

# Schweizerische Zeitschrift für Soziologie Revue suisse de sociologie Swiss Journal of Sociology

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## **Wie die Arbeitswelt Bildungsinstitutionen verändert / Comment le monde du travail transforme les institutions éducatives / How the World of Work Transforms Educational Institutions**

Edited by Barbara Duc, Kerstin Duemmler, Héloïse Durler,  
and Philippe Losego

- Barbara Duc, Kerstin Duemmler, Héloïse Durler, and Philippe Losego How the World of Work Transforms Educational Institutions [E]
- Judith Hangartner, Angela Kaspar, and Regula Fankhauser Autonomy as Anticipation of the World at School [G]
- Nadia Lamamra and Roberta Besozzi Educational Practices at the Heart of the World of Work [F]
- Raffaella Simona Esposito, Regula Julia Leemann and Christian Imdorf Establishment of a School-Based Pathway to Universities of Applied Sciences in Switzerland. Conventions of Higher Education Access in Vocational and General Education [E]
- Philippe Saner Envisioning Higher Education: How Imagining the Future Shapes the Implementation of a New Field in Higher Education [E]
- Melike Janßen Organization Versus Profession? Teaching in the context of higher education reforms from a Sociology of Professions Perspective [G]
- Sandrine Garcia Intensification of Teachers' Work and Bureaucracy: The Example of the PPRE [F]
- Pierre Canisius Kamanzi, Pierre Lapointe and Martial Dembélé The Implementation of Results-Based Management in Quebec: Between School Principals' Optimism and Teachers' Skepticism [F]
- Carl Denecker School Principals' Work Stress in an Era of New Education Governance [E]

## **Index**

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### **Inhalt / Sommaire / Contents**

- 283 How the World of Work Transforms Educational Institutions**  
Wie die Arbeitswelt Bildungsinstitutionen verändert  
Comment le monde du travail transforme les institutions éducatives  
*Barbara Duc, Kerstin Duemmler, Héloïse Durler, and Philippe Losego*
- 299 Selbstständigkeit als Antizipation der Arbeitswelt in der Schule**  
Autonomy as Anticipation of the World of Work at School  
L'autonomie comme anticipation du monde du travail à l'école  
*Judith Hangartner, Angela Kaspar und Regula Fankhauser*
- 317 Former en entreprise : les pratiques éducatives au cœur du monde du travail**  
Training in Companies: Educational Practices at the Heart of the World of Work  
Ausbildung in Unternehmen: Bildungspraktiken im Zentrum der Arbeitswelt  
*Nadia Lamamra and Roberta Besozzi*

- 337 Establishment of a School-Based Pathway to Universities of Applied Sciences in Switzerland. Conventions of Higher Education Access in Vocational and General Education**  
 Die Etablierung eines schulischen Zugangswegs an die Fachhochschulen in der Schweiz. Konventionen des Hochschulzugangs in Berufs- und Allgemeinbildung  
 La mise en place d'une voie d'accès scolaire aux Hautes écoles spécialisées en Suisse. Conventions d'accès aux études supérieures dans la formation professionnelle et générale  
*Raffaella Simona Esposito, Regula Julia Leemann, and Christian Imdorf*
- 359 Envisioning Higher Education: How Imagining the Future Shapes the Implementation of a New Field in Higher Education**  
 Die Hochschulbildung der Zukunft. Wie Zukunftsvorstellungen die Einführung eines neuen Studienfeldes prägen  
 L'enseignement supérieur du futur. Comment des visions d'avenir façonnent l'introduction d'un nouveau domaine d'études  
*Philippe Saner*
- 383 Organisation versus Profession? Lehre im Kontext der Hochschulreformen aus professionssoziologischer Perspektive**  
 Organization Versus Profession? Teaching in the context of higher education reforms from a Sociology of Professions Perspective  
 Organisation versus profession ? L'enseignement dans le contexte des réformes de l'enseignement supérieur d'un point de vue de la sociologie des professions  
*Melike Janßen*
- 409 Intensification du travail enseignant et bureaucratisation : l'exemple des PPRE**  
 Intensification of Teachers' Work and Bureaucracy: The Example of the PPRE  
 Intensivierung der Arbeit von Lehrpersonen und Bürokratisierung: das Beispiel der PPRE  
*Sandrine Garcia*
- 427 La mise en œuvre de la gestion axée sur les résultats au Québec : entre l'optimisme des directions d'établissement et le scepticisme des enseignants**  
 The Implementation of Results-Based Management in Quebec: Between School Principals' Optimism and Teachers' Skepticism  
 Die Umsetzung von ergebnisorientiertem Management in Quebec: optimistische Schulleitern und skeptische Lehrkräfte  
*Pierre Canisius Kamanzi, Pierre Lapointe, and Martial Dembélé*
- 447 School Principals' Work Stress in an Era of New Education Governance**  
 Le stress au travail des directeurs d'école au temps de la nouvelle gouvernance éducative  
 Arbeitsstress von Schulleitern in der Ära der neuen Schulgovernance  
*Carl Denecker*

## How the World of Work Transforms Educational Institutions

### Wie die Arbeitswelt Bildungsinstitutionen verändert

### Comment le monde du travail transforme les institutions éducatives

Barbara Duc\*, Kerstin Duemmler\*, Héloïse Durler\*\*, and Philippe Losego\*\*

## 1 Introduction

The world of work and the educational system are closely interrelated. The structural divisions that exist among workers in the labor market, for example, are produced within the educational system, through processes of selection, qualification and certification (Georg and Sattel 2006). This relationship developed in particular during the industrial age (Gonon et al. 2009) and is growing stronger today (Dubet et al. 2010) in more service and knowledge oriented economies. New labor requirements and conditions, such as flexibility and life-long learning, that emerged out of a global market orientation (Mercure and Vultur 2010) have entered educational institutions and their programs (Tomlinson 2013). At the same time, under an economic perspective that views education as an investment in human capital, New Public Management (NPM) reforms have found their way into educational institutions and profoundly transformed pedagogical work.

