## Chapter 15 **Subjects and Subjectivities of the (New)** Geopolitics of Knowledge



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#### 15.1 Introduction

Researchers across educational disciplines agree that there has been a continuous neoliberalisation and industrialisation of education. Higher Education (HE) in particular has largely become an enterprise, in which universities, educational institutes and research centres compete with each other (Hazelkorn, 2017; Erkkilä & Piironen, 2018), develop novel business models for education (Kehm & Lanzendorf, 2005; Maasen & Weingart, 2006; Hartmann, 2019), continuously innovate their research and teaching (Wildavsky et al., 2011; Bui et al., 2019), and strive for excellence and global leadership (Welfens & Walther-Klaus, 2008; Altbach & Salmi, 2011; Münch, 2014). Apart from the economic and historical reasons of this development, the fact remains that education is being transformed, setting economic growth and increased productivity as its main goal (Spring, 2015).

This global transformation of education has been studied both as an epistemic shift as well as a geopolitical game (Robertson et al., 2016; Moisio, 2018; Reiter, 2018; Parreira do Amaral et al., 2019), leading some theorists to conceptualise it as a (new) Geopolitics of Knowledge (GoK) (Mignolo, 2002). The global transformation of knowledge production, however, affects other social institutions, including family, work, and health, too: the more educated the population, the better the access

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<sup>&</sup>lt;sup>1</sup>Using the term new indicates the new wave of geopolitical change in global education, while the brackets remind the reader that geopolitical changes as such have always permeated and influenced educational processes worldwide.

to higher-paying jobs, and, thus, the more sustainable and healthy families are. In contrast, poor education limits the possibilities of better jobs, leading to economic instability, family erosion, and health care difficulties (OECD, 2012; Lee, 2015; Geruso & Royer, 2018). Finally, one important aspect of the (new) GoK is its embeddedness in neoliberalism as a rationality that structures the ways in which relations among and between peoples and things are reimagined, reinterpreted and reassembled to effect governing at a distance (Ward & England, 2007 cit. by Bell & Green, 2016, p. 240). Neoliberal governmentality organises the global transformation of education at a distance (Ball, 2010, p. 135 [original emphasis]) and attempts to steer individuals by creating desirable forms of self-conduct. The individuals in question encompass those directly or indirectly involved in the processes of knowledge production and provision, be they students and teachers, researchers and academic personnel, educational policymakers and policy practitioners. Keeping that in mind, this chapter will explore and analyse the desirable subjectivities of the (new) GoK, i.e. the modes of self-conduct of the individuals, to outline asymmetries, inequalities, and vulnerabilities associated with this development. The chapters leading question is: What kind of subjectivities are being produced and presented as needed and desirable, and what new vulnerabilities emerge as a side-effect? To enquire into this question, the chapter will concentrate on the 21st century skills and competencies discourse (SCD), which presents the key abilities and competencies the future labour force will need for successful participation in the labour market. This discourse operates at a global level and presents an excellent opportunity to observe the processes of transformation of global education.

The chapter is structured as follows. *First*, it conceptualises the analysis of subjectivities and provides working definitions of the two central terms: subjectivity and discourse. *Second*, it presents the 21st century SCD, compiles and discusses various frameworks of key competencies, and identifies its core aspects. *Third*, it provides a fine-grained analysis of three central tension-pairs, within which subjectivities are formed. *Fourth*, it summarizes the results and contextualizes the (new) GoK as a global governmentality.

## 15.2 Discourse and Subjectivity: Conceptualizing the Analysis

This part provides, *first*, a definition of discourse and its role in shaping the existing opportunity structures of individuals. *Second*, it makes a distinction between subject and subjectivity, to clarify and analytically separate these two terms.

