing education for social progress.

83 In the following, we discuss how modes of governance affect the potential of education to contribute to social progress. We describe the complexity of education governance and review core topics in the study of educational governance. We continue by focusing on three broad trends that have dominated the agenda of policy-makers and scholars alike in recent years:

84 **First:** decentralization, privatization and marketization of education

85 **Second:** the rise of evidence- or research-based policy-making

86 **Third:** the ongoing educational expansion, now encompassing adult and further education

87 **3.1.1 Educational governance around the world**

- 88 The rise of formal education since the middle of the nineteenth century – with regulation of schooling and public policies pertaining to teachers, pupils and schools as well as the continued expansion of upper and post-secondary education – spurred debates about the governance of education worldwide. Initially in developed countries and since the mid-twentieth century internationally, education emerged as a principal policy and administrative domain for governments, as well as the principal agenda of a fast growing number of intergovernmental- and transnational nongovernmental organizations. As a result, the governance of education grew into a complex array of institutions, often with intersecting and overlapping jurisdictions and responsibilities. The contemporary complexity of education governance is, therefore, both a strong engine and a constraint for the harnessing of education towards social progress: it is both a solid system of policy-making and operations and still an unmanageable maze of public and private, national and international governors. Nevertheless, education is currently formally enshrined in numerous international treaties as a human right guaranteed to all and policies are set – nationally, internationally and transnationally – in accordance with this spirit. And while over time education policies have oscillated between focusing on education’s skilling and economic benefits and its progressive and civic importance, education has been universally recognized as a critical social institution and thus as a major focus for policy-making (Drori 2016).
- 89 For instance, in Europe, the Bologna process, which started out as an effort of international coordination in higher education governance, has contributed to the establishment of a transnational governance framework, largely based on voluntary cooperation between governments. This framework both achieves some sort of coordination in higher education policy, such as the introduction of Bachelor and Master degrees throughout Europe and the establishment of common quality management procedures, while also respecting national peculiarities. Furthermore, according to Voegtle et al. (2011), it was largely driven by a process of transnational communication with the goal of joint problem-solving. Hence, it is a good example how complex governance arrangements in the global era are both necessary as well as possible.
- 90 This general vision of education has not tamed the vast variation in education governance across countries. The institutional design and capacity of education systems vary dramatically cross-nationally, among levels of government, and between sectors. As a corollary, political conflicts about the institutional design or the *governance* of education systems are often related to underlying material interests of those affected (Ansell 2010; Busemeyer 2015; Iversen/Stephens 2008). Furthermore, historical conflicts about the design of education systems have strong implications for the governance of

education in the contemporary period, because once established, institutions create powerful path dependency effects, which reduce the leeway for large-scale change in the long term (Pierson 1993; Thelen 1999). The feedback effects of established institutions affect strategies, preferences, and power resources of individual and collective actors in the respective systems. The implication is that once political choices for the design of education systems have been made at *critical junctures* in historical policy development, large-scale change is unlikely thereafter.

91 This is why there is a huge variation in the governance of education systems nowadays. As already shown above, there is of course a significant cross-national variation in the extent to which different sectors of the education system are developed, which is to a certain extent related to the level of economic development in a given country. Broadly speaking, the higher levels of the education system (upper secondary, post-secondary and tertiary education) develop in line with economic demand and capacities, implying a gradual opening up of access for those formerly excluded. Access to tertiary education in non-democratic or developing economies, in contrast, is often restricted to the offspring of the countries' elites, exemplifying the ambivalent character of education with regard to the promotion of citizenship and social progress (Stasavage 2005). Ideally, democracy, education and economic development can positively reinforce each other with education promoting both citizenship and economic skills, which promote the further development of democratic structures. These in turn can ensure a continued opening up of access to higher levels of education (Ansell 2008, 2010). And still, there is no deterministic association between the institutional structure of education systems and economic development. In the (post-)industrial democracies of the Western world with similar levels of economic development, there is still a huge variety of institutions.

92 For instance, countries differ with regard to the degree of *institutional stratification* in school structures, primarily at the secondary level. In some cases, there is a strong separation between academic and vocational tracks, which is often associated with students being sorted onto these different tracks very early on in their school careers (Germany or Switzerland are good examples for this type of systems). In contrast, in other countries such as Sweden, but also the United States and South Africa, all children from different backgrounds attend the same type of schools, namely comprehensive secondary schools. However, again depending on the exact design of educational governance, the formal equivalence in institutional design can go along with a strong degree of effective segregation: In the United States, the fiscal stance of individual schools (or school districts) very much depends on the wealth of the

locality, mirroring existing socio-economic inequalities and thereby creating a clear stratified hierarchy of institutions in the respective educational sectors (Busemeyer 2006).

- 93 In general, research has shown that a higher degree of institutional stratification in secondary education is associated with higher levels of educational inequality, exacerbating class biases in access to education (Pfeffer 2008; Hanushek/Wößmann 2006). In other words: A strong separation between academic and vocational tracks in lower and upper secondary education delimits the potential contribution of education to promoting social equity (and progress). However, from a purely economic perspective, the strong separation between academic and vocational tracks might have beneficial effects (Hall/Soskice 2001), because it increases the supply of vocational skills in the economy, which can be beneficial for (some types of) employers. Furthermore, there is empirical evidence that levels of *socio-economic*, not educational, inequality are lower in countries with extensive vocational training systems (Busemeyer 2015; Estévez-Abe et al. 2001), because vocational training opens up access routes to well-paid and secure employment for those with few academic skills. These examples show that it is necessary to evaluate the effects of educational institutions from different perspectives as these might be very different and partly contradicting, depending on the viewpoint.
- 94 Questions of educational governance reach beyond the institutional design of educational institutions as such, including issues related to *education financing and spending*. First of all, countries differ with regard to how much they invest in education in total and how they distribute funding across the different sectors (Busemeyer 2015). However, there is *no* apparent association between the total level of investment on education and educational performance (Castles 2013). This is shown quite impressively in the OECD's PISA studies, which compares educational attainment of 15-year old students in a large sample of rich and middle-income countries from Peru and Vietnam on the one hand to Luxembourg and Switzerland on the other. Even though there is certain association between economic well-being and educational performance with poorer countries clustering in the lower half of the ranking table and richer countries above, there are some notable exceptions: Vietnam, for example, with a GDP per capita of about 2,100 Dollar performs significantly better than Luxembourg with a GDP per capita of about 101,000 Dollar.^[4] Hence, in order to promote educational opportunities, it is *not* sufficient to simply increase spending on education. This, again, points to the crucial role of governance as well as cultural, social and political contexts, because the institutional set-up of education systems determines how available resources are employed, and if they are employed in effective and efficient ways.

- 95 In addition to the total level of spending, there is significant cross-national variation in the division of labor between public and private sources of funding (Wolf 2009; Wolf/Zohlnhöfer 2009). Private sources of funding mostly include tuition and school fees, but also contributions from private foundations, employers and individuals. Even though the evidence on the impact of tuition fees on participation in and access to education is somewhat mixed, there are solid indications that high tuition fees effectively block students from low-income backgrounds from participating in (higher) education (Mettler 2014). Furthermore, high levels of private spending can also have feedback effects on citizens' expectations vis-à-vis the welfare state: When individuals have invested a considerable amount of money in acquiring their education, they are less likely to support high levels of taxation and redistribution, since this would lower their returns on their educational investments (Busemeyer 2013).
- 96 In the context of developing countries, private schools (and financing) may play a different role. In a situation, when public schools are failing because of serious governance problems related to mismanagement, corruption and a lack of accountability, private schools may be considered as an attractive alternative, delivering a higher quality of teaching and better learning outcomes at lower costs, as a recent comprehensive report on private schooling in developing countries has shown (Ashley et al. 2014). In the long run, however, the establishment of a private school sector might also promote segregation and inequalities in the developing countries, when access is increasingly tied to parental background and resources. Hence, improving the governance of public institutions should be the prime goal in these contexts.
- 97 In addition to institutional stratification and spending, another important dimension in the governance of education is *how different stakeholders in the system are included* in decision-making (or not). There are several aspects related to this topic. The first is the question of how many different stakeholders are involved in decision-making about educational reforms as well as day-to-day management of education systems (this might be called the *horizontal* governance dimension). There are some countries, in which decision-making is centralized in the hands of governmental bureaucrats, whereas in others, different stakeholders are involved, e.g. parents and students in the running of local schools as well as representatives of trade unions and employers' association in the administration of vocational training schemes.
- 98 The second aspect is how different competencies for the administration of the education system are *distributed across levels of government* (the *vertical* dimension of governance). Again, in some

countries, decision-making competencies are concentrated on the national level (e.g. in France) with limited involvement of and autonomy for lower levels of government. In contrast, the financing and administration of education is very decentralized in other countries. In Scandinavian countries, for instance, municipalities have far-reaching competencies for the provision and financing of education. The local level is also important in Anglo-Saxon countries like the US or the UK. In federalist systems, the subnational levels play a crucial role in education policy, although this might often be associated with an actually lower degree of autonomy for the local level, since many competencies are then concentrated on the regional level.