This special issue deals with how the world of work transforms educational institutions. It cannot provide an all-encompassing account of this issue, but it does shed light on the relationship between the worlds of work and education by focusing on two specific topics. First, this introduction and the contributions to this special issue examine how labor-market requirements and wider socioeconomic changes have entered the educational system and shaped educational programs, curricula and practices today. Second, this special issue explores how the current management of educational institutions, in Switzerland and elsewhere, has initiated reforms and affected work realities within them. Following from its investigation into these two topics, this special issue also addresses the implications for the individuals in educational institutions, whether pupils, teachers or principals.

Each of the contributions to this special issue examines at least one of these topics and provides insights into how the world of work shapes the educational system, its programs and organizations and the lived experiences of individuals

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within them. All articles are empirical studies: five focus on Switzerland and three on educational institutions in Germany, France and Quebec; they cover a wide spectrum from obligatory to post-obligatory educational institutions.

## 2 The Introduction of Labor-Market Requirements into the Educational System

Educational institutions differ in their proximity to the world of work. While some prepare learners for a future school-to-work transition or train them in a specific occupation or profession, others offer a more general educational program that is more distant from labor-market requirements. Economic labor market concerns do not automatically enter and merge with the inherent logics of educational institutions. Educational institutions do not only function to prepare individuals for the labor market, but also to integrate them into society socially, culturally and politically. Nevertheless, there is a relationship between school levels and their proximity to labor-market requirements.

While obligatory educational programs are logically more distant from the employment system, post-obligatory secondary and tertiary educational programs tend to be related to this system more closely, albeit in different ways. In Switzerland, post-obligatory education has historically been divided into academic, general and vocational education. The proximity to labor-market requirements is greatest in the latter (Georg and Sattel 2006). The vocational education and training (VET) system, which dominates the post-mandatory educational system in Switzerland, trains apprentices to be able to enter occupational positions in the labor market immediately after completing their training. Indeed, occupational organizations define the ordinances and the main components of the relevant curriculum, while state federal authorities are only responsible for issuing them (SEFRI 2018).

During the last few decades, however, educational policy has become more prominent in formulating strategies and initiating reforms in order to better adapt the educational system and its programs to labor-market realities and changes (Tomlinson 2013). Since the 1990s, the attractiveness of VET and its capacity to adapt to the labor market's requirements for new and higher qualifications have been questioned. Increasing numbers of students have been drawn to higher education (Kiener and Gonon 1998). In response, new vocational programs were created to enable lifelong learning and continuous integration into the employment system, universities of applied sciences were established and the VET system introduced the Vocational Baccalaureate Diploma. These reforms were intended to render the system more permeable to tertiary education in view of a labor market situated in a globalized economy and based on knowledge-intensive activities (Kiener and Gonon 1998).

The academic system has not escaped educational strategies to take labor-market needs more into account, in particular in light of the expansion of the university

education system. Although the initial objectives of the Bologna process focused on other areas – including comparability of diplomas, mobility and quality assurance – students' ability to gain employment after their studies became a central focus during the reform process (Schaeper and Wolter 2008). The Rectors' Conference of Swiss Universities (CRUS 2013) even published an employability checklist for curriculum developers focused on students' ability to contribute to both the needs of the labor market and the wider society (see also EHEA 2012). This checklist is intended to make educational institutions aware of the kinds of skills graduates will require, for instance problem solving. In recent decades, universities have also been eager to develop non-disciplinary study courses oriented toward practical issues.

However, educational reforms responding to anticipated labor-market needs and changes have not remained limited to post-compulsory education, but have also affected transitional and obligatory education. Although the youth unemployment rate in Switzerland remains low in comparison to other European countries, the transition from school to work, in particular via the dual VET system, has become more difficult in the last three decades (Bergmann et al. 2012). While the situation today is better than it was during the economic recession of the 1990s, the school-to-work transition remains difficult for many, and especially for socioeconomically disadvantaged youth (Meyer 2011). In general, school-to-work transition processes today take longer, are more often fragmented and depend on the acquirement of a post-obligatory diploma to a greater extent than they did before the 1990s (Waardenburg 2011).

Because of these socioeconomic changes, a transitional school system has developed in Switzerland and other countries (Maier and Vogel 2013) to accompany young people after obligatory schooling as they enter apprenticeships and the labor market. However, this transitional system has been criticized for mainly requiring young people to wait longer before entering the workforce without really increasing their chance of accessing post-obligatory education or integrate into the labor market (Sacchi and Meyer 2016). The obligatory school system, which today is explicitly charged with systematically preparing pupils for the transition from school to work, has thus increasingly become a focus of policy debates. New regional school curricula, for instance, include a focus on preparing young people for the transition to post-obligatory education and the labor market (CIIP 2013; EDK 2014).

We have described these various reforms and strategies here as conscious attempts to anticipate labor-market requirements and integrate them into the educational system, but some can also be interpreted as an unintended adaptation – as parallel to, but separate from developments in the employment system. These parallel developments may, at a certain moment, interfere with or mutually stimulate one another. This overlap is illustrated especially well by the emergence of the concepts of competence and transversal competence in education, on the one hand, and the employment system, on the other.