#### 15.2.1 Discourse

An analysis of subjectivities has to be based on a careful definition of what counts as a discourse, to which individuals can be subject. There exists a wide range of theoretical definitions of discourse (e.g. Fairclough & Fairclough, 2012; Angermüller et al., 2014; Wodak & Meyer, 2016), but their common ground is that they acknowledge the discursive nature of social reality and interpret social problems as discursively constructed (Kitsuse & Spector, 1973). Discourses produce knowledge and organize the meaning-making processes in particular contexts. In the context of global education there are various discourses that shape the debate and that have gained global visibility and relevance, most notably the discourses on innovation and inclusion in education (Segercrantz et al., 2016; Dunne, 2009) and the discourse on 21st century skills and competencies (Caro et al., 2018). Here it is important to look at how they frame the possibilities of thought and action—or structures of opportunity, as Parreira do Amaral and Dale (2015) term it—and regulate the accessibility of services, positions, and practices in global HE. Along with institutional opportunity structures, in the form of school systems, educational policies, working facilities, and research infrastructures, individuals are faced with discursive opportunity structures, within which they develop their careers, progress in their life projects, and navigate themselves according to goals and objectives they find meaningful. Analyzing these discourses means to reconstruct their constitution of social problems and decompose how they produce subjectivities.

#### 15.2.2 Subjectivity

The term subjectivity is derived from the word subject. By *subjects* we generally understand individuals—teachers, researchers, students, policymakers, etc.—who act according to their institutionally acknowledged and socially accepted roles, duties, and responsibilities. Subjectivity, in turn, describes their expected and desired ways of thinking and acting and, as with any other concept, is seen as an active agent that shapes and is shaped by prevailing social, cultural, and political spaces (Blackman et al., 2008, p. 14). The analysis of subjectivities, therefore, uncovers how existing and new rationalities, discursive practices, and technologies of power shape the self-conduct of subjects, their thinking, acting, and selfunderstanding. The transformation of subjectivities, thus, refers to the sphere of the political, i.e. to the constant striving for hegemony and domination (Mouffe, 2005). In this respect, mode of subjectivation represents a technology of power that shapes the conduct of individuals and makes them conform to certain ends (Foucault, 1988, p. 18). Against this background, exploring the (new) GoK means to render the power structures and technologies of subjectivation visible and to understand and dismantle their discursive production (DeLeon, 2020). It is important to note that individuals are not automatically subject to any discourse but rather are confronted with constant attempts to shape their behaviour and decision-making. Also, individuals can be subject to manifold discourses, nourished by various rationales, which is why subjectivities cannot be clearly clustered and framed. Instead, they need to be perceived as a temporal and contingent variation or *intersection* of discursive practices of different origin. Therefore, a critical analysis of subjectivities needs to focus on the processes of discursive construction and embedding of a particular form of self-understanding and self-conduct.

# 15.3 21st Century Skills and Competencies Discourse—A Critical Companion

Subjectivities always relate to a particular discourse, by which they are produced and to which they respond. This section, therefore, presents and critically assesses one of the leading discourses in global HE—the 21st century skills and competencies discourse (SCD). It does so, *first*, by introducing its context, *second*, by summarizing and discussing the main frameworks that define the desired skills and abilities, and *third*, by elaborating four core aspects of SCD.

In recent years, the debate on the key skills and competencies required by the future labour force has gathered pace. Given the technological developments of the past twenty years and the rising trend of automation and data exchange, known as industry 4.0, governments, educators, policymakers, universities, and research centres have sought, with good reason, to adapt to these rapid changes in order to secure social stability and economic growth (Gray, 2016; Horch, 2017). As a result, the 21st century skills and competencies discourse was shaped by related political, economic, educational, and socio-cultural concerns, focused primarily on how to cope with the uncertainty, unpredictability, and instability of the future labour market and society more generally. Within this discourse, actors involved seek to decide on the most important and desirable abilities needed by individuals of the 21st century for a successful transition into the labour market as well as for full civic participation (Ananiadou & Claro, 2009). One of the reasons for focusing on these competencies is that the majority of recent and future job growth in OECD nations has been, and is projected to continue to be, in services and knowledge work occupations, jobs that are thought to require higher levels of these general skills than manual work (Finegold & Notabartolo, 2010, p. 36). Table 15.1 provides an overview of skills and competencies identified as necessary within various prominent frameworks.

