



Editorial

Regional Disparities in National Education: Origins, Governance, and Consequences (Special Issue)

Rita Nikolai ^{1,*} , Irene Kriesi ² and Regula Julia Leemann ³ ¹ Faculty of Philosophy and Social Sciences, University of Augsburg, D-86159 Augsburg, Germany² Swiss Federal University for Vocational Education and Training, 3052 Zollikofen, Switzerland; irene.kriesi@ehb.swiss³ School of Education, University of Applied Sciences Northwestern Switzerland (FHNW), 4132 Basel-Muttenz, Switzerland; regula.leemann@fhnw.ch

* Correspondence: rita.nikolai@uni-a.de

Research about regional disparities in education within nation-states and their consequences for equity and inequality has a long tradition in education sciences. Many OECD countries started in the 1960s, with the expansion of educational services in regions with underdeveloped infrastructures. In particular, programs in upper-secondary education were extended to reduce inequalities between rural and urban areas, as well as to increase the educational opportunities for children from lower socio-economic backgrounds and for girls. Following the educational expansion after World War II, higher education locations were expanded, in addition to secondary schools [1]). As a result, differences between rural and urban spaces became less evident. Nevertheless, the place of residence and living conditions are still decisive for educational attainment. Thus, the accessibility of educational institutions impacts the educational opportunities of individuals [2–4].

Educational disparities are partly due to regionally diverging supplies of educational and training programs, differing admission regulations in federal education systems, segregated neighborhoods, the dismantling of educational infrastructures in rural areas, or the expansion of private schooling in urban areas. Regional disparities in education are also caused by differences in the supply and the characteristics of educational programs targeted at students with disabilities and students with a migration history. However, it is remarkable that (1) less attention has been given to social-historic, cultural, and economic factors that bring regional structure disparities in education. Hardly considered, also, are (2) educational policies, governance processes, and public justifications, causing or reducing such inequality, (3) the long-term consequences for educational equity, life-long learning, the development of regional and national labor markets, democratic culture, and social cohesion, at a national, regional, or even local level. It remains an open research question how regional disparities are linked with urban developments, school development plans, business development, and even consequences for the individual life course.

Access to education is about overcoming social differences and often also about overcoming spatial differences. Education reforms to reduce regional disparities are difficult to balance: decision-making processes often compete between considering cost efficiency, local specificities, creating equal living conditions, or preventing population decline in peripheral areas [5] (p. 405).

In this Special Issue, the papers address the described research gaps from different disciplines, including education sciences and sociology. The empirical studies encompass compulsory school, baccalaureate schools, vocational education and training, higher education, continuing adult education, and non-formal education. The papers focus on selected countries (Germany, Switzerland, England, Estonia, Spain, and Bulgaria) and the disparities in education at regional or even local levels. They analyze origins, policies, and governance, as well as consequences of regional disparities within and between countries.



Citation: Nikolai, R.; Kriesi, I.; Leemann, R.J. Regional Disparities in National Education: Origins, Governance, and Consequences (Special Issue). *Educ. Sci.* **2022**, *12*, 319. <https://doi.org/10.3390/educsci12050319>

Received: 22 April 2022

Accepted: 25 April 2022

Published: 2 May 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Educational Federalism as a Source of Regional Disparities

The results of several studies presented in this Special Issue point to the importance of federal political structures in national education systems, as a central origin of federal states' different educational policies, resulting in regional inequalities and long-term institutional and individual consequences. This holds for compulsory schooling, and the VET system, which is regulated more at the national level, is exemplified in the article "Education and Training Regimes within the Swiss Vocational Education and Training System. A Comparison of the Cantons of Geneva, Ticino, and Zurich in the Context of Educational Expansion" [6]. The historical analyses of these three cantons, by Philipp Gonon and Lena Freidorfer-Kabashi, show how federal state legislation in the system of vocational education and training (VET) has been implemented very differently by the relevant actors on the cantonal level, by taking economic, political, social, and pedagogical concerns into account. The authors reconstruct, for the period between 1950 and 1970, three different leitmotifs—supporting, enabling, integrating VET—underlying the education and training regimes that shaped the further development of VET in the three cantons. These differences in values and orientations in VET policies can explain today's existing cantonal differences in the participation rate in dual apprenticeships, full-time school-based VET, and general education pathways.