In corporations, the concept of competence emerged in the 1980s as part of a strategy of flexibility within a context of growing competition and greater demands for responsibility and autonomy from workers. Thus, workers' competences appeared as a new parameter, alongside the use of qualification, for selecting and evaluating individuals in the employment system. This new perspective transformed the training-employment relationship, namely the connection between qualities acquired by workers and measured by their diploma, on the one hand, and qualities considered necessary for professional activities, on the other (Dubar 1996; Kergoat 1999; Stroobants 2002). It favors an individualized relationship between a worker with competences and a company that recognizes them, and it contributes to making individuals responsible for their employability (Mercure and Vultur 2010).

This development coincided with a similar development in the educational system, especially in curricula, where the competency-based approach developed in line with educational reflections on how to improve the transfer of knowledge acquired in school to social practices (Perrenoud 2000). This approach is intended to enable students to mobilize their learning outcomes in diverse and complex situations outside school. Competence does not refer to the accumulation of knowledge, therefore, but to its mobilization in whatever situations or problems the individual may encounter.

The relationship between the emergence of the importance of competence in corporations and in the educational system is controversial. Perrenoud (2000) argues that its use in education derives partly from a reflection within the educational system about how best to transfer school outcomes to the wider world. Others interpret it as an attempt to connect the spheres of education and work (Rop e and Tanguy 1994; Kergoat 1999; Monchatre 2007), and above all to adapt educational and training systems to labor-market expectations. In this view, school and training become privileged spaces for building the competences required in the professional world (Monchatre 2007). This trend is best illustrated by the omnipresence of the notion of transversal competences – also referred to as non-academic, non-disciplinary competences or soft skills – in corporations, schools and training.

Among corporations, the notion of transversal competences has developed in response to changes in the world of work, including the introduction of new technologies and the expansion of the service sector. These changes involve greater valorization of workers' attributes that are not attested by diplomas, but instead relate to their greater commitment, flexibility and versatility in the work context (Voss and Pongratz 1998; Duru-Bellat 2015). Workers are required to possess a large number of non-disciplinary competences, including the ability to communicate, solve problems and be autonomous (Bailly and L en e 2015).

These transversal competences, despite the vagueness of what they cover (Giret 2015; Scharnhorst and Kaiser 2018), are found in many educational curricula, including the new regional school curricula for compulsory school programs in

Switzerland (CIIP 2013) and the Swiss VET ordinances linked to the different occupations taught in initial vocational training. These kinds of competences are also central to transmission, evaluation and selection practices in educational institutions (Kergoat 2007; Duru-Bellat 2015). Widespread reference to them has accompanied the questioning of which competences are necessary for successful integration into the world of work and the social world in general (OECD 2005).

Despite the debate regarding where the notion of competence first emerged, the general use of competence, and especially transversal competences, attests to the nesting of the educational and employment systems. Through competences such as autonomy, flexibility, responsibility, social and communication skills, emotional self-management and computational skills, educational institutions seek to develop in students (in primary and secondary schools, VET and universities) the capacities they believe necessary for integration into the world of work. The case of VET is emblematic, because it is conceived as a place where young people are prepared for what is required by the labor market to be directly employable (Masdonati et al. 2007). In this context, competences, and above all transversal competences, appear to be central to the curriculum of most occupations.

### 3 New Public Management's Effects on Educational Institutions

In recent decades, another major transformation, usually called “New Public Management” (NPM) (Hood 1995), has also affected educational systems in Switzerland and elsewhere. NPM emerged in the mid-1970s in Anglo-Saxon countries, especially Australia, New Zealand and the United Kingdom (Hood 1991; Gunter 2012). It spread to most OECD countries in the 1990s and became the world-dominant paradigm of public policies in the early 2000s (Hall et al. 2015).

Despite major differences between national cases, there have been several common trends in educational policies associated with NPM (Hood 1991), including the introduction of school autonomy and the professionalisation of principals, who have increasingly been chosen from professions other than teachers; national and international assessments (e. g. PISA, TIMSS, PIRLS and cantonal standardized reference tests); the standardization of knowledge (from the 1998 English National Curriculum to the 2011–2014 Swiss Lehrplan 21/PER); and increased teacher accountability.

However, most of the literature on these changes has distinguished between hard and soft accountability (Cattonar et al. 2013). Hard accountability is most common in Anglo-Saxon countries and countries inspired by their policies. For example, school performance is made public and personal judgments of teachers are available online. Sanctions for underperformance can be harsh: in the United States, underperforming schools can have their funding cut and be obliged to fire

some of their staff (Harris and Herrington 2006). In most continental European countries, including Switzerland, the soft accountability model is dominant. Assessments are not public: they are used by educational departments and principals to make their staff more conscious of their shortcomings. No actual sanctions are used for poor compliance.

NPM arrived late in Swiss educational systems, mainly after the first Programme for International Student Assessment (PISA). In particular, school autonomy and the professionalisation of principals are very recent (L uthi 2010; Gather Thurler et al. 2017). School assessments also began after 2000 (Wirthner 2011), probably because the apprenticeship system, which channels many students away from formal schooling early on, makes the educational systems less expensive, which reduced pressure on the need to measure performance outcomes. Switzerland also responded to PISA with the Intercantonal Agreement on Harmonisation of Compulsory Education (HarmoS Accord). Although this accord is supposed to be “bottom-up” (cantons had the right to refuse to sign it), it is clearly a form of centralization (Bieber and Martens 2011).