- 99 With the onset of globalization, in particular since the mid-twentieth century, new international and transnational interdependencies have emerged with strong implications for educational governance. Education is currently promoted by a transnational advocacy network, which is composed of both intergovernmental- and transnational nongovernmental organizations. This diverse set of organizations, which have proliferated at an exponential rate for decades, has been instrumental in formulating transnational regulation, most notably the Global Campaign for Education and the Education for All agenda, as well as situating education as a pinnacle of the Millennium Development Goals. While intergovernmental organizations affect national education agendas through the activation of inter-state treaties, most other transnational organizations influence education agendas through “soft law” mechanisms, for example by setting standards for education in the form of comparative assessments for achievement (e.g., Kamens and McNeely, 2010; Wiseman, 2010; Meyer and Benavot, 2013). The rise of the private and for-profit transnational education sector further complicates the matrix of global education governance, introducing neo-liberal practices and therefore furthering the turn of public education systems worldwide toward so-called New Public Management models (e.g., Ball, 2012). Overall, this heterogeneous transnational advocacy network of organizations, which constitutes the global governance of education, operates as a diffuse policy regime, drawing legitimacy and authority from its financial and political capacities, the appreciation of expertise, and the geopolitical power of western governmental and nongovernmental actors.
- 100 This international and transnational education governance intersects with national and sub-national education policy-making in numerous ways and greatly influences its trajectory. For one, this global governance regime constitutes what is taken to be “best practices” for education, defining universal standards for curriculum, pedagogy, evaluation and alike. For example, global organizations have imprinted curricula worldwide by introducing discourses of social

sciences (Wong, 1991), environmentalism (Bromley, Meyer, and Ramirez, 2011) and human rights (Suárez, 2007) to textbooks in schools worldwide and by promoting programs for girls' education (Vaughan, 2013) and lifelong learning (Jakobi, 2009). In these ways, the global transnational advocacy network for education formulated curricular, pedagogical and administrative isomorphism, regardless of varying national political cultures or local traditions. Also, this global governance regime is critical for the implementation of education policies worldwide, because it serves as the cadre for consultancy and expertise and as the source for sponsorship of education reforms. Through their evidence-based assessments and policy recommendations, which operationalize educational ideologies, the global governance regime spreads particular education practices and ideas (e.g., Mundy and Menashy, 2014). Overall, world polity, as the formal organizational backbone of world society, drove the rapid institutionalization of universal mass schooling (Boli, Ramirez and Meyer, 1985; Meyer, Ramirez and Soysal, 1992) and of tertiary education (Schofer Meyer, 2005), thus prescribing education agenda, especially in poorer countries with weaker national polities (e.g., McNeely, 1995; Steiner-Khamsi and Stolpe, 2006; Vaughan, 2013). And still, the worldwide isomorphism that resulted from the decades of policy borrowing and lending has nevertheless preserved cross-national differences in education capacities and outcomes (Baker and LeTendre, 2005).

101 **3.1.2 Recent trends in educational governance and their implications for social progress**

102 The complexity of the global governance regime for education thinly veils the overwhelming thematic coherence of education governance worldwide. In other words, in spite of the heterogeneity within the transnational advocacy network and the rapid growth of the constituents involved in this governance regime, the focus remains on conceiving of education as a means for societal development. This focus drives forwards several worldwide trends in the governance of education. Currently, three main trends are dominant worldwide: systemic mode of decentralization, administrative mode of research-based policy-making, and content mode of emphasis on lifelong learning.

103 Decentralization, privatization and marketization

104 The first such broad and worldwide, towards decentralization in the provision of education, is often accompanied and conditioned by a parallel trend towards privatization and marketization (Gingrich 2011). Decentralization of education governance means that competencies for the management, financing, curriculum design and personnel are delegated from the national to lower levels of

government, such as subnational and local governments as well as schools themselves. Even though this is a powerful international trend, national contexts, of course, influence how it manifests itself in different countries. In cases such as the US and the United Kingdom, for instance, the governance of education had already been rather than decentralized before the 2000s, but many competencies had been centralized in the hands of “Local Education Authorities” (LEAs) or school districts. Thus, in this context, further decentralization amounts to the delegation of responsibilities down to the level of individual schools, which are independent from the local educational authorities (e.g., Charter Schools in the US or Academies in the British context). In other cases, for instance Germany, decentralization implied the delegation of autonomy to individual schools within existing governance structures, i.e. from the *Land* level to the school level. In Sweden, far-reaching reforms in the 1990s paved the way for the emergence of “independent schools”, which are run by private providers, though financed with public moneys (Klitgaard 2008). This represents a typical “Swedish” approach to decentralization in the sense that competition between schools is limited by public regulation on admission criteria and financing (Bunar 2010).

105 In the context of developing countries, we can also witness a similar process of marketization and privatization in the governance of education, but it plays out very differently as it is entangled with the ongoing expansion of educational opportunities, in particular at the level of higher education. In African countries, for instance, the recent wave of expansion in tertiary enrolment went along with a significant expansion of the role of private institutions in higher education (Varghese 2013). Private households were increasingly willing and able to pay for education, but state institutions often lacked the fiscal and administrative capacities to meet this increasing demand both from households as well as employers. Hence, private institutions increasingly played an important role filling this gap. As mentioned above, in the short run, this type of privatization can promote social progress by granting access to education to those who were formerly excluded, but in the long run, a continued failure of public institutions may promote segregation.

106 It is difficult to single out one specific driving factor of the trend towards decentralization, but there are several plausible candidates. First, in the Western world, over the course of the 1970s and 1980s, the public (i.e. mostly vocal parents from the middle and upper classes) in many countries became increasingly dissatisfied with the “one size fits all” model of educational governance and demanded a more differentiated and participatory model of governance. Second, central governments may also have developed an interest in offloading some responsibilities to lower levels of government, in

particular in times when fiscal and budget constraints became increasingly binding so that unpopular decisions about cutbacks could be delegated to lower levels of governments. Furthermore, the mobilization of private sources of funding in the form of fees or the involvement of private educational providers could partly compensate for the lack of public funding, which may be a more important driving force of privatization and marketization in the developing and middle-income countries, where educational aspirations of the newly affluent middle classes are thwarted by public governance failures. Finally, the professionalization of education management went along with the emergence of New Public Management (NPM) as the dominant paradigm of administrative decision-making. From the perspective of NPM, promoting competition between schools, both within the public system as well as between public and private providers, is believed to increase the overall efficiency of the system.

107 What are the potential consequences of decentralization with regard to the potential of education to contribute to the social progress? This question is difficult to answer empirically, and it very much depends on the specific implementation of decentralization reforms. In the Western world, there are good reasons to believe that decentralization, privatization and marketization will and does already have negative consequences with regard to social and educational inequality as well as social progress in general. Furthermore, there is little evidence that decentralization has gone along with a significant increase in educational performance so far (Schlicht-Schmälzle et al. 2011). In the developing countries, in contrast, marketization may promote educational expansion in the short run, compensating for the lack of responsiveness on the part of the public education system. In the long run, however, the entrenchment of a private sector may contribute to segregation, as it has done in some rich-world democracies.