In their historical study, "Swiss VET between National Framework and Cantonal Autonomy: A Historical Perspective" [7], Lorenzo Bonoli and Jackie Vorpe point out that the cantonal policies in VET, institutionalised after the period 1950–1970, were a result of interpretations of the national regulatory framework and of debates and negotiations between different actors in administration, politics, schools, and professional organisations. The cantonal autonomy and responsibility for implementing VET gave these actors specific room for manoeuvre to implement VET on the cantonal level. The authors present five conceptual dimensions, along which they analyse three cantonal policies and the positions and arguments of actors exploiting a certain autonomy concerning national provisions. The results demonstrate the differences between the cantons in the extension of intervention of the cantonal state, private actors, vocational schools, and the scope of measures to promote equal opportunities and the general aims directed towards socio-economic or socio-educational aims.

Furthermore, federally different policies manifest themselves also in the admission regulations at educational transitions. An interesting empirical example of the relevance of admission regulations as governance instruments is the article by Miriam Hänni, Irene Kriesi, and Jörg Neumann, "Entry into and Completion of Vocational Baccalaureate School in Switzerland: Do Differences in Regional Admission Regulations Matter?" [8]. The authors investigate the effects of cantonal different admission regulations, like a mandatory entrance exam, grade average at school, teacher recommendation or admission interview on the probability of entering, graduating, and equity of participation in vocational baccalaureate school. Their analyses indicate that higher admission barriers, especially a mandatory entrance exam, reduce the chances of entering vocational baccalaureate school, particularly among apprentices with low socio-economic status and among those who pursue a vocational baccalaureate after their VET diploma. These findings can explain why the proportion of vocational baccalaureate holders varies considerably between Swiss regions. As the vocational baccalaureate is a prerequisite for access to universities of applied sciences, this also has implications for regional differences in higher education.

The paper, "Transition to Long-Term Baccalaureate School in Switzerland: Governance, Tensions, and Justifications" [9], by Sandra Hafner, Raffaella Simona Esposito, and Regula Julia Leemann, provides a second example of how admission regulations govern access to high-prestige Swiss baccalaureate schools. Instead of looking at the nexus between regulations and quotas, as Hänni et al. do, they focus on the cantonal governance procedures of the selection process itself. Comparing two cantons with different governance processes, but similar quota targets, the authors ask what procedures, instruments, and measures are used to limit access to baccalaureate schools and reach the politically defined quotas

and how responsible actors justify these selection processes. The results highlight that selection processes can be understood as “transition chains” and refer to synchronous and diachronic situations of action coordination of the involved actors. The findings highlight that cantonal governance processes that result in similar outcomes, i.e., reaching a similar baccalaureate quota, may rely on different justification patterns and processes.

Educational federalism takes different shapes. It refers to the scope at the regional or cantonal level in shaping the school, and governance structure, but may, in some countries, also include leeway at the communal level regarding the provision and accessibility of school types and tracks. The contribution of Regula Julia Leemann, Andrea Pfeifer Brändli, and Christian Imdorf, in their study, “Access to Baccalaureate School in Switzerland: Regional Variance of Institutional Conditions and Its Consequences for Educational Inequalities” [10], includes both levels and analyses of the relationship between the cantonal and communal provision of educational opportunities, young people’s socio-economic background and their chances to access baccalaureate schools. The findings highlight that the educational opportunity structure of the place of residence matters regarding both levels. Furthermore, children with highly educated parents profit more from an abundant provision of places at baccalaureate schools. Theories of social inequality in educational attainment should, thus, pay more attention to spatial opportunity structures and their interplay with individual characteristics.

2. Organisational Autonomy as a Source of Regional Disparities

Regional disparities are not only the result of federal political structures, but also arise from the autonomy status of educational organisations, regarding the provision of programs, access rules, funding strategies, or target groups. This is especially true for the higher education sector, where a shift in the governance regimes towards more autonomy and accountability of the individual organisations has taken place in the last decades. In their article, “Does It Make a Difference? Relations of Institutional Frameworks and the Regional Provision of Continuing Higher Education in England and Spain” [11], Diana Treviño-Eberhard and Katrin Kaufmann-Kuchta demonstrate that national frameworks of the two countries—adhering to specific policy objectives and participation strategies—explain regional disparities in continuing higher education provision, only to a limited extent. In contrast, universities, as autonomous actors, impact regional provision directly, as they react to various labour market demands, pursue different strategies for funding and develop diverse normative orientations. Consequently, the type and concept of provision and degree, cooperation between providers, target groups, admission regulations, or financing schemes vary between regions.