#### 4 Changing Working Conditions within Educational Institutions

Pedagogical work has changed significantly under NPM, even though, in contrast to most other institutions that have been affected by it, reforms have not decreased staff levels (Tardif and Lessard 1999).

First, school autonomy and the professionalization of principals have contributed to managerialism (Gather Thurler et al. 2017; Frajerman 2018), even if this effect has, in some countries, been “temperate” (Barr ere 2013). The effects of school autonomy on system efficiency are not actually clear (Scheerens and Maslowski 2008), and some scholars have wondered if the autonomy is real (Frajerman 2018), but it is clear that autonomy makes the relationship between principals and teachers more hierarchical. Moreover, in splitting from teachers, principals have increasingly come to define themselves as a specific profession, and an increasing proportion of them have never been teachers. Managerialism has also increased principals’ workload (Barr ere 2006; Losego 2017) and responsibilities (Gather Thurler et al. 2017). Indeed, in the soft accountability model, standards and performance measures do not put direct pressure on teachers, but on principals. Standards can only be what Baluteau (2012) calls a “metrological resource” to convince teachers to improve their outcomes.

Managerialism has led to the emergence of new intermediate professions between teachers and principals, including deans and quality specialists (S a 2018). Some teachers are partially discharged of their teaching load in order to accomplish

specific tasks, like school mediation or computer upkeep, for instance. Some teachers are charged with helping to implement the current reforms (Mangez 2008).

Second, the stress on results and performance has collectivized pedagogical work. Traditionally, teaching has been an individual, and even individualist, profession. But just as in industrial corporations, the necessities of quality assurance have led teachers to gather and work collectively (Barrère 2002; Marcel et al. 2007; Lessard et al. 2009; Losego et al. 2011). Teachers are increasingly expected to design the same assessments and courses in order to ensure curriculum alignment and avoid protests from students or parents about possible inequalities. In contrast to individual work, this collective work makes possible social and managerial control of pedagogical work (Barrère 2006), and it also affects teachers' personal life, particularly female teachers', as it reduces the proportion of work that can be done at home.

Third, this outcome-based management engendered an individualization of pedagogy. The inclusion of all students in the same schooling (Blanck et al. 2013; Ébersold 2017) led educational authorities to require teachers to tailor their teaching for students with special needs (Bélanger and Kahn 2019). At the same time, teachers are supposed to combine these efforts with contradictory demands like promoting efficacy. They also often have to make their inclusionary efforts visible, which increases their required paperwork, and thus also their administrative workload.

Managerialism, in educational institutions as elsewhere (Lallement 2010), gives teachers, principals and other educational staff more autonomy and simultaneously places increasing time, efficiency and quality constraints on them (Dutercq and Maroy 2017). Moreover, staff is required to take charge of their workplace contradictions. The psychological cost of this responsibility, itself the direct result of accountability requirements and mandatory collective work, is manifested in health problems, which affect workers of all statuses (Lantheaume and Hérou 2008; Gather Thurler et al. 2017).

Individuals working in educational institutions often have to arbitrate between contradictory mandates (e. g. completing the increasing amount of paperwork while providing high-quality teaching). Paradoxically, in order to do their job properly and meet the required goals, they can endorse deviant practices, such as test cheating. Regardless, individuals are increasingly accountable for their "choices", whether those choices are consistent with institutional rules or not.

The increasing demand on educational institutions to develop the competences required by the labor market are a good field of study for such arrangements. Employability demands create new pedagogical challenges, and sometimes contradictions, for schools and teachers who might absolve themselves from responsibility and instead place that responsibility on students (Cayouette-Remblière 2016). In particular, transversal competences, including autonomy, flexibility and responsibility, are often conceived as if students could, if motivated, easily develop and mobilize them.

Indeed, transversal competences are frequently referred to as “personal dimensions, but which are actually above all the result of an individual journey marked by social belonging (class, gender and ethnicity)” (Kergoat 2007, 18, own translation). Like other competences (Monchatre 2007), transversal competences are the result of a socialization process that is frequently unspoken. The current emphasis on individual responsibility neglects the social conditions that allow individuals to act autonomously and responsibly (Lahire 2001; Durler 2015). Partly blind to the social prerequisites – including time, oral and written language skills and material life conditions – that are necessary to act in a self-directed way, educational institutions tend to stigmatize individuals who have not had access to these resources (Garcia 2018). In other words, individuals are required to behave autonomously, but without necessarily possessing the required conditions for learning how to do so, either within or outside educational institutions. There is thus a risk that the promotion of transversal competences will result in discrimination and the reproduction of social inequalities.

## 5 Contributions to the Special Issue

The first contribution to this special issue, by Judith Hangartner, Angela Kaspar and Regula Fankhauser, examines how schools attempt to convince students to become self-directed and responsible. Secondary schools today are explicitly charged with preparing young people for their future educational and professional careers, in particular for their transition to the labor market via VET programs. The development of social and personal competences, or transversal competences, has become a central focus of this preparation, because individuals are increasingly held responsible for their (life-long) learning and ability to integrate into the labor market. Based on ethnographic fieldwork in a school that has developed new forms of learning, Hangartner et al.’s article examines how autonomy and responsibility imperatives guide teaching and coaching programs and practices. Hangartner et al.’s theoretical background lies in governmentality studies investigating how technologies of the self are interrelated with power relations in educational institutions. In this article, the authors analyze a coaching scene between a teacher, a pupil and a parent and demonstrate how narrowly autonomy and responsibility are conceived – as the ability to execute prescribed tasks, be reliable and be on time. The aim of this pedagogical practice is to create an executing self rather than an entrepreneurial self. The article also demonstrates how subtle mechanisms of control and support reinforce the asymmetrical power relations between teachers and pupils. Moreover, the school’s experiment does not take structural inequalities and barriers into account. As a result, pupils, but also the school itself, are held as primarily responsible for the school-to-work transition.