108 A crucial factor in this respect is the extent to which competition between schools and higher education institutions is constrained by public regulations. When a higher degree of institutional autonomy in resource management as well as pedagogical matters is accompanied by a decentralized system of education finance, decentralization can result in a growing heterogeneity between institutions. Wealthy schools would then increasingly be concentrated in wealthy districts, being able to attract better students and better teachers. Elitist private universities could close their doors to aspiring students from lower social backgrounds. Once an institutional regime is established – and in particular, once it has become entangled with housing and residential patterns as well as career choices – it can be very difficult to change politically, because

public opposition against redistributing resources away from the wealthy to the poorer districts will be significant as households have adjusted their housing and lifetime financial choices accordingly.

- 109 On the positive side, it could be argued that the decentralization in the provision of education allows for a greater involvement of local stakeholders, in particular parents, teachers and students, in designing the pedagogical content of the curriculum. Granting schools more autonomy could also promote the embeddedness of schools in local contexts, nurturing civil society and social capital. Eventually, this might increase the commitment of individuals to “their” school. Also, in today’s diverse societies, a “one size fits all” model of education simply would not be able anymore to cater to the different educational needs and demands. In higher education, decentralization would allow universities to develop individual profiles, building on their respective strengths. In contexts, where the public system is plagued with management problems and governance inefficiencies, private (autonomous) institutions may be more effective and efficient.
- 110 The rise of evidence-based policy-making
- 111 Second, the governance of education globally and worldwide is turning towards research-based policy-making. Much along the reorientation of policy-making in the fields of healthcare and welfare, education policy-making too is increasingly anchored in methodical study and scientized evidence, which are accepted as providing a solid – namely, professional and value-neutral – basis for decision-making on matters of supervision, control, capacity, efficiency, operations and structure. This research-based governance mode is inspired by cultural trends towards scientization and quantification (see, Drori and Meyer, 2006; Espeland and Sauder, 2007) and expresses a high form of administrative rationalization (Drori, 2006). Applied to education, this research-based mode of governance has primarily introduced practices of assessment of various aspects of education provision (such as education outcomes, also of comparative performance) and of administrative capacity (such as financial and human resources). Globally, most evident is the policy fascination with internationally comparative testing, such as PISA and TIMSS, under the assumption that curricula and student achievements are indeed universal and comparable (Kamens and McNeely, 2010). Indeed, the rise of this international assessment regime has encouraged the diffusion of practices for the assessment of education also at the national and sub-national level, bringing the mode of “governing by numbers” to all world regions (e.g., Grek, 2009) and many countries (e.g., Feniger, Livneh, and Yogev, 2012; Sung and Kang, 2012). Moreover, this impulse for research-based governance furthers the privatization of policy-making: with

preliminary research required for each policy initiative, much of this research is subcontracted, or outsourced, to experts and think tanks. Few governmental policy agencies, most notably the intergovernmental OECD, maintain the capacity for the extensive research that is required to substantiate policy-making. Overall, the dramatic growth of international and national educational testing and the dramatic expansion of education assessment practices signal the rise of a rationalized governance regime for education. This governance mode steers education towards administrative-focused regime and is often criticized as diverting attention away from content-specific and context-specific policy-making.

112 Continuing educational expansion

113 Third, whereas global and cross-national education policies focused until the 1980s on mass schooling and, with the advent of the global knowledge economy, also on tertiary education and innovation, the contemporary substantive focus for education governance is on lifelong learning. The orientation towards education as a continuous, and often also self-motivated, learning and skilling is spurred by the rapid changes of the global economy and the labor force. Such changes include the longevity of individuals, which extends the employability of working adults; they also introduce great uncertainty as to the competencies that are required for future gainful and productive employment. These uncertainties, and the “over the horizon” planning that they impose, call not only for promotion of continuous learning but also for change to the content of education. Indeed, contemporary education policies globally and cross-nationally advocate a paradigm shift in pedagogy – towards flexible and non-formal education, towards digital literacy, and towards agentic learners. This global governance regime regarding lifelong “and lifewide” learning is formalized in such intergovernmental initiatives as the 2010 Belém Framework for Action, coordinated by such intergovernmental programs as the UNESCO Institute for Lifelong Learning, and advocated by the European coalition of nongovernmental organizations known as The Lifelong Learning Platform (formerly, EUCIS-LLL). Here too we see evidence for the complexity and heterogeneity of global, international and transnational advocacy networks of organizations, creating a global mode of education governance.

114 **3.1.3 Conclusions and recommendations**

115 Over the course of the globalization of education policy-making, formally since the mid-nineteenth century until today, there is a consistent and unwavering commitment to the vision that education is a means for societal development. Nevertheless, the definition of what accounts for development and of the mechanisms by which

education is to contribute to development have varied over time and across polities. In this way we observe a sustained definition of education's social role and still considerable variety in the operationalization of education's contribution to development. This tension is expressed clearly in policy documents, which on the one hand proclaims the universal importance of knowledge and learning and the virtues of erudition while, on the other hand, specify particularistic (national, ethnic, or religious) conditions and goals for designing education and for harnessing it towards human wellbeing.

116 Given the diverse background conditions that different countries are facing, it is difficult to come up with policy recommendations that would hold independent of context. In fact, a first and foremost recommendation would be that in considering and devising governance reforms, policy-makers need to take into institutional, political and social contexts as well as policy legacies and path dependencies. There is no "one size fits all" model of educational governance, which could be transferred from one country to another. A complementary recommendation would be to pay more attention to the cultural foundations of educational governance, which have implications for the effectiveness of how governance works in different countries.

117 In spite of these considerations, there is certainly a lot of potential to learn from each other: Thus, a second recommendation is to engage in transnational processes of communication, which can be enhanced by input from evidence-based research and the systematic involvement of a diverse set of governmental and non-governmental stakeholders. In order to create lasting and legitimate policy solutions, evidence-based policy-making needs to be connected to processes of societal mobilization and organization. Furthermore, a transnational process of problem-oriented policy learning should respect national (and subnational) diversity in addressing governance problems in education (and beyond), while striving for a common understanding of problems and challenges at the same time.

118 **3.2 Institutions and educators**

119 While section 3.1 focuses the macrolevel, in this section we mainly focus on the two levels considered to be decisive in creating the proximate environment for development and learning: the microlevel and the mesolevel. We summarize central insights gleaned from research on (1) characteristics of educational institutions that facilitate learning and (2) relevant attitudes and competencies of educators (esp. principals and teachers). The section mostly focuses on facilitators of education as means of social progress at the level of institutions and educators, the most relevant barriers are described in the final part.

120 In line with the four goals of education as means for social progress, educational institutions and educators should contribute to the promotion of ...

- 121
1. ...skills, abilities, knowledge and competencies in learners that allow them to be successful with regard to objective standards of achievement and therefore participate in the labor market and workforce (economic),
 2. ...social responsibility as a basic personal attitude among learners (civic),
 3. ...interest and motivation in learning that goes beyond a purely economic rationale, with learners having the self-efficacy to make this a reality and thus being open for personal development (humanistic),
 4. ...equal opportunities for all learners, which involves providing support for learners at risk and contributing to a reduction in the influence of factors such as SES that are outside individuals' control (equity).

122 The section focuses on key educational objectives/ targets that are assumed to be the fundamental basis of all of the goals mentioned above and apply to all individuals. We are describing the necessary qualities of institutions and competencies of educators from a psychological perspective. This was chosen as the psychological perspective can address basic motivations, attitudes, and competencies that are considered to be universal and decisive for all individuals. Concerning institutions we primarily deal with preschool/kindergarten and school, as they are obligatory or at least key educational institutions in most countries. Additionally, these levels of education have been shown to have a high and sustainable influence on personal and finally societal developments (cf. Campbell et al., 2002, OECD, 2013). As the mission of universities is not purely an educational one, and only a select group of students come into contact with these institutions, we will give them only the occasional mention here.