Organisational autonomy as a source of regional differences is also relevant for the continuing education and education field, in which differences between cities and rural landscapes are very distinctive. In the article, “The Notion of Continuing Education in Local Education Reports in Germany—An Analysis of Regional Disparities in Topics, Data, and Governance Recommendations” [12], Pia Gerhards focuses on municipalities, who control, to a large extent, the continuing education in Germany. By analysing education reports—steering instruments for local education policy—she shows that the topic of continuing education is mentioned differently, and the provided information relies, to an unequal extent, on quantitative data among districts. Although cities publish education reports more frequently, it is precisely the rural cities that mention continuing education as an important topic in their reports and see in it a great potential for education policy. However, these latter districts have fewer data at their disposal for their governance efforts.

3. Social and Economic Structures as a Source of Regional Disparities

Three contributions in this volume illustrate that the relationship between federal and regional educational structures and educational outcomes is often not straightforward and is interrelated with the composition of the local population, economic structure, and individual characteristics, such as ethnicity. The paper by Marcel Helbig and Norbert Sendzik,

“What drives regional disparities in educational expansion: School reform, modernization, or social structure?” [13], engages in this topic by using German data. They attempt to disentangle the role of educational policy reforms and the accompanying regional school structures, changes in the social structure and socio-economic background for educational expansion, and young people’s access to different school types. The findings reveal that educational development in Germany was mainly driven by changes in the regional social structure. Regional education policies only play a minor role in explaining regional education differences. The authors conclude that although regional education policies affect educational opportunities, they have little impact on the patterns of social inequality.

Taking Bulgaria as an example, Christian Imdorf, Petya Ilieva-Trichkova, Rumiana Stoilova, Pepka Boyadjieva, and Alexander Gerganov investigate the role of regional economic structures and urbanization in explaining regionally different school-to-work transition patterns of youth from different ethnic backgrounds and with different educational attainment. The findings of their paper, “Regional and Ethnic Disparities of School-to-Work Transitions in Bulgaria” [14], highlight that school-to-work transition processes in Bulgaria vary considerably between regions. They result from a complex interplay between regional structures, type of education, and ethnicity. Regional levels of urbanization and strong regional economies facilitate smooth school-to-work conditions and alleviate the disadvantages of ethnic minorities. The findings, thus, point to regional economic forces as an important driver of unequal labour market integration between social groups.

In their contribution, “Regional Patterns of Access and Participation in Non-Formal Cultural Education in Germany” [15], Lea Fobel and Nina Kolleck examine the social participation and the role of cultural and arts education in rural areas in Germany, for non-formal education. Their analyses shed light on regional differences in an education field that is often neglected in education sciences: the relevance of non-formal education. For Germany, a simple East–West distinction or a distinction between urban and regional areas has no explanatory power. Rather, the respective funding influences the infrastructure of cultural education. Still, peripheral regions are not less ambitious in the supply of educational provisions and, therefore, are also willing to invest financially in cultural education.

4. Policy Dealing with Regional Disparities

Regional disparities are problematic in terms of equal educational opportunities and can threaten the social cohesion of a nation-state. Therefore, political actors in educational governance are challenged to monitor the structures and consequences, analyse and address the causes, and justify the measures taken on. One crucial factor responsible for spatial disparities in the school infrastructure—the buildings, technical networks, staff, and organizational routines—as Walter Bartl states in his article, “Governing Spatial Disparities in School Infrastructure by Numbers: Investments in Form, Tensions, New Compromises?” [16]. The author provides an analytical tool for empirical analyses of different forms of governing by quantitative indicators, such as the number of teachers, classes, and schools. He differentiates two dimensions. On the one hand, gathering information and measuring disparities can be done in a more or less standardised manner. On the other hand, school planning and allocating school infrastructure can be more or less formalised and regulated. He applies this tool to a historical case study on the changing role of numbers in governing education infrastructure in Germany. His analyses reveal that in periods of educational expansion, in the late 1960s and early 1970s, the governance device of spatial disparities in school infrastructure changed from low quantitative standardization of information and low quantitative regulation of allocating resources to high standardization and regulation.