In their contribution, Nadia Lamamra and Roberta Besozzi examine the vocational education and training of apprentices in Swiss companies. Dual apprenticeship programs alternate between vocational education in schools and vocational training at workplaces, thus offering a unique field to study the link between educational and professional logics. The authors demonstrate that production and efficiency constraints create a heavy burden on VET trainers in companies, which affects the training conditions for apprentices. Production imperatives dominate training activities, thus leaving reduced time for instruction, which is often pushed to the margins of trainers' work activities. Trainers are forced to instruct apprentices during "interstices" and periods with a lighter workload, and to adopt a pedagogy of "learning by doing." This pedagogy develops out of necessity rather than choice, and it requires apprentices to quickly prove their autonomy and assume their work responsibilities unassisted. The article also demonstrates that the trainers suffer from these conditions in different ways, depending on their relationship to their work and their understandings of apprenticeship and of themselves as trainers.

In their contribution, Raffaella Simona Esposito, Regula Julie Leeman and Christian Imdorf examine the controversy surrounding the institutionalization of upper-secondary specialized schools (SpS) as a pathway to universities of applied science alongside VET. This controversy clearly demonstrates how labor-market considerations shape secondary schooling. Esposito et al. draw on data such as experts' interviews and educational policy documents to analyze, with the help of the sociology of convention, how actors justify and assess this type of school. The controversy was mainly between advocates of the dual VET system and representatives of the SpS. The former criticized the SpS for not offering the extensive professional experience needed to access universities of applied science. The latter insisted on the importance of general knowledge and a stable personality, especially in the social and health sectors, which they argued were promoted within the school community and the sheltered environment of the SpS, respectively. The authors demonstrate that opponents and proponents both relied on the same justification, the domestic convention, although they emphasized different aspects of it. In the end, the domestic convention as referred to by VET advocates and oriented toward the labor market's demands prevailed. The SpS had to compromise in order to be recognized as a pathway to universities of applied sciences, as demonstrated by the most recent SpS curriculum, which includes practical on-the-job experience.

In his article, Philippe Saner focuses on the introduction of data science in Swiss higher education and the visions – or imaginations – of the future that underlie it. He places it within the current context, in which states, corporations, business actors and scientific organizations are formulating digital strategies to cope with the current sociotechnical transformation. Common to all of these strategies is the adaptation of the educational system to the future needs of digitized labor markets. Through a qualitative analysis of study program descriptions, policy documents and reports

by economic actors, Saner shows that the introduction of data science in higher education has been shaped by multiple visions of the future from industry, science and politics. It has been marked by, on the one hand, the adoption of economic concepts and business terms by science policies and educational curricula and, on the other, considerations of sociotechnical visions such as “talent shortages”, the “sexiness” of data science and the need to integrate data science into innovation policies in order to ensure the nation’s competitiveness. These various visions help coordinate actors in different fields and have performative effects, including the development of data-science programs in higher education and the transfer of data-science skills to the labor market. This combination of visions, together with the speed with which data science has spread throughout higher education, demonstrates how responsive higher education appears to be to the requirements of the labor market.

Melike Janssen studies the impact of the Bologna process on teaching conditions at German universities. Intended to raise teaching quality, the reforms introduced a complete revision of study programs and a broad evaluation of teaching performance. One concern these reforms attempted to address was whether university programs sufficiently take labor-market requirements into account, in particular in a knowledge society where knowledge is perceived as a means to create socioeconomic value. Janssen employs sociological theories on professions and studies the tensions that result between these organizational demands and professors’ own understanding of high-quality teaching. Based on qualitative interviews with professors from different disciplines, the study investigates how the loss of teaching autonomy is experienced and whether it leads to de-professionalization. Professors perceive a loss of motivation and disciplinary competence among students as a result of the reforms. They have also suffered from the increasing bureaucratization and related time constraints, and they perceive their loss of control over their teaching practices as a lack of trust. However, they do not a priori consider references to labor-market requirements as problematic, partly because some study programs are more practically oriented and most students do not necessarily plan an academic career. Overall, the results do not confirm the de-professionalization thesis. Professors are still the main agents defining and shaping their teaching programs and practices, although tensions and conflicts with organizational demands are omnipresent.

Sandrine Garcia’s article describes the personalization of pedagogical work experienced by primary-school teachers in France due to programs such as the *Programme Personnalis e de R eussite  ducative*. Teachers are required to complete a significant amount of paperwork and coordination work to demonstrate to the administration the efficacy of their specific efforts to help pupils with special needs succeed. They are expected to follow up on every pupil with special needs by establishing relationships with families and specialists (psychologists and speech therapists, for example). These requirements increase teachers’ workload and responsibilities significantly, and teachers struggle with the contradictions between the need to

personalize the treatment of students' difficulties and the need for standardization required by inspection bodies. Although this personalization of pedagogical work is intended to enhance educational outcomes, in practice it becomes an opportunity for the administration to control procedures and impose conformity on teachers. It results in an intensification of pedagogical work, because teachers are required to formally state on forms what they have already done in practice. Teachers sometimes strategically use this paperwork to make agreements with parents and convince them to accept some specific measures that can alleviate their own workload, including special education and a lowering of pedagogical expectations.