123 **3.2.1 Characteristics of successful educational institutions**

124 Research on institutional quality typically identifies three broad quality areas, which need to work in tandem with one another if institutional success is to be achieved: process quality (= learners' direct interactions in the group setting, with the educator, and with the physical environment), structural quality (= the framework surrounding concrete interactions, including characteristics such as group size, student-teacher ratio, teacher qualifications and spatial and material conditions), and quality of orientation (= curriculum,

institutional-specific concept, educational approach, staff goals and values). These three quality areas are linked to the three levels discussed above: process quality corresponds with the microlevel, quality of orientation with the mesolevel, and structural quality with the macrolevel. The classification scheme of qualities is primarily used in research on early childhood education (cf. Tietze, Roßbach & Grenner, 2005), but – even if labelled different - can also be found in research on classroom instruction and school effectiveness (cf. Scheerens, 2000). Thus, the three quality areas repeatedly come up when examining the characteristics of effective educational institutions in line with our goals in the following sections.

Kindergartens

There is a growing body of research recognizing that early childhood education and care brings a wide range of benefits, both social and economic: better child well-being and learning outcomes; more equitable outcomes and a reduction in poverty; increased intergenerational social mobility; greater female labor market participation and gender equality; increased fertility rates; and better social and economic development for society at large (OECD, 2006; Campbell et al., 2002).

- 125 Numerous studies conducted in various countries demonstrate that participation in systematic preschool education per se as well as the length of attendance at kindergarten, pre-school etc. are positively correlated with later school success (WENIGE ZITATE Tietze, 2010). The rate of grade retention among children from disadvantaged families and immigrant backgrounds shows a particularly strong reduction.
- 126 However, not only the length of attendance matters. In fact the quality these institutions have has an important influence on the outcomes (cf. Britto, Yoshikawa, & Boller, 2011). Here, the quality areas mentioned above are of relevance and have to be viewed considering their interdependency. There is a substantial correlation between process quality and various aspects of structural quality and quality of orientation: For example, process quality and student-educator-ratio are related. As better the ratio as higher the quality. Higher process quality is observed when educators are better paid. But a high level of education of educators seems to represent only a necessary not a sufficient condition for ensuring good process quality. Traditional, less individual-oriented convictions among educators have negative effects on process quality. In sum, good structural conditions create the framework for high pedagogical process quality – making it possible, rather than “determining” it per se. But the relative importance of structural conditions can vary

depending on cultural context. While the influence of any single quality aspect is usually rather small; taken together, they form a potent package.

127 High institutional quality is shown to have consistent short, middle and long term effects. In terms of preschool-aged children (= short term), consistent, supportive effects were found for linguistic-cognitive development. Results concerning social development are mixed. In the medium term (= school age), effects of high-quality preschool education have been found for cognitive, language and math performance, and in general for scholastic abilities. Furthermore, high institutional quality is related to a higher ability to cope with everyday situations. In the long run (= off school age), also positive social and cognitive effects were found e.g., better final school degrees, higher income, lower rates of criminality (Campbell et al., 2002). However, with regard to long-term effects, the quality of the subsequent school plays an important role. If the subsequent school has low quality, the positive effects of high quality preschool education diminish.

128 All in all, a growing body of research recognizes that early childhood education and care brings a wide range of benefits, including social and economic ones: better child well-being and learning outcomes; more equitable outcomes and reduction of poverty; increased intergenerational social mobility; higher female labour market participation and gender equality; increased fertility rates; and better social and economic development for society at large. Research further shows that quality matters a lot, in particular the everyday process quality. Exposure to high-quality care appears especially important for at-risk children's later school success. The literature clearly shows that money invested in early childhood development and education yield extraordinary public returns. Governments are increasingly working to assist families and support children. Between 1998 and 2011, public expenditure on young children in the form of childcare and preschool increased 55% on average across OECD countries (OECD, 2016). However, there are large differences in the percentage of their GDP the countries spent on childcare and preschool. Even in the OECD-countries preschool places for very young children are lacking (OECD, 2015). From the two year olds 39% stay in childcare (variation 0 – 95%) from the three year olds 74% (variation 3 – 100) while 88% of the four year olds attending kindergarten (variation 36 – 100%). Furthermore, the quality of childcare, kindergarten, and preschool education is very mixed.

Schools

Obviously, the three quality areas (process quality, structural quality, and quality of orientation) are also of high relevance for schools.

However, respective research does not focus on these quality areas, but on school effectiveness and quality management. Within this research several parameters for success (concerning the four goals of education) and their working mechanism could be identified (Scheerens, Glas & Thomas, 2003; Bensen & Bos, 2010): (1) Achievement orientation: High but appropriate expectations for both teachers and students provide a positive stimulus for the school's pedagogical work. (2) Well-structured learning atmosphere: Students can be supported better both in advancing their content knowledge and in taking responsibility for themselves and their environment in a learning environment where everybody feels valued and secured. This encompasses a positive school climate among students as well as between students and teachers and among the teaching staff. (3) Professional cooperation among teachers: There should be broad consensus among the teaching staff in terms of pedagogical goals; teachers should work together in formulating goals and in planning and developing their classroom instruction. (4) Pedagogical leadership: The school's leadership goes beyond purely administrative matters. Rather school principals' responsibilities are: supporting, evaluating and developing teaching quality; goal-setting, assessment and accountability; strategic financial and human resource management; and collaborating with other schools. (5) Quality of the enacted curriculum: Schools have to ensure the alignment between the intended and enacted curriculum. This requires school-level reflection with regard to its pedagogical work. (6) Evaluation focus: Evaluation is considered important, and systematic monitoring of student performance, feedback on instruction and internal as well as external evaluations take place at the institutional level.

129 Sustainably successful schools need to fulfill all six parameters together as they are highly related. Similar as for kindergarten, most important are parameters contributing to process quality (= instructional quality) as e.g., achievement orientation and well-structured learning atmosphere (Hattie, 2008). However, even in the OECD countries this high level of school quality is only partly realized with high variation across countries. This could be shown on the one hand by such studies as PISA or TIMSS, and on the other hand by studies focusing on school climate.

Conclusions

The opportunities for implementing these parameters vary internationally and across cultures. Nevertheless, professionalization of educators and educational institutions is needed. This professionalization should explicitly seek to target all four educational goals and take responsibility for achieving them. So far, there is a lack of models that explicitly and cohesively describe necessary competencies for educators, teachers and school

principals. One such approach was presented by Schober, Klug, Finsterwald, Wagner and Spiel (2012) and refers to schools in its original form. The same basic idea can easily be broadened to include other educational institutions as kindergartens. The approach will be described in the next subsection.

130 3.2.2 Competencies of educators and principals

131 The approach presented by Schober et al. (2012) proceeds from the assumption that *results-oriented, output-oriented, and competency-oriented quality development* leads to the optimization of educational institutions as a whole by means of orienting the entire pedagogical process as well as the entire work of the school / educational institution towards improving young people's learning outcomes. As a guiding maxim for behavior, educators (daycare educators, kindergarten teachers, preschool teachers, school teachers, etc.) and principals (daycare and kindergarten principals, school principals, etc.) should ask themselves what concrete learning goals are being pursued in a given situation, whether these are being achieved – and if not, why not and what needs to be changed in order to achieve them.

132 Concretely, these competencies are: being able to 1) define (learning) goals; 2) take targeted measures to achieve these goals; 3) measure and assess whether and to what extent goals have been achieved; 4) derive new measures as a consequence of this; 5) initiate and conduct internal evaluations (i.e. effectiveness analyses); and 6) handle and make use of the results of external evaluations. The extent to which these competencies are necessary certainly vary by group of actors (educators vs principals) and by level (e.g., kindergarten vs school). Nevertheless, they are equally valid for all actors regardless of whether they work in schools or in pre-schools, whether they are involved in direct instruction or in leading the institution as a whole. Table 1 in the Appendix specifies these six competencies for result-oriented quality development more in detail.