The table was compiled using seven international and national frameworks, ordered by date of issue, and structured in clusters and definitions of skills and competencies. As can be observed, the clusters and definitions from various frameworks are very similar and vary only in minor details or differences in terminology. Although they have been developed over a period of more than 15 years, and in countries with varying educational systems, they nonetheless align on major issues, which was also shown in previous studies (Chalkiadaki, 2018).

 Table 15.1
 Identifying 21st century key skills and competencies

Framework (year		
of issue)	Clusters	Definition of key skills and competencies
enGauge (2003) <sup>a</sup>	Digital-Age Literacy	Basic, Scientific, Economic, and Technologica Literacies Visual and Information Literacies Multicultural Literacy and Global Awareness
	Inventive Thinking	Adaptability, Managing Complexity, and Self-Direction Curiosity, Creativity, and Risk Taking Higher-Order Thinking and Sound Reasoning
	Effective Communication	Teamwork, Collaboration, and Interpersonal Skills Personal, Social, and Civic Responsibility Interactive Communication
	High Productivity	Prioritizing, Planning, and Managing for Results Effective Use of Real-World Tools Ability to Produce Relevant, High-Quality Products
P21 (2009) <sup>b</sup>	Core subjects and 21st century themes	Global Awareness Financial, Economic, Business and Entrepreneurial Literacy Civic Literacy Health Literacy Environmental Literacy
	Learning and innovation skills	Creativity and innovation Critical thinking and problem solving Communication and collaboration
	Information, media and technology skills	Information literacy Media literacy Information, Communications and Technology literacy
	Life and career skills	Flexibility and adaptability Initiative and self-direction Social and cross-cultural skills Productivity and accountability Leadership and responsibility

(continued)

Table 15.1 (continued)

Framework (year of issue)	Clusters	Definition of key skills and competencies
National Research Council (2012) <sup>c</sup>	Cognitive competencies	Cognitive processes and Strategies Knowledge Creativity
	Intrapersonal competencies	Intellectual Openness Work Ethic/Conscientiousness Positive Core Self-Evaluation
	Interpersonal Competencies	Teamwork and Collaboration Leadership
ATCS (2012) <sup>d</sup>	Ways of thinking	Creativity and innovation Critical thinking, problem-solving, decision-making Learning to learn/metacognition
	Tools for working	Information literacy Information and communication technology (ICT) literacy
	Ways of working	Communication Collaboration (teamwork)
	Ways of living in the world	Citizenship—local and global Life and career Personal and social responsibility
World Economic Forum (2016) <sup>e</sup>	Foundational Literacies	Literacy Numeracy Scientific literacy ICT literacy Financial literacy Cultural and civic literacy
	Competencies	Critical thinking/problem-solving Creativity Communication Collaboration
	Character Qualities	Curiosity Initiative Persistence/grit Adaptability Leadership Social and cultural awareness

(continued)

Table 15.1 (continued)

Framework (year		
of issue)	Clusters	Definition of key skills and competencies
OECD (2019) <sup>f</sup>	Task Performance	Achievement orientation Responsibility Self-control Persistence
	Emotion regulation	Stress resistance Optimism Emotional control
	Collaboration	Empathy Trust Cooperation
	Open-mindedness	Curiosity Tolerance Creativity
	Engagement with others	Sociability Assertiveness Energy
	Compound skills	Self-efficacy Critical thinking/Independence Self-reflection/Meta-cognition
European	Eight key competences	Literacy competence
Commission (2019) <sup>g</sup>		Multilingual competence
		Mathematical competence and competence in science, technology and engineering
		Digital competence
		Personal, social and learning to learn competence
		Citizenship competence
		Entrepreneurship competence
		Cultural awareness and expression competence