In their contribution, Pierre-Canisius Kamanzi, Pierre Lapointe and Martial Dembélé examine how managerialism is changing the relationship between principals and teachers in Quebec schools. Results-based-management (RBM) has been thoroughly accepted and even advocated by principals in the Canadian province, while it has been subject to criticism by teachers, especially of secondary education. Managerialism seems to make more sense for principals than for teachers, even despite the increased workload it causes them, and even though they are subjected to accountability. Some principals are critical of the concrete ways in which RBM has been implemented, but they nonetheless remain convinced by its legitimacy, perhaps, as Kamanzi et al. suggest, because it gives them more power over teachers and the school's organization. Although Quebec's accountability system is a soft one – there are no sanctions for underperformance, for example – the visibility of the results of accountability measures gives principals some influence over teachers and their pedagogical work. Principals can encourage teachers to work more collectively in order to achieve the school's organisational goals, for example. Thus, RBM gives principals more power and more pedagogical leadership. Teachers, in contrast, have difficulties making sense of RBM. It entails boring paperwork that seems to simply duplicate their actual work. Moreover, the emphasis on results can create inequalities between schools and teachers, depending on their social contexts. But the main issue for teachers appears to be the threat RBM poses to their professional autonomy: it seems to transform them into mere executors of tasks assigned by others.

In his article, Carl Denecker investigates work-related stress among school principals in Switzerland. He identifies the main causes of the stress they experience and examines their coping strategies. Based on quantitative and qualitative interviews conducted with directors from various compulsory schools in the Swiss Cantons of Vaud and Geneva, he shows that school principals' work-related stress derives primarily from their workload and the amount of time they spend on their work. Mediating conflicts – between the school, parents and teachers, for example – is another important source of stress, and this work occupies a considerable amount of their time. They prefer to mediate conflicts immediately, before they get out of control. However, this strategy involves regular interruptions of their other

work, as a result of which they find themselves forced to do much of this work in the early morning or on evenings or weekends. Denecker demonstrates the limits of such individual strategies to cope with these tensions and contradictions, which significantly shape their work conditions.

## 6 References

- Bailly, Franck, and Alexandre Léné. 2015. Postface: Retour sur le concept de compétences non académiques. *Formation emploi* 130: 69–78.
- Baluteau, François. 2012. Les ressources symboliques des managers scolaires. Essai de typologie. *Education et sociétés* 2: 93–107. <https://doi.org/10.3917/es.028.0093>.
- Barrère, Anne. 2002. Pourquoi les enseignants ne travaillent-ils pas en équipe? *Sociologie du travail* 44(4): 481–497. [https://doi.org/10.1016/S0038-0296\(02\)01278-5](https://doi.org/10.1016/S0038-0296(02)01278-5).
- Barrère, Anne. 2006. *Sociologie des chefs d'établissement. Les managers de la République*. Paris: PUF.
- Barrère, Anne. 2013. Un management bien tempéré : l'expérience des chefs d'établissement de l'enseignement secondaire français. *Education et sociétés* 32(2): 21–34. <https://doi.org/10.3917/es.032.0021>.
- Bergmann, Manfred M., Sandra Hupka-Brunner, Thomas Meyer, and Robin Samuel (eds.). 2012. *Bildung – Arbeit – Erwachsenwerden. Ein interdisziplinärer Blick auf die Transitionen im Erwachsenenalter*. Wiesbaden: Springer VS.
- Bélangier, Nathalie, and Sabine Kahn. 2019. Les dispositifs individualisés d'aide aux élèves : lieux de renormalisation. Comparaison entre l'Ontario et la Belgique. *Recherches en Education* 35: 27–37.
- Bieber, Tonia, and Kerstin Martens. 2011. The OECD PISA Study as a Soft Power in Education? Lessons from Switzerland and the US. *European Journal of Education* 46(1): 101–116. <https://doi.org/10.1111/j.1465-3435.2010.01462.x>
- Blanck, Jonna M., Benjamin Edelstein, and Justin J. W. Powell. 2013. Persistente schulische Segregation oder Wandel zur inklusiven Bildung? Die Bedeutung der UN-Behindertenrechtskonvention für Reformprozesse in den deutschen Bundesländern. *Swiss Journal of Sociology* 39(5): 267–292.
- Cattonar, Branka, Xavier Dumay, and Christian Maroy. 2013. Politique d'évaluation externe et recomposition des professionnalités dans l'enseignement primaire : un cas de responsabilisation (accountability) douce. *Education et sociétés* 32(2): 35–51.
- Cayouette-Remblière, Joanie. 2016. *L'école qui classe. 530 élèves du primaire au bac*. Paris: PUF.
- CIIP (Conférence Intercantonale de l'Instruction Publique de la Suisse romande et du Tessin). 2013. *Plan d'étude romand (PER)*. Neuchâtel: CIIP. [https://www.plandetudes.ch/documents/10136/19192/Aper%C3%A7u+des+contenus+du+PER+Cycle+3/75420548-b10b-4a5b-af1c-dd7d27b70ca5\(26.03.2019\)](https://www.plandetudes.ch/documents/10136/19192/Aper%C3%A7u+des+contenus+du+PER+Cycle+3/75420548-b10b-4a5b-af1c-dd7d27b70ca5(26.03.2019)).
- CRUS (Conférence des Recteurs des Universités Suisses). 2013. Checklist Employability in der Curriculumentwicklung. [https://www.swissuniversities.ch/fileadmin/swissuniversities/Dokumente/Kammern/Kammer\\_UH/Referenzdokumente/130220\\_Empl\\_Checklist\\_13\\_007\\_D.pdf](https://www.swissuniversities.ch/fileadmin/swissuniversities/Dokumente/Kammern/Kammer_UH/Referenzdokumente/130220_Empl_Checklist_13_007_D.pdf) (26.03.2019).
- Dubar, Claude. 1996. La sociologie du travail face à la qualification et à la compétence. *Sociologie du travail* 2: 179–193.
- Dubet, François, Marie Duru-Bellat, and Antoine Vérolet. 2010. *Les sociétés et leur école. Emprise du diplôme et cohésion sociale*. Paris: Seuil.
- Durler, Héloïse. 2015. *L'autonomie obligatoire. Sociologie du gouvernement de soi à l'école*. Rennes: PUR.
- Duru-Bellat, Marie. 2015. Les compétences non académiques en question. *Formation emploi* 130: 13–19.
- Dutercq, Yves, and Christian Maroy 2017.