133 Comprehensive and fundamental determinants for all six competencies are (a) a fundamentally positive attitude towards evaluation, (b) the willingness to take responsibility, and (c) high self-efficacy and self-worth. *Responsibility* means that educators and principals must feel connected to the goals of their institutions and believe that they can be achieved. Taking responsibility, in turn, requires high *self-worth* and a high *self-efficacy*. A further (d) fundamental determinant is to *view diversity as an opportunity*. Differences among individuals in terms of abilities and starting points must be recognized in setting goals and taken into account in designing instruction. This particularly applies to the areas of *multiculturalism* (cf. Cochran-Smith, Davis & Fries, 2003), *gender*,

special abilities / needs and socio-economic background. Related to this, it is also necessary to explicitly view a much wider range of competencies as resources and a source of student potential, rather than just a few (cf. those that align with the traditional canon of school subjects).

134 For realizing results-oriented quality development not only the described competencies of educators and principals are necessary, but also appropriate conditions at the mesolevel (= institutions) are needed as described in the subsection before. Furthermore, the macrolevel has to provide respective high professional education for teachers and principals.

135 **3.2.3 Central barriers**

136 Having in mind the described characteristics of successful educational institutions and of the competencies educators and principals should have for results-oriented quality development, several barriers could be brought into discussion. They obviously vary across cultures and countries. In the following we mention four central barriers that are of general relevance.

- 137
- Presently a high proportion of children is not attending public education; in particular there is a substantial supply gap in daycare, kindergarten and preschool education. Of course, here is a high variation across continents and cultures.
 - High quality of education and professionalization of teachers and principals is not widely established. Again, a large variation across continents and cultures is evident. A further problem arises from the fact that poor teacher education and lacking school and preschool attendance is often combined. Furthermore, even in OECD countries there is a substantial portion of institutions (schools, kindergartens, etc.) that does not fulfill the criteria for success as described above.
 - Even in countries where nearly all children are attending public education and teachers are obligatory educated at universities, initiatives and reforms for quality improvement fail as they are not systematically implemented. Implementation is widely understood as the “specific set of activities designed to put into practice an activity or program of known dimensions” (Forman et al., 2013).
 - A further general barrier that hinders reforms for results-oriented quality development is that most of the programs, recommendations etc. are formulated on a meta-level lacking concrete advises for action and measures for educators, principals and institutions.

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138 3.2.4 Conclusions and recommendations

139 The section focuses on characteristics of institutions, educators and principals that contribute to their ability to work towards the four goals enabling social progress rather independently of specific cultural and national contexts. They are expected to put learners in the position to actively participate in shaping their educational careers, gather information and have confidence in their ability to overcome challenges and uncertainty. Learners have to be prepared for overcoming social barriers – both of a personal nature and with regard to society in general.

140 In the following we provide recommendations for institutions and educators to be facilitators to education as a means for social progress. The recommendations address all three levels mentioned before (macro, meso, micro):

- 141
- Given that educational institutions play an important role in social progress, opportunities for participation in them need to be assured – even in early childhood.
 - Investment in the quality of institutions and their actors increases the positive effects on various facets of social progress. Thus, all three areas of quality (process, orientation, structural) need to be supported systematically – at all levels of learners’ educational careers. Decisions with regard to structural quality are political decisions (macrolevel) that have corresponding effects on quality of orientation (at the mesolevel of educational institutions) and process quality (at the microlevel, educators).
 - The goals of education must be explicitly defined in ways that go beyond economics and the labour market. Educational systems need to be aware of their responsibility for all educational goals (holistic perspective) relevant to facilitating social progress (e.g. in terms of designing curricula; ensuring that institutions attend to all goals; ensuring that basic education is sufficient and defining corresponding minimum standards with relevant criteria; and monitoring a wide range of competencies, not just a few very specific ones)
 - Educational institutions and their principals and educators are important factors influencing educational success on the individual, societal and economic level. Policy makers must be aware of this and enhance the professionalization of the educational system.
 - Results-oriented quality development processes should be promoted . Here, autonomy and the participation of all actors of an institution are necessary prerequisites for success.

- Being a principal in an educational institution or an educator is a challenging position in society that carries great responsibility. Therefore a high investment should be put in attracting high-potential candidates for these positions and in high-quality training for principals and educators (beginning with educators in preschool institutions).
- All reforms and programs in the field of education need a systematic implementation strategy. The realization of this strategy should be accompanied by evaluation measures. In recent years, a growing body of implementation research has indicated that an active, long-term, multilevel implementation approach is far more effective than passive forms of dissemination.

142 Educational institutions should not only focus on their respective educational duties but also recognize their *shared* responsibility for social progress, for successful incoming and outgoing transitions and for the complete educational careers of their students. This responsibility about what happens before and after learners are part of their own institution also needs to be better anchored within universities. This is recommended as they are actively involved in the training of educators in many countries.

143 3.3 Content and pedagogy

144 The support of the four goals of education and consequently the promotion of social progress is not only dependent on governance, institutions, and educators but also on content of education (curriculum) and pedagogy which is the topic of this subsection. In the first part we discuss the power of content and pedagogy in promoting social progress. Based on this, we focus first on relevant aspects of the content of education and two further parts deal with important trends in pedagogy. The description of barriers and facilitators for promoting social progress and the influencing factors of the three levels (macro, meso, micro) are integrated in all subsections. Considering the high relevance of school for lifelong development, achievement, well-being and further basic values of social progress this section primarily focuses on schooling.

145 3.3.1 The power of content and pedagogy in promoting social progress

146 For those in primary and secondary education, what happens in classrooms is the main shaper of their experiences of schooling and dominates future memories. It also plays important roles in shaping identities, constructing citizenship, preparing learners for the workforce, sustaining and renewing cultural traditions, and developing capabilities that matter to individuals and society.

Education does not always do these things well, or with balanced emphasis. In addition to being experientially important, classroom processes and the content of teaching and learning have major consequences for learning outcomes, no matter how these might be defined, and positive or negative experiences or expectations or life in classrooms create 'push' and 'pull' factors that contribute to decisions about whether to attend school and whether to continue. Curriculum and pedagogy are also ultimately where the vast majority of educational funding goes in the form of the recurrent costs of teacher salaries. Surprisingly, despite the centrality of curriculum and pedagogy to the experience and benefits of education, and despite the costs of staff to deliver and enact them, in comparative perspective they are relatively under-researched and they receive insufficient attention in terms of, for example, aid funding to education, as compared to questions of access and outcomes.

147 The content taught in schools is expressed in a curriculum, which may be more or less controlled and centralised. Many, but not all, countries have a state (or sub-national) curriculum. This sets out the knowledge that learners are expected to command, and also in most cases defines particular skills they should acquire and sometimes the values that are intended to be inculcated. The level of detail of these varies widely, ranging from minute details of 'facts' to be covered and learned and competencies to be attained by all students, to very loose guidelines within which teachers make some of the most important decisions regarding what is taught and learned and there is space for differentiation for and by individual learners based on their needs and interests. Where the national curriculum is tightly framed, it is also common to have state-prescribed textbooks which buttress this control over content. While a common curriculum can potentially support equity by equalising entitlement, the use of imposed state curricula to oppress citizens in totalitarian or racist regimes is well-documented. Whatever the explicit learning outcomes might be, the content of teaching and learning also has an implicit dimension, known as the hidden curriculum, which sends strong but oblique messages to learners. For example, the ways that women are portrayed in textbooks – the jobs they do, the ways they communicate, the clothes they wear, who is loved and who is not – set out a normative framework for learners that has deep effects on their own identities and understandings of what to expect from others, regardless of whether the official line advocates equality for women as a learning goal.

148 Pedagogy is a complex and highly culture-bound process and this is perhaps among the explanations for the lack of attention it receives by researchers and funders. On one level, pedagogy consists of the observable methods and interactions that take place in classrooms. However, as in Alexander's definition (2000) it also includes the

beliefs, philosophies and theories that underpin these in the minds of teachers. These govern what teachers do, although habit and imitation are highly significant as well. All the lessons in the world have a number of shared and familiar ingredients: tasks, activities, teacher judgments, and interactions, structured through use of time, space and student institution, and, over the cycles of the school year, routines, rules, and rituals (Alexander, 2001). Within this there are context-specific variations which create a plethora of approaches. Despite these cultural variations, there are powerful international norms of 'best practice' which become travelling policies and prescriptions for pedagogy. We explore one of these – learner-centred approaches – in the section below.