Source: Authors own elaboration based on chosen frameworks

Among the core or key skills, the four Cs—critical thinking, creativity, collaboration, communication— have a leading position (Joynes et al., 2019, p. 12) and define the most desired cognitive abilities. In comparison, interpersonal and intrapersonal competencies receive less emphasis (Reimers & Chung, 2016, p. 3) and form instead a bulk of unpopular or rather marginal skills and competencies,

<sup>&</sup>lt;sup>a</sup>enGauge (2003). 21st Century Skills

<sup>&</sup>lt;sup>b</sup>P21 (2009). P21 Framework Definitions

<sup>&</sup>lt;sup>e</sup>National Research Council (2012). Education for Life and Work. Developing Transferable Knowledge and Skills in the 21st Century, in: Pellegrino and Hilton (2012)

<sup>&</sup>lt;sup>d</sup>ATCS (2012). Defining 21st Century Skills, in: Binkley et al. (2012)

<sup>&</sup>lt;sup>e</sup>World Economic Forum (2016). New Vision for Education: Fostering Social and Emotional Learning through Technology

<sup>&</sup>lt;sup>f</sup>OECD (2019). Assessment framework of the OECD Study on Social and Emotional Skills, in: Kankaraš and Suarez-Alvarez (2019)

gEuropean Commission (2019). Key Competences for Lifelong Learning

including basic literacy, contextual learning, environmental literacy, interpersonal skills, metacognition, visualization skills (Hanover Research, 2011 [original emphasis]), but also non-cognitive, soft, whole child development, transversal, transferable or social emotional skills and competencies (GPE, 2020, p. 2 [original emphasis]).

Generally, skills and competencies are considered an overarching concept for the knowledge, skills, and dispositions that citizens need to be able to contribute to the knowledge society (Voogt & Roblin, 2010, p. 16). What might count as a skill or competency, then, depends on what is required on the labour market. In this sense, Lamb et al. refer to skills as to *context-based forms of developing expertise* (2017, p. 12 [original emphasis]). That is, being or becoming an expert requires mastering abilities necessary for a particular working task or position. To what extent future job roles will require the particular skills and competencies deemed essential by todays strategies remains, however, unknown. When critically approached, the forms of expertise, or rather employability skills (Gravells, 2010), can be seen not only as *context*-based, but also as *discourse*-based and informed by various educational, economic, and political rationales. Although there exists a wide range of ideas on how future education could or might look, the 21st century SCD clearly predominates and steers the way global and national education policies identify and set their objectives and agendas.

#### 15.3.1 Four Aspects of the 21st Century SCD

The 21st century SCD, expressed in national and global frameworks, informs and provides a strong basis for navigating educational policymaking on various governance levels. It also, however, impacts the way individuals conceive of qualification and proceed in their school-to-work and work-to-work transitions. In this stage of analysis, the frameworks have been assessed as discursive manifestations of the debate on key skills and competencies, out of which four aspects could be carved out and further used to understand the production of subjectivities.

The first aspect points to the forced *uniformity and homogeneity* of the subjects. As can be seen from the overview, the global search for key skills and competencies shows striking conformity and agreement among international organizations, research think-tanks, national governments, and private partnerships on what core or key skills are, which is surprising given the vagueness, difficult of measurement, and highly subjective understanding of these skills (Soland et al., 2013; Suto & Eccles, 2014). The global focus on key skills, which indirectly implies the existence of marginal skills, shows that from the sum of manifold skills obtained by individuals during their life, only a certain number counts as desirable and necessary. This differentiation of competencies directs from the very beginning the process of obtaining and mastering skills, in which individuals are no longer invited to choose freely from a variety of skills and possible, perhaps even not yet existing, competencies, but are instead conducted to conform to the uniformity of supreme ideals of the

future labour market. There is little evidence, however, of what the future labour market will look like and whether it will in fact require the skills and competencies defined today as *kev*.