- Ébersold, Serge. 2017. L'École inclusive, face à l'impératif d'accessibilité. *Education et sociétés* 40(2): 89–103.
- EHEA (European Higher Education Area). 2012. Making the Most of Our Potential: Consolidating the European Higher Education Area. Bucharest Communiqué. <https://enqa.eu/wp-content/uploads/2013/03/Bucharest-Communique-20121.pdf> (26.03.2019).
- EDK (Schweizerische Konferenz der kantonalen Erziehungsdirektoren). 2014. *Lehrplan 21*. EDK: Bern. <https://www.lehrplan21.ch/> (26.03.2019).
- Frajerman, Laurent. 2018. Note de conjoncture. Autonomie des établissements et justice en éducation: le débat intellectuel et politique sur l'autonomie des établissements scolaires. *Education et sociétés* 1: 73–91.
- Garcia, Sandrine. 2018. *Le goût de l'effort: la construction familiale des dispositions scolaires*. Paris: PUF.
- Gather Thurler, Monica, Isabelle Kolly-Otiger, Philippe Losego, and Olivier Maulini, (eds.). 2017. *Les directeurs au travail. Une enquête au cœur des établissements scolaires et socio-sanitaires*. Berne: Peter Lang.
- Giret, Jean-François. 2015. Introduction: pourquoi débattre des compétences non académiques? *Formation emploi* 130: 7–11.
- Georg, Walter, and Ulrike Sattel. 2006. Berufliche Bildung, Arbeitsmarkt und Beschäftigung. Pp. 125–152 in *Handbuch der Berufsbildung*, edited by Rolf Arnold, and Antonius Lipsmeier. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Gonon, Philipp, Katrin Kraus, Jurgen Oelkers, and Stefanie Stolz (eds.). 2009. *Work, Education and Employability*. Bern: Peter Lang.
- Gunter, Helen M. 2012. Le leadership scolaire, restructuration managériale de l'organisation de l'établissement scolaire. *Education et sociétés* 2: 59–74.
- Hall, David, Emiliano Grimaldi, Helen M. Gunter, Jorunn Møller, Roberto Serpieri, and Guri Skedsmo. 2015. Educational Reform and Modernisation in Europe: The Role of National Contexts in Mediating the New Public Management. *European Educational Research Journal* 14(6): 487–507. <https://doi.org/10.1177/1474904115615357>.
- Harris, Douglas N., and Carolyn D. Herrington. 2006. La régulation par les résultats contribue-t-elle à l'amélioration des écoles? Pp. 203–213 in *Améliorer l'école*, edited by Gaëtane Chapelle, and Denis Meuret. Paris: PUF.
- Hood, Christopher. 1991. A Public Management for All Seasons. *Public Administration* 69: 3–19.
- Hood, Christopher. 1995. The "New Public Management" in the 1980s: Variations on a Theme. *Accounting, Organizations and Society* 20(2): 93–109. [https://doi.org/10.1016/0361-3682\(93\)E0001-W](https://doi.org/10.1016/0361-3682(93)E0001-W).
- Kergoat, Prisca. 1999. *Savoirs, qualifications, compétences: enjeux pour l'entreprise, enjeux pour l'école*. 10<sup>èmes</sup> Entretiens de la Villette, <http://desette.free.fr/pmevtxt/Apprendre%20autrement%20aujourd'hui%20Sommaire%20complet.htm> (12.03.2019).
- Kergoat, Prisca. 2007. Une redéfinition des politiques de formation. Le cas de l'apprentissage dans les grandes entreprises. *Formation emploi* 99: 13–28.
- Kiener, Urs, and Philipp Gonon. 1998. *Die Berufsmatur. Ein Fallbeispiel Schweizerischer Berufsbildungspolitik*. Nationales Forschungsprogramm 33: Wirksamkeit unserer Bildungssysteme. Zürich: Rüegger Verlag.
- Lahire, Bernard. 2001. La construction de l'"autonomie" à l'école primaire: entre savoirs et pouvoirs. *Revue française de pédagogie* 135: 151–161.
- Lallement, Michel. 2010. *Le travail sous tensions*. Paris: Sciences Humaines.
- Lantheaume, Françoise, and Christophe Hérou. 2008. *La souffrance des enseignants. Une sociologie pragmatique du travail enseignant*. Paris: PUF.
- Lessard, Claude, Pierre C. Kamanzi, and Mylène Larochelle. 2009. De quelques facteurs facilitant l'intensification de la collaboration au travail parmi les enseignants: le cas des enseignants canadiens. *Education et sociétés* 1: 59–77.