149 What have these to do with social progress and with the four goals of education as set out above? There are a number of issues around content and pedagogy which relate to the question of equity. The curriculum often caters far better for some parts of the population rather than others, and privileges particular forms of dominant knowledge that reinforce an unequal status quo. Language of instruction strongly governs access to the curriculum for learners. On the other hand, teaching ABOUT inequality through the use of critical thinking has the potential to interrupt cycles of reproduction. Much is learned too about one's rightful place in society through the interactions that shape experiences of pedagogy. Teachers send out strong messages about who is able, who is powerful and who is in charge through how they interact with students. Classroom discussions may be dominated by boys, by dominant ethnic groups, by those whose parents are better educated, or by those with good language competency, disenfranchising others and reminding them of their lower status. When teachers tightly control tasks and activities there is little space for questioning of the status quo or for exploring what is of interest to learners whose life worlds are outside the norms established within curricular content that supports inequalities.

150 Schools are a primary site for socialization for children and adolescents in particular, for whom relationships with individuals outside the home gain increasing importance. Although schooling structures can be sites in which adolescents are socialized to reproduce existing social class hierarchies (Bourdieu, 2000), they are also – at least potentially - mechanisms for upward mobility. In particular, school social contexts have been found to be critically important sites for socialization towards schooling and career, with consequences for students' educational outcomes (Hallinan, 2006). The relationships children form through school have been theorized to be instrumental in their access to resources and support. Transmitted through these relationships, the realization of academic

and career goals can be fostered. The quality of these relationships has proven to be an important factor in youths' academic achievement (Bryk & Schneider, 2002).

151 The four goals of education are supported – or undermined – by content and pedagogy. Much discourse around curriculum reform is couched in terms of preparing students for economic productivity, whether that means learning ‘the basics’ of literacy and numeracy, studying vocational subjects as preparation for specific jobs, or focusing on the so-called 21st century skills that support the knowledge economy (see below). The nature of civics as a subject area or cross-curricular theme – for example whether it is limited to knowledge about governmental structures and prescriptions about obedient citizens, or whether through critical pedagogy it questions inequalities and power – shapes understandings of the possibilities and limits of democratic political and civic participation. The Janus face of education's relationship to equality is also in evidence in the roles of content and pedagogy. The curriculum has the potential to contribute to the redistribution of opportunity by debunking myths of in-group superiority; equally, it can reinforce social stratification when different curricula are offered to different groups of students and those groups align with relative privilege. Where learners are streamed into academic and vocational tracks there is often a correlation between socio-economic status and one's place in the streams. As noted above, textbooks and other curricular resources can communicate messages to students that build or undermine their confidence in terms of what they can achieve. A pedagogy for equality is one which allows equal participation and promotes critical questioning of privilege.

152 One key area of international debate revolves around the development and implementation of initiatives and agendas such as Education for All (EFA), the Millennium Development Goals (MDGs) and more recently the Sustainable Development Goals (SDGs). In particular, it has been frequently argued that international efforts have focused far too narrowly on increasing access to formal education, without attending to the quality of learning actually taking place in schools. There has been a failure to ensure that schooling actually leads to education, resulting in a need to recapture the broad understanding of education and its purpose in future goals and frameworks. These critiques highlight the need for policy and practice to attend not just to learning outcomes, but also to the learning process and the role of pedagogy in providing quality education (United Nations, 2013). Linked to these educational policy discussions is a large body of academic work from disciplines such as development studies, development education and anthropology that has critiqued international development, and by extension education, initiatives and agendas for their tendency to rely on a ‘Western’ view

of what constitutes 'development'. Authors such as Amartya Sen, Martha Nussbaum, Arturo Escobar, Robert Chambers and James Ferguson have argued for a range of alternative conceptualizations of the term capable of providing space for indigenous and local knowledges, diverse understandings of what constitutes a 'good life', and acknowledgement of the effects of unequal global relationships. This shift in academic discourse has also run parallel to a shift in international development policy, which is increasingly moving away from an idea of 'development' being organized *for* the Global South *by* actors in the Global North (Skinner, Blum & Bourn, 2013).

153 Beyond all these restrictions and controversial discussions, the subjects and themes a global core curriculum might include have been described and are set out below. Additionally, identity formation as one highly relevant cross-subject theme is discussed in more detail.

154 3.3.2 Core curriculum for the 21st century

155 Among the striking features of contemporary global education is the consolidation of a globally recognized core curriculum. Such curriculum describes the subjects and themes that are considered the basis for those personal competencies and for the societal capacities that are required for 21st century progress worldwide (Trilling and Fadel, 2009; Rotherham and Willingham, 2010).

156 Whereas post World War II international education policies concentrated mostly on basic literacy, currently the global core curriculum includes a much expanded list of subjects and themes. Chief among them is STEM (science, technology, engineering and math), which is adjusted per education level to build the required general science and math knowledge and skills. In its expanded form STEM also includes environmental education, chemistry, physics, and computer sciences (Marginson et al., 2013). Alongside, global core curriculum also includes citizenship education, which generally includes civic and political skills, studies of international relations and human rights, multiculturalism and tolerance education (Cogan and Derricott, 2014). Last, the global core curriculum also incorporates post-literacy curriculum, referring to life-long learning and non-formal education and acknowledging the ever-changing conditions of global society and the need for continuous education and skilling of the labor force (Jakobi, 2009; Tuijnman, and Boström, 2002). These three general curricular areas – STEM, citizenship-, and post-literacy education – differ in their worldwide appeal: drawing upon the definition of science as a universal body of human knowledge, STEM is the most internationally standardized curricular areas, whereas citizenship- and post-literacy curricula are treated

with greater sensitivity to local social traditions. And still, on the whole, all three curricular areas are included in international policy recommendations regarding education and progress.

157 The sweeping endorsement of this global core curriculum is predicated on the non-contested expectation that education is the mechanism for delivering social progress, namely prosperity, wellbeing, justice and security. Therefore, while education in general is hailed as the panacea for social ills and goods, the impact of the subjects and themes that are incorporated into the global core curriculum is specifically articulated. For example, STEM is commonly linked with the 21st century's knowledge- and innovation economy; in a similar manner, citizenship education is assumed to guarantee political engagement, public responsibility, and social action. In these ways, education in general and the 21st century global core curriculum in particular are defined as both a means to a social end and as a human right.

158 The global core curriculum is set as a policy recommendation and its implementation worldwide is voluntary. Nevertheless, the authority of such education principals as UNESCO to specify and prescribe this curricular model propels the diffusion of the universalized curriculum to societies worldwide. Moreover, curricular and learning assessment tools that were designed to evaluate curricular development and implementation work to further articulate and even scale the globally recognized curriculum (Brinkeley et al., 2012). For example, UNESCO's General Education Quality Analysis/Diagnosis Framework (GEQAF), which was designed to strengthen the capacities of national education authorities to monitor local education achievements and thus to allow for policy interventions, has been also responsible for the diffusion of isomorphic curricula across the world. Likewise, the testing and rankings scheme of OECD's Program for International Student Assessment (PISA) confirms the standing of reading, math and science as the three areas of global education competence.

159 The nature of globalisation demands that educational programs in all countries prepare young people to understand global relationships and concerns, cope with complex problems and live with rapid change and uncertainty. Insufficient recognition, particularly in LAMICs (low and middle income countries), of the importance of these issues in international education and development policy, not to mention research, undermines international efforts to engage *all* citizens around the world with developmental processes and debates in providing quality education to all.