The second aspect highlights the processes of *individualization and competitiveness* of the subjects. Etymologically, to have a competence (or competency: a more job-related version of the term) means to do something well or successfully (Cambridge Dictionary, n.d.). That is, it is not to fulfil a given task to the best of ones own ability, but to fulfil a given task as it was desired and expected to be fulfilled. In the former, self-satisfaction stays in the foreground, whereas the latter case is a response to external expectations of success. Such a construction of competency or skill is considered by Hampson and Junor (2009) as a distinctly *Anglo* concept—individualistic, defined by employers, and not contested by (or embedded in) other social forces ([original emphasis]). Gaining a competence, thus, goes along with readiness to compete (the word has the same root as competence) for the best performance of external tasks. Success criteria, although individualistic in their nature, are not set by individuals themselves, but are dictated by external expectations, norms, and values, which keeps individuals in a constant mode of competition and self-actualization.

The third aspect is that the discourse on key skills and competencies presents itself as *self-evident and natural* phenomenon. Key competencies and skills are presented in the frameworks as a matter of fact, without reference to those who ought to gain and make use of them. Future subjects are instead portrayed as initially and pre-reflexively willing to gain any competencies needed for a successful school-towork or work-to-work transition. In this vein, the acquisition of key skills and competencies is presented to subjects not as a deliberative choice, but rather as a necessity and a natural progression of events, as a continuous, open-ended, and highly competitive endeavor. The latter, however, cannot be controlled by anyone, as no one can be held responsible for making the wrong predictions about what qualities and competencies will be necessary for the future labour force. As Finegold and Notabartolo point out, investing in improving individuals general capabilities is unlikely to yield a positive return if jobs are not designed to use them (2010, p. 41). Nonetheless, key skills and competencies seem to have no alternative in securing stable transitions.

The fourth aspect is the *geopolitical dimension* of the 21st century SCD. As with any other discourse, the 21st century SCD is not bounded to any institution, government, business structure, or individual. Nonetheless, it occupies and reproduces the geopolitical space of neoliberal knowledge-based societies, which gives meaning to its existence, intelligibility, and legitimacy. The focus on skills and competencies within neoliberal knowledge-based societies expresses the assumed core condition for a sustainable and socially inclusive society. However, on a global scale, they have dominant influence on how knowledge is perceived, produced, and shared, using tacit success criteria expressed in rankings, impact factors, or international cooperation standards as means of securing a hegemonic position (Ricken et al., 2014; Bengtsen et al., 2019). Furthermore, it is within this geopolitical space, where the appeal to excellence and innovation increases expectations and demands on

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subjects (Rostan & Vaira, 2011; Rasmussen & Ydesen, 2019) and where the production of subjectivities takes place and is transferred to other epistemic spaces.

The aspects developed above provide important background information for understanding the processes of subjectivation within the 21st century SCD. There are certainly good reasons why the various frameworks identify similar skills and competencies, including the globalized character of the world, the evolution of technology and ICT, and the need for innovation (Chalkiadaki, 2018, p. 10), all of which affect every country in the world (more or less the same). However, it still continues to be controversial how to measure the acquisition of these competencies and how they relate to each other (Finegold & Notabartolo, 2010, p. 30). Pellegrino and Hilton, for example, claim that, so far, only a few studies have demonstrated a causal relationship between one or more 21st century competencies and adult outcomes (2012, p. 4) and that the comparison of publicly stated skills (within international frameworks) and formally required skills (when applying for a job) has not yet been done. Up to now, there is little evidence on how many job offers require creative and innovative workers and how it should be determined who is creative or innovative enough to hold a particular job.

### 15.3.2 Framing Subjectivities of the 21st Century SCD

The previous textual analysis of the 21st century SCD showed how discursive structures and practices enable the production of desired subjectivities. The following fine-grained analysis addresses these processes more closely and outlines three central tension-pairs that frame the production of subjectivities.

