

# Chapter 4

## Understanding Education Reform Policy Trajectories by Analytical Sequencing



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**Abstract** This chapter exemplifies a strategy for understanding and examining Policy and Practice Nexuses concerning education reform trajectories. Education policy-making is an increasingly complex process, mostly neither linear and rational nor unidirectional. However, to understand such processes, we advocate complexity reduction through analytical distinctions, sequencing, and entity-relationship-thinking. While policy-practice nexuses are conflated in