The contribution, “Socio-Spatial Conditions of Educational Participation: A Typology of Municipalities in the Canton of Zurich” [17], by Sybille Bayard, Flavian Imlig, and Simona Schmid, takes a descriptive macro-approach by developing and testing empirically a typology of municipalities in the largest Swiss canton of Zurich. Based on a

large set of indicators at the municipal level, tapping the socio-economic composition of the population and the economic and educational structure, they distinguish six types of districts. They offer different resources and challenges related to the educational participation of the population living in these types of districts. The typology is a useful example of how regional characteristics may be condensed to display socio-spatial patterns of educational participation. The approach provides a scientific basis for monitoring differences between municipalities in contextual conditions relevant to education and educational policy decisions, including funding allocation or the provision or adjustment of the educational infrastructure.

Political reforms do not always improve regional inequality—in some cases, they can even exacerbate it. In their article, “The Paradox of State-Funded Higher Education: Does the Winner Still Take It All?” [18], Kaire Pöder and Triin Lauri analyse how far the abolishment of tuition fees in Estonia in 2013 has influenced students’ access to and progress in higher education, especially for rural and remote students. Surprisingly, the abolishment has not improved the equity in university admission in Estonia, in terms of either socio-economic background or regional disparities. The reform weakly improved rural students’ tendency to graduate on time, and it diminished the probability that they were admitted to high-rank curricula in higher education. The Estonian example, thus, shows that educational reforms can sometimes have unintended consequences and that regional educational inequalities can even increase.

5. Conclusions: Origins, Governance, and Consequences

Despite all the different theoretical and methodological approaches and different fields of education considered in the Special Issue’s contributions, the following can be summarized: despite the expansion of educational infrastructures, spatial and social inequalities in educational opportunities remained. However, it has been shown in different contributions that rural regions do not have to be the losers. On the contrary, it has been shown, along with various educational levels, that rural regions can also succeed in providing an expanded educational infrastructure. The commitment of different actors in educational policy can be decisive.

Various contributions in this Special Issue have demonstrated the following, regarding the origins of regional disparities and inequalities in education: educational opportunities differ along historically established cultural factors in different regions and regionally different economic factors (e.g., unemployment rate and economic strength). However, the social composition of the population also influences educational participation (e.g., of the population with a higher-education certificate). Moreover, the place of residence continues to determine educational opportunities. Differences in educational opportunities continue to exist between urban and rural areas, but also within cities, it plays a role in educational participation, in which neighborhoods individuals live.

In order to study and understand spatial disparities, it is crucial to look at the governance of education, i.e., how education is regulated, organised, reformed, and legitimised. Various studies point out that political governance structures and mechanisms are partly responsible for the emergence of regional inequalities. These include, in particular, federal structures and the associated relatively large autonomy of federal states in organising their education systems. In addition, the autonomy of municipalities and individual educational organisations leads to disparities in education. Even if overarching political regulations exist, they get re-contextualised, i.e., interpreted, negotiated, justified, and put into practice in different ways, depending on the social context, the historically developed beliefs, and the composition and power of the actors. This room for manoeuvre in education governance leads to various governing measures between regions, federal states, municipalities, and organisations. These measures include the structure of educational provision, i.e., formats and aims of education, as well as the number of training places, the rules, tools, and distribution procedures, i.e., admission regulations and their concrete realization, or the funding resources and policies.

The analyses in this Special Issue also address policy measures and governance efforts to mitigate these regional variances or deal with the associated educational disparities. Reference is made to instruments, such as education reports or indicator systems, that allow for the monitoring of the situation, based on empirical data and quantitative analyses, to derive, justify, and implement education policy measures. These attempts at governing by numbers have historically changed in their form, quality, and scope. Today, they are omnipresent, and their meaningfulness is at the core of the belief in evidence-based policy.

However, the reforms introduced do not consistently achieve their goal and may result in unintended consequences. They often leave social inequalities in educational attainment untouched or may even strengthen the relationship between regional differences and educational outcomes. The relevance of spatial dimensions for social inequality is by no means new and has been emphasized by life course theory. However, most dominant approaches that theorize educational outcomes have hitherto neglected this factor. Future research should, thus, investigate the relationship between regional governance processes, policies, and individual outcomes in more detail and elaborate our theoretical understanding of the mechanisms at work.

Funding: This research received no external funding.