### 15.3.3 Willing vs. Unwilling Subjects

The first tension-pair contrasts the logics behind the willing and the unwilling subject. Apparently, the 21st century SCD focuses on the development of individual skills and competencies, replacing the focus on structural changes and rearrangements that cause mismatches between proclaimed and actual efforts to change social inequalities (Parreira do Amaral & Zelinka, 2019). Subjects are thus obliged to gain new, and extend existing, capabilities, skills, and competencies. This self-actualization and self-responsibilization of individuals foster the production of an employability- and market-driven subjectivity—the modern self-entrepreneur (Bröckling, 2015)—which is globally becoming a mindscape, a kind of novel culture (Moisio & Kangas, 2016, p. 275). In this culture of production, however, it is

<sup>&</sup>lt;sup>2</sup>It needs to be acknowledged, however, that there remains a crucial distinction between countries providing the labour for producing raw materials for digital technologies and societies in which they are used and profits from them made.

not skills and competencies gained by subjects, but subjectivities, i.e. modes of selfconduct based on desired competencies, that become a source of production (Reed, 2009, p. 33). Subjects are only disposable unless they acknowledge and enhance their self-entrepreneurial subjectivity and show passion for growth and a will to accelerate (Vostal, 2016). Subjects' willingness and passion, i.e. the guarantee that they will try to obtain new skills and competencies, whatever their usefulness might be, become the new production factors. Within this logic, the differentiation of the willing subject co-creates its opposite, i.e. the unwilling subject, labelled as unemployed, undocumented, or disposable individual (Oksala, 2015). While the willing subject finds its self-realization in gaining new skills and competencies, the unwilling subject turns into the target of the lifelong learning (LLL) discourse, expressed and institutionalized in manifold policies that intervene with logics of prevention, compensation, activation, or empowerment (Parreira do Amaral & Zelinka, 2019, p. 409). Thus, when critically approached, the subjectivity of willing individuals produced by the SCD presents a counterpart to subjectivity of unwilling individuals produced by the LLL discourse.

#### 15.3.4 Outcome-Oriented vs. Quality-Based Competencies

The second tension-pair is the analytical differentiation between outcome-oriented and quality-based competencies. This differentiation has been identified by choosing the most prominent skills and competencies from the frameworks, reflecting upon possible quality-based counterparts, and juxtaposing the two kinds of skills (Fig. 15.1).

As mentioned before, the key skills and competencies are not only highly subjective, hard to measure, and volatile with regard to their longevity, but also mainly *outcome-oriented* (coloured blue in the Fig. 15.1), i.e. gaining them shall increase the employability of the individuals. Moreover, when testing the feasibility of the outcome-oriented skills and competencies, several questions arise. First, it remains unclear whether the subjects become competent and more employable by targeting the proposed skills and competencies, i.e. whether these competencies will actually be needed in the future labour market. Moreover, since they are difficult to integrate into school curriculums and programmes (Chalkiadaki, 2018), it is a matter of concern how they can be practically deployed: How can creativity, critical thinking, or innovation be taught? Who can provide leaving certificates on creativity, critical thinking, or cooperation? Who can guarantee that these skills will be valued in the same way in various labour markets and sectors? Finally, do employers consider these to be the key competencies they require of potential employees?

Opposed to the outcome-oriented skills and competencies, the so-called *quality-based* skills and competencies (coloured red in Fig. 15.1), which have not been explicitly stated in any of the frameworks, could assess educational challenges more holistically and in a longer-term perspective. On the one hand, they put a lot more weight on personal integrity and the ability to interact in accordance with the

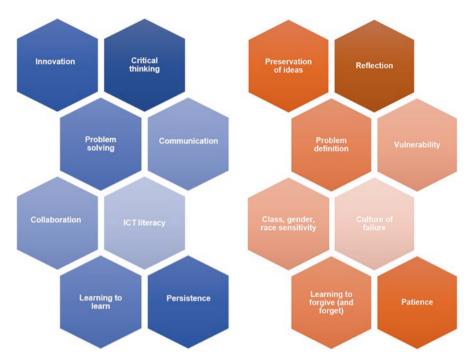


Fig. 15.1 Outcome-oriented (blue) vs. quality-based (red) skills and competencies. (Source: Authors own reflection and juxtaposition)