- Losego, Philippe. 2017. Un travail en miettes – Un minutage du travail de direction. Pp. 51–80 in *Les directeurs au travail. Une enqu ete au c eur des  tablissements scolaires et socio- sanitaires*, edited by Monica Gather Thurler, Isabelle Kolly-Otger, Philippe Losego, and Ollivier Maulini. Bern: Peter Lang.
- Losego, Philippe, Catherine Amendola, and Mich le Cusinay. 2011. L'insertion subjective des novices de l'enseignement primaire : collaboration et sentiment de comp tence. *Revue Suisse des sciences de l'Education* 33(3): 479–494.
- L uthi, Floriane G. 2010. *Le leadership des directions d' tablissement scolaire : vers une optimisation par des pratiques de gestion des ressources humaines*. Paris: L'Harmattan.
- Maier, Maja S., and Thomas Vogel (eds.). 2013.  berg nge in eine neue Arbeitswelt? Blinde Flecke der Debatte zum  bergangssystem Schule-Beruf. Wiesbaden: Springer.
- Mangez, Eric. 2008. *R former les contenus d'enseignement. Une sociologie du curriculum*. Paris: PUF.
- Marcel, Jean-Fran ois, Vincent Dupriez, Dani le P risset Bagnoud, and Maurice Tardif (eds.). 2007. *Coordonner, collaborer, coop rer. De nouvelles pratiques enseignantes*. Bruxelles: de Boeck.
- Masonnati, Jonas, Nadia Lamamra, Jacqueline De Puy, and Beno t Gay-des-Combes. 2007. Les enjeux identitaires de la formation professionnelle duale en Suisse: Un tableau en demi-teinte. *Formation emploi* 100: 5–19.
- Mercure, Daniel, and Mircea Vultur. 2010. *La signification du travail. Nouveau mod le productif et ethos du travail au Qu bec*. Qu bec: Presses de l'Universit  Laval.
- Meyer, Thomas. 2011. On ne pr te qu'aux riches : l'in galit  des chances devant le syst me de formation en Suisse. Pp. 40–65 in *Transitions juv niles en Suisse*, edited by Manfred M. Bergman, Sandra Hupka-Brunner, Anita Keller, Thomas Meyer, and Barbara E. Stalder. Z rich: Seismo.
- Monchatre, Sylvie. 2007. D'une pratique   son instrumentation. *Formation emploi* 99: 5–11.
- OECD (Organisation for Economic Cooperation and Development). 2005. *Definition and Selection of Competencies*. <http://deseco.ch/bfs/deseco/en/index/02.parsys.43469.downloadList.2296.DownloadFile.tmp/2005.dskcexecutivesummary.en.pdf> (26.03.2019).
- Perrenoud, Philippe. 2000. *Construire des comp tences d s l' cole*. Paris: ESF.
- Rop , Fran oise, and Lucie Tanguy (eds.). 1994. *Savoirs et comp tences. De l'usage de ces notions dans l' cole et l'entreprise*. Paris: L'Harmattan.
- S , Silvia. 2018. Management de la qualit  dans les  tablissements de formation professionnelle secondaires : quelles reconfigurations professionnelles? Projet de th se doctorale, Facult  des Sciences Sociales et Politiques, Universit  de Lausanne.
- Sacchi, Stefan, and Thomas Meyer. 2016.  bergangsl sungen beim Eintritt in die Schweizer Berufsbildung: Br ckenschlag oder Sackgasse? *Schweizerische Zeitschrift f r Soziologie* 42(1): 3–39.
- Schaepfer, Hilde, and Andr  Wolter. 2008. Hochschule und Arbeitsmarkt im Bologna-Prozess: Der Stellenwert von "Employability" und Schl sselkompetenzen. *Zeitschrift f r Erziehungswissenschaft* 11(4): 607–625.
- Scharnhorst, Ursula, and Hansruedi Kaiser. 2018. Transversale Kompetenzen f r eine ungewisse digitale Zukunft? Pp. 9–12 in *Digitalisierung und Berufsbildung. Herausforderungen und Wege in die Zukunft*, edited by J rg Schweri, Ines Trede, and Isabelle Dauner. Zollikofen: Eidgen ssisches Hochschulinstitut f r Berufsbildung EHB.
- Scheerens, Jaap, and Ralf Maslowski. 2008. Autonomie des  tablissements scolaires : des moyens   la recherche d'un objectif? *Revue fran aise de p dagogie* 164: 27–36.
- SEFRI. 2018. *La formation professionnelle en suisse 2017. Faits et donn es chiffr es*. Bern: SEFRI.
- Stroobants, Marcelle. 2002. La qualification ou comment s'en d barrasser. Pp. 61–73 in *L' nigme de la comp tence en  ducation*, edited by Joaquim Dolz, and Edm e Ollagnier. Bruxelles: De Boeck.
- Tardif, Maurice, and Claude Lessard. 1999. *Le travail enseignant au quotidien : contribution   l' tude du travail dans les m tiers et les professions d'interactions humaines*. Qu bec: Presses de l'Universit  Laval.

- Tomlinson, Michael. 2013. *Education, Work and Identity. Themes and Perspectives*. London: Bloomsbury.
- Voss, Günter G., and Hans. J. Pongratz. 1998. Der Arbeitskraftunternehmer. Eine neue Grundform der Ware Arbeitskraft? *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 50(1): 131–158.
- Waardenburg, George. 2011. Le système suisse de diplômes. Pp. 81–96 in *La société des diplômés*, edited by Mathias Millet and Gilles Moreau. Paris: La Dispute.
- Wirthner, Martine. 2011. Un bilan des réformes de l'évaluation du travail des élèves en Suisse romande. Pp. 13–34 in *Réformer l'évaluation scolaire: mission impossible?*, edited by Béatrice Gilliéron Giroud, and Ladislav Ntamakiro. Bern: Peter Lang.