Acknowledgments: We would like to thank all the authors of this Special Issue for their dedication and committed collaboration throughout the review and publication process. We are also grateful for the effort of the numerous scholars who were willing to provide their expertise and review the papers. Their insightful, detailed, and constructive remarks, suggestions, and assessments contributed significantly to the quality of the final articles and, thus, to this Special Issue.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Barro, R.J.; Lee, J.-W. *Education Matters: Global Schooling Gains from the 19th to the 21st Century*; Oxford University Press: Oxford, UK, 2015.
- Bondi, L.; Matthews, M.H. (Eds.) *Education and Society: Studies in the Politics, Sociology and Geography of Education*; Routledge: London, UK; New York, NY, USA, 1998.
- Brock, C. *Geography of Education: Scale, Space and Location in the Study of Education*; Bloomsbury Academic an Imprint of Bloomsbury Publishing Plc.: London, UK; New York, NY, USA, 2016.
- Meusbürger, P. Geography of Education and Educational Systems. In *International Encyclopedia of Geography: People, the Earth, Environment and Technology*; Richardson, D., Castree, N., Goodchild, M.F., Kobayashi, A., Liu, W., Marston, R.A., Eds.; John Wiley & Sons, Ltd.: Oxford, UK, 2017; pp. 2747–2764.
- Meusbürger, P. *Bildungsgeographie. Wissen und Ausbildung in der Räumlichen Dimension*; Spektrum: Heidelberg, Germany, 1998; p. 405.
- Gonon, P.; Freidorfer-Kabashi, L. Education and Training Regimes within the Swiss Vocational Education and Training System. A Comparison of the Cantons of Geneva, Ticino, and Zurich in the Context of Educational Expansion. *Educ. Sci.* **2022**, *12*, 20. [[CrossRef](#)]
- Bonoli, L.; Vorpe, J. Swiss VET between National Framework and Cantonal Autonomy: A Historical Perspective. *Educ. Sci.* **2022**, *12*, 114. [[CrossRef](#)]
- Hänni, M.; Kriesi, I.; Neumann, J. Entry into and Completion of Vocational Baccalaureate School in Switzerland: Do Differences in Regional Admission Regulations Matter? *Educ. Sci.* **2022**, *12*, 188. [[CrossRef](#)]
- Hafner, S.; Esposito, R.S.; Leemann, R.J. Transition to Long-Term Baccalaureate School in Switzerland: Governance, Tensions, and Justifications. *Educ. Sci.* **2022**, *12*, 93. [[CrossRef](#)]
- Leemann, R.J.; Pfeifer Brändli, A.; Imdorf, C. Access to Baccalaureate School in Switzerland: Regional Variance of Institutional Conditions and Its Consequences for Educational Inequalities. *Educ. Sci.* **2022**, *12*, 213. [[CrossRef](#)]
- Treviño-Eberhard, D.; Kaufmann-Kuchta, K. Does It Make a Difference? Relations of Institutional Frameworks and the Regional Provision of Continuing Higher Education in England and Spain. *Educ. Sci.* **2022**, *12*, 132. [[CrossRef](#)]
- Gerhards, P. The Notion of Continuing Education in Local Education Reports in Germany—An Analysis of Regional Disparities in Topics, Data, and Governance Recommendations. *Educ. Sci.* **2022**, *12*, 15. [[CrossRef](#)]
- Helbig, M.; Sendzik, N. What Drives Regional Disparities in Educational Expansion: School Reform, Modernization, or Social Structure? *Educ. Sci.* **2022**, *12*, 175. [[CrossRef](#)]
- Imdorf, C.; Ilieva-Trichkova, P.; Stoilova, R.; Boyadjieva, P.; Gerganov, A. Regional and Ethnic Disparities of School-to-Work Transitions in Bulgaria. *Educ. Sci.* **2022**, *12*, 233. [[CrossRef](#)]

15. Fobel, L.; Kolley, N. Regional Patterns of Access and Participation in Non-Formal Cultural Education in Germany. *Educ. Sci.* **2022**, *12*, 13. [[CrossRef](#)]
16. Bartl, W. Governing Spatial Disparities in School Infrastructure by Numbers: Investments in Form, Tensions, New Compromises? *Educ. Sci.* **2022**, *12*, 167. [[CrossRef](#)]
17. Bayard, S.; Imlig, F.; Schmid, S. Socio-Spatial Conditions of Educational Participation: A Typology of Municipalities in the Canton of Zurich. *Educ. Sci.* **2022**, *12*, 73. [[CrossRef](#)]
18. Pöder, K.; Lauri, T. The Paradox of State-Funded Higher Education: Does the Winner Still Take It All? *Educ. Sci.* **2021**, *11*, 812. [[CrossRef](#)]