limited possibilities and capabilities of others. Obtaining them is accompanied by obstacles, failures, misunderstandings, and errors, which cannot be solved alone but only by mutual interaction. Here, the endurance and acceptance of open-ended questions, the ability to handle delicate issues with care, and the readiness to envision solutions beneficial for all parties involved require more than just individual training; they require nurturing the sense of responsibility for others and enhancing the quality of life itself, not just the quality of working life (Lamb et al., 2017, p. 12).<sup>3</sup> On the other hand, they do not conceive personal potentials as growth factors, but rather seek to transform individual specificities into social benefits. The example of vulnerability could best illustrate this idea.

Generally, vulnerability is treated as a negative condition of certain individuals that affects their life and career chances. In educational policymaking, vulnerability has become a new framework for, and a particular perspective on, the education of excluded or vulnerable social classes (Parreira do Amaral & Zelinka, 2021). However, the emphasis on vulnerability's positive condition can open space for

<sup>&</sup>lt;sup>3</sup>As in the case of outcome-oriented skills, the quality-based skills are hard to teach and evaluate in terms of certificates or grades, too. The measurement of inter- and intrapersonal skills cannot be accomplished by institutionalised procedures, but rather by long-term refinement of working and living culture.

fruitful reflection, since it not only evokes the state of being threatened or injured, but also points to specific soft skills, such as tenderness, compassion, openness to others, softness, and fragility (McLeod, 2012, p. 22). Reframing vulnerability as a positive condition can empower subjects to transform their sensitivity to social inequalities, stigmatizations, labels, and oppressions into full civic engagement and active political participation.

#### 15.3.5 Economic Growth vs. Social Inclusion

The third tension-pair is the ambition of many educational policies to achieve sustainable economic growth and, at the same time, guarantee social inclusion and equality of opportunities, which has been central to various policy agendas across the globe (European Commission, 2010, 2013; OECD, 2018; United Nations, 2020). In this regard, reasoning about new skills and competencies for the future labour market can undoubtedly stimulate governments, educators, and private partnerships and bring about positive effects. What needs to be questioned, however, is not so much their incorporation in national education standards (Ananiadou & Claro, 2009, p. 5), but rather their impact on the structure of national and regional labour markets and the future labour force. As Joynes at al. have suggested, while it is acknowledged that there are extensive projected demands at the global level, discussions should also recognize the degree of diversity of demand across regions (e.g. East Asia vs. sub-Saharan Africa), as well as the ways in which contextual and economic circumstances of underdevelopment can inform practical skills needs and priorities at national and sub-national levels (2019, p. 6). Different regions have different demands in terms of the qualification of the labor force. While some regions need highly skilled workers, others rely on a low skilled labor force, depending on factors such as population increase, household income, educational attainment, homeownership, and state-specific influences (Zimmer et al., 2013). It is therefore questionable whether the same competency holds the same value in different regions. To what extent do the frameworks on key skills and competencies acknowledge regional disparities and specificities? Do the key skills and competencies recognize the context-sensitive regional issues, tensions, and relationships? How can the support of key skills and competencies contribute to regional cohesion and social inclusion and how will they prepare the future labour force for regional challenges?

To sum up, the new kind of subjectivity has three key characteristics: *first*, the willingness of the subjects to pursue key skills and competencies and their readiness to compete in the global labour market; *second*, the primary focus on outcomeoriented skills and competencies that enhance employability and self-entrepreneurism; and *third* promoting a homogeneous set of skills applicable to global issues, but not to regional demands. These core aspects of the new subjectivity are developed within and fostered by the 21st century SCD, which has steadily become a navigational technology for schools and education institutes all across the

globe. The final section will set the results of this fine-grained analysis into the broader context of the (new) GoK.