160 **3.3.3 Identity formation**

- 161 Who am I? What shall I do with my life? Questions of identity can and do arise at many points in life, but they are particular and intense during adolescence. The term identity has been used to refer to many different phenomena, such as goals, values or beliefs. The term is also used to refer to people's group affiliation and role in society. From a social-psychological and sociological perspective, individuals have multiple identities: one can be Indian, female and planning to be a teacher in the future. These various facets of identity converge to define the self (Schwartz, Donnellan, Ravert, Luychx, & Zamboanga, 2012).
- 162 In addition to being shaped by dispositions, motivations and individual experiences, the process of identity development can be influenced by the social and cultural environment. This is of particular relevance regarding schools as the most important institution adolescents are committed to (Lannegrand-Willems & Bosma, 2009). Adolescents in schooling in most countries spend a minimum of 20 hours a week during at least 10 months of the year.
- 163 There is, however, not only a lack of empirical research analyzing identity formation in school contexts, but also a lack of recommendations on how schools can actively contribute to identity formation in positive ways that promote individual choice and emancipation. Whereas people in the mid-20th century could develop their individual and collective identities within well-defined roles of work and partnership, today's youth is challenged with identity issues prior to entering the workforce and committed partnerships. The transition from adolescence to adulthood has become far more extended, individualized and complex than in the mid-20th century. Consequently, schools are forced to systematically provide opportunities for students' exploration of life and supporting identity formation in domains such as occupation, culture, religion, politics and gender roles. It is of particular importance that schools with students from poorer socioeconomic backgrounds provide such opportunities for their students.
- 164 Cultural background and gender are significant aspects of identity in which schooling plays a significant role. For immigrants, school provides an opportunity to socialize. School is a place where both local and migrant children and youth spend a substantial part of the day. For many, school provides prolonged first-hand contact with people from different cultures and ethnic backgrounds, and is therefore an important context for forming peer relations. As a result, school has the potential to afford positive opportunities like friendships, learning about other cultures, understanding other ethnic groups; as well as negative experiences such as prejudice and

racism, rejection and social exclusion, bullying and victimisation (Schofield, 1995) having either positive or negative effects on identity formation in the domain of culture.

165 Despite men and women, or boys and girls, formally having the same educational opportunities, gender differences still exist in students' performance and motivation, in vocational aspirations, and also in salaries and the participation in different substantive fields. Gender-stereotyped expectations play a central role in the perpetuation of gender differences, as they determine behaviour of important others and thus lead to vicious cycles in the development of children's gender-stereotyped motivation and performance and therefore their identity development. Overall men and women are typified to differ both in terms of achievement-oriented traits, labelled as agency, or instrumentality and in terms of social- and service-oriented traits, labelled as communion, or expressivity (Kite, Deaux, & Haines, 2008). Men are characterized as aggressive, forceful, independent, and decisive (= agentic attributes), whereas women are characterized as kind, helpful, beautiful, and concerned about others (= communal attributes).

166 Gender-stereotyped expectations are often confirmed even though they are false, as expectations often lead to self-fulfilling prophecies and to perceptual biases (Jussim, Eccles, & Madon, 1996). In the context of education, gender-stereotyped expectations in particular concern interests, abilities and vocational aptitudes attributed to girls and boys (Kollmayer, Schober, & Spiel, 2016). In general, a positive view on heterogeneity should become a pivotal educational goal for teachers leading to the active promotion of students' social competence and coping with diversity which also supports positive identity formation.

167 For realizing the described subjects and themes of education respective pedagogical measures are needed. In the following subsections two important trends in pedagogy are presented in more detail.

168 **3.3.4 Learner-centred education**

169 Learner-centred education (LCE) is a travelling policy and classroom practice which has gained international currency, not least due to its links – in theory – to education's role in promoting social progress. The broad term 'learner-centred education' is an umbrella for a wide range of practices which emphasise different approaches to pedagogy and the curriculum, including, for example, inquiry-based learning, activity-based learning, critical pedagogy, and child-centred

pedagogies. What they all have in common is their reaction against teacher-centric approaches such as lecturing and drilling, and their emphasis on learner control over what is studied and how.

170 Learner-centred practice has been associated with social progress in a number of ways[5]. By encouraging active participation by all individual learners, and by giving them greater control over the curriculum, it upholds Children's Rights conventions and is assumed to facilitate the development of democratic skills. Critical versions of LCE encourage questioning of received knowledge and of authority, also essential for democracy and for social change. By acknowledging and accommodating individual differences in terms of interests, talents and preferred approaches to learning, in theory LCE has the potential to promote equality in the classroom, at least in terms of processes, if not outcomes. It also has the potential to promote learner engagement with schooling and by generating and channelling motivation, raise achievement across all groups of learners. LCE is also claimed to prepare all learners for the knowledge economy by creating flexible, lifelong learning practices that can respond to rapid change and the information revolution.

171 However, given the complexity and multiple interpretations of LCE, pedagogy's close relationship to culture and to power interactions, and LCE's export to low-and-middle-income countries especially during the late 20th century, it is perhaps not surprising that much of this potential has not been realised and that LCE's assumed link to social progress has been questioned. The lack of evidence – or occasionally contradictory evidence – concerning the underpinning suppositions above are one source of critique. What is especially compelling, however, is that whatever the potential of LCE, it cannot be realised within mainstream schooling where it does not embed into local systems, and in many lower-income countries where it has been an import, there have been unintended consequences of the introduction of LCE through policy reform. Research has offered a range of reasons for this, including teachers unaccustomed to learner-centred approaches and with little preparation; assessment regimes which test a fixed curriculum and memorised knowledge; and a lack of resources to support a wider range of learning activities in classrooms. LCE has also been accused of being an individualistic and 'Western' approach which is not in harmony with indigenous approaches or locally-acceptable relationships of power distance between teachers and learners (Schweisfurth 2011). Beyond these issues of policy-practice gaps and accusations of neo-colonialism which have sometimes followed in lower-income contexts, research in the UK has suggested that not all learners are equally equipped to participate in learner-centred lessons, with already advantaged

learners being more accustomed to stimulating learning activities and more practiced at expressing themselves (Bernstein 1971, Young 2013).

- 172 Despite these challenges, it is striking how successful LCE has been with adult learners, such as those based on Freirian approaches (Freire 1972), and in alternative schools outside of the mainstream, such as those that follow the Montessori model. It seems that LCE's shortcomings are more to do with understandings of childhood and children's places in the world, and the domination of particular modes of state schooling, than it does with its own failings.
- 173 What is perhaps needed is a new understanding of learner-centredness and approach to it. Policymakers and teachers can embrace its potential to uphold rights, encourage critical thinking and democratic exercise, and support the development of love for learning. However, given the cultural variations that will frame the enactment of such pedagogies, to be successful and to suit the local context it is essential that educational reform to pedagogy does not impose individualistic approaches where more collectivist ways of working are more culturally valued and have been educationally successful. Reforms must also avoid making inappropriate or unrealistic demands on teachers. The limitations of this cultural relativity are where pedagogical approaches violate rights (such as the use of corporal punishment) or perpetuate or create inequalities (for example by excluding students with less cultural capital).

174 **3.3.5 The role of technology**

- 175 Begin with the obvious: the most drastic change over the past generation to the lives of both teachers and students is the explosion of digital technology. In 1996, universities began to create websites, email was still a novelty, and cell phones were costly and looked like small radios. Research was conducted via card catalogue at libraries and in encyclopedias. Google and Wikipedia were yet to be born. Today the world looks utterly different. Access to the worldwide web, cellular technology and mobile computing, email, and social media have completely transformed what takes place inside and outside the schoolyard. Parents, teachers, and, above all others, students inhabit a hybrid world, interacting with distant others and information with ease.
- 176 The opportunity to communicate via technology -- email, social media, text message -- marks one massive shift in the experience of teaching and learning. A still larger shift is the digital accessibility of knowledge and information. The success and ubiquity of Google, whose stated mission is to "organize the world's information and make it universally accessible and useful," has forever changed how

anyone connected to education can access knowledge on any topic. And technology has also begun to transform classroom lessons: teachers and students create online learning opportunities, including testing and assessment.