## 15.4 Global Geopolitics, Global Governmentality— Concluding Remarks

The tendency towards substantially *new* geopolitics of knowledge, compared to previous attempts to mould global education in the last century (Benavot et al., 2007), has been characterized by researchers not only as a process of industrialization and economization of global education, but also as a confrontation of various discursively constructed illusions, imaginaries, rationales, and expectations (Castree & Sparke, 2000; Belina et al., 2013; Moisio & Kangas, 2016) that make use of the mutual dependency of various spheres of society, most prominently education and the labor market (Kovacheva et al., 2019, p. 242). Apart from the epistemic and political re-definition of knowledge-production, the current geopolitical transformation signals a change of power relations as well. To capture them, this section conceptualizes the new GoK as a part of global governmentality.

Developed by Michel Foucault, the notion of governmentality describes the way society is governed by conducting the self-conduct of individuals (Foucault, 2004). Framing the new geopolitics of knowledge as a global governmental technology enables fruitful insights into micro-mechanisms of power that operate beneath global tendencies and developments. In this regard, the transformation of subjectivities can enlighten how power relationships change and direct the further development of the new GoK. Against this background, some concluding remarks can be made.

First, the governing of subjects starts with *problematizing and individualizing* educational issues. Current educational challenges to address, volatility, uncertainty, complexity, ambiguity, (acronymised as VUCA; Hughes, 2018, p. xiv), are expressed in terms of the need to equip individuals with the necessary skills and competencies that would assure productivity and growth in unpredictable and uncertain times. The global frameworks of the 21st century SCD are seemingly leading subjects to acknowledge this necessity and adopt the subjectivity of self-organising learners (Tuschling & Engemann, 2013) and self-innovators. However, while they pay attention to the individual dispositions of anonymous subjects, they also turn a blind eye to regional disparities, postcolonial differences, and global power imbalances, thereby strengthening the existing hegemony of neoliberal knowledge-based societies.

Second, and in line with the previous argument, global governmentality operates by *authorizing and validating* the means of knowledge-production. While the central idea of neoliberal knowledge-production is the need to provide excellent, innovative, and cutting-edge research and education, the question of whether and when excellence has been reached or not has long remained an unquestioned assumption.

Instead, educators across the globe exchange their views on how it could be achieved (Ferrari, 2002; Taylor & Ryan, 2005; Van den Branden et al., 2011). The global governmentality of knowledge-production has succeeded in imagining a space in which a certain group of people can decide on what counts as excellent and innovative and, in turn, where the necessary resources, including funding, material infrastructure, or academic and research personnel, should be allocated. In this way, it has strengthened the power positions of those authorised to define future progress, excellence, and innovation and blocked those unable to commit to this kind of knowledge-production.

Third, the (new) GoK as a governmental technology seeks to conduct the conduct of individuals by *subjectivation*, *differentiation*, and creation of liberties. On the one side, it promotes self-entrepreneurism and favors initiative, willingness, and self-actualization. On the other side, it cares for the excluded or disposable individuals, framing them as vulnerable or in need of assistance, thus leaving no space for refusal or resistance. It imposes a neoliberal vision of knowledge-production on to global education and positions itself as a forerunner of things to come, turning the self-declared ability to distinguish future challenges into an asset. The opposition to this kind of novel and innovative endeavor starts with questioning its very basis, i.e. its definition of subjects as knowledge-bearers.

The chapters conceptual work on the processes of subjectivation within the dynamic of the new geopolitics of knowledge seeks to inspire further debates and studies on global education. As stated at the beginning of the chapter, new geopolitical shifts lead to the production of new kinds of subjectivities, which have been analyzed using the example of the 21st century SCD. However, the subjectivities analyzed not only express asymmetrical power relations and the forthcoming differentiation between the excellent and the excluded but also point to a larger paradigmatic transformation of education and society: a pervasive neoliberal instrumentalization of the former and a deep atomization of the latter. Further research shall therefore focus on uncovering converging forces in global education, particularly the attempts (of individual and collective subjects) to resist the current trends and conceive education as a chance to change, rather than as a battleground of conflicting ideas.

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