- 177 In recent years, technological innovation has done more than color the experience of teaching and learning inside and outside the classroom; it has threatened to replace the classroom entirely. The advent of “massive open online courses,” or MOOCs, provide opportunities for children and adults alike to access educational opportunities, often for free (or no more than the price of an internet connection) anywhere in the world and at any time. It is too soon to assess whether MOOCs will be as “disruptive” to traditional brick-and-mortar schooling as some of their founders wish.
- 178 In contrast, the aims of on-line distance education in low and middle income countries are often different from those of the higher income countries. In the latter, moves to widen participation and lifelong learning for non-traditional learners are closely linked to the development of a strong knowledge economy. In contrast, in LAMICs motives for distance learning are often to provide basic and literacy education to large numbers of poor people, particularly in the rural areas. Lack of trained teachers has meant that several open learning initiatives in LAMICs have focused on educating and training their unqualified teaching force. In sum, there is a variety of open and distance learning methods that have been successfully implemented with an outreach to the poorer and deprived groups in LAMICs.
- 179 It is widely suggested that online technologies can help address issues of educational equity and social exclusion, and open up democratic and accessible educational opportunities. The national governments and non-government agencies who funded endeavours in LAMICs have advocated the use of new technologies to reduce the cost of reaching and educating large numbers of children and adults who are currently missing out on education. However, the present IT provisions in LAMICs is limited to the urban elite. Existing infrastructures allow only a few to develop communication and interaction skills and to become part of the new social networking paradigm. Education for the masses continues to be didactic and devoid of interaction and critique. And while e-learning may offer the opportunity to shift the distance learning paradigm from delivering of content towards learner-centred and discussion-led learning, continuing reliance on print material and broadcast technologies dominates in LAMICs (Gulati 2008). The IT access gap is contributing to the widening digital divide between haves and have not in LAMICs. Furthermore, using online education needs both high

motivation and self-regulated learning competencies. Therefore, as it was outlined in the section on LCE not all learners are prepared to profit from technology based education as online courses.

180 Many of these technologies – email and the web, for instance – are so ubiquitous that we no longer see them as innovative; they are merely the medium through which we do business. But much more remains to be done in order to realize the educational promise of technology. For one, there is a digital divide between haves and have-nots, and extending access to the web through cellular and broadband technologies must be a global priority. Beyond access, we need much more research on how most effectively to adopt blended learning strategies and to incorporate online learning opportunities in the classroom. But there is evidence, that online education often lacks respective didactical concepts and is not solidly based on learning theories. Mostly, the technology dominates educational concepts and models. The idea that often has driven the adoption of technology in education is to save money and time. But the contrast is the case. High quality and successful use of ICT in education needs time and money.

181 **3.3.6 Conclusions and recommendations**

182 While there is ever greater recognition of the need to focus on pedagogy and learning, and the development of critical approaches to education that incorporate diverse perspectives and skills, uncertainty remains about precisely how to achieve this in practical terms. Just as teachers cannot overhaul the education system alone, nations cannot counteract worldwide deficiencies in education systems in isolation. All countries will face consequences if today's learners are not adequately prepared to collaborate and resolve the world's economic, environmental, health, social, and political challenges. All can contribute to a global pool of expertise on how best to implement 21st century learning by forming alliances to overcome obstacles to overhauling education.

183 In the following we provide recommendations for content and pedagogy addressing all three levels mentioned before (macro, meso, micro):

- 184 • Curriculum developers and teachers need to ensure that the curriculum does not privilege particular ethnic, socio-economic, gender or other groups through embedded stereotypes or differential access.
- Further research is needed on the interactions that shape identity in different contexts, and how the curriculum and pedagogical relationships can nurture positive identity construction of the self, the group, and the other.

- Policymakers and teachers need to embrace the potential of pedagogy to uphold rights, encourage critical thinking and democratic exercise, and support the development of love for learning. However, learner-centred and related approaches need to be adapted to suit the local context within a framework of human and child rights and equality.
- More research is needed on how most effectively to adopt blended learning strategies and to incorporate online learning opportunities in the classroom, while minimizing the effects of the digital divide.
- LAMICs, wherein only a small proportion of the population has Internet access, need to realize the disparities between rural and urban communities, male and female students, and elite and non-elite groups. They need to consider how to adapt global software and hardware to benefit all of their citizens. This also holds true for those from the Global North advising on and supporting education in LAMICs. The critical challenge is to educate students and teachers to the use of computers and develop accessible infrastructures so that they benefit from the interactivity offered by online learning.
- In the future, curricular reform will most likely be required to balance core subjects and new 21st century skills. This will also require fresh thinking about performance measures to overcome legitimate concerns that there has been limited progress toward recognizing and rewarding skill development that cannot be detected in an end-of-term assessment.
- Accountability will be more essential than ever in 21st century education systems. It will be important to measure accurately the impact of new skills and pedagogy in the classroom to bring about new and improved outcomes.
- The roles of educational institutions in the future and their capacity to radically transform themselves remain uncertain. Every nation has its own vision of what a 21st century education should look like. Innovations that produce successful learning in one nation can have a ripple effect as other nations adopt and adapt these methods for their own use. With increased international cooperation and collaboration, all can participate in building a global learning network as dominant and pervasive as existing international networks in business, finance and communications.

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334 **Appendix**

335 **Table XIX.1:** Specific competencies of educators and administrators for result-oriented quality development in educational institutions (CROQD)

Concrete knowledge / specific competencies of...		
6 Competence in the CROQD	Educators	Principals

<p>Competency in being able to define and set learning goals</p>	<ul style="list-style-type: none"> • Self-regulation (SRL) - competencies with regard to oneself and to one's teaching • Subject-related knowledge and knowledge of curricula in order to select goals 	<ul style="list-style-type: none"> • SRL-competencies with regard to oneself and one's ability to lead an institution • Knowledge about curricula • Knowledge about institutional development • Leadership skills (especially with regard to pedagogical leadership)
<p>Competency in taking targeted measures to achieve goals</p>	<ul style="list-style-type: none"> • Knowledge on how to promote motivation and SRL • Subject-related knowledge and knowledge of didactics, including knowledge about diversity • Diagnostic competencies 	<ul style="list-style-type: none"> • Knowledge on how to promote staff motivation and staff SRL • Subject-related knowledge and knowledge of didactics, including knowledge about diversity • Diagnostic competencies • Management skills
<p>Competency in examining whether goals have been achieved</p>	<ul style="list-style-type: none"> • SRL- competencies • Diagnostic competencies • Ability to design feedback processes 	<ul style="list-style-type: none"> • SRL- competencies • Diagnostic competencies • Ability to design feedback processes

<p>Competency in deriving consequences from achieving or not achieving goals</p>	<ul style="list-style-type: none"> • SRL- competencies • Knowledge of (subject-specific) didactics in order to adapt one's methods • Competence in dealing with feedback 	<ul style="list-style-type: none"> • Self-regulation competencies • Knowledge of (subject-specific) didactics • Leadership skills (especially with regard to pedagogical leadership)
<p>Being able to initiate and conduct internal evaluations (i.e. effectiveness analyses)</p>	<ul style="list-style-type: none"> • Ability to adopt evidence-based logic as a shared fundamental basis of acting • Competence for team work and effective instructional feedback • Methodological competencies (for designing evaluations) • Competence in dealing with feedback / open-mindedness 	<ul style="list-style-type: none"> • Ability to adopt evidence-based logic as a shared fundamental basis of acting • Competence for team work and for promoting team work • Methodological competencies (for designing evaluations) • Competence for giving feedback • Ability to deal with changes / open-mindedness* • Ability to create a positive culture of failure • Knowledge of (participatory) evaluation models

Competency in dealing with and making use of the results of external evaluations

- Competence for team work
- Competence in dealing with feedback
- Basic statistical knowledge

- Competence for team work
- Competence in dealing with feedback
- Basic statistical knowledge
- Able to create a culture of failure
- Open-mindedness

337 [1] Affiliations : University of Vienna, Austria ; Stanford University, USA

338 [2] Affiliations : University of Wisconsin – Madison, USA ; University of Konstanz, Germany ; CHET, South Africa ; Hebrew University, Israel ; Institute for Advanced Studies – IHS Vienna, Austria ; University of Vienna, Austria ; Institute for Studies on Labor and Society, Brazil ; University of Glasgow, UK ; Panjab University, India

339 [3] Affiliations : CHET, South Africa

340 [4] Data on GDP per capita are taken from:
<http://data.worldbank.org/indicator/NY.GDP.PCAP.CD>
(<http://data.worldbank.org/indicator/NY.GDP.PCAP.CD>) (accessed August 2, 2016)

341 [5] The narratives which follow are drawn from Schweisfurth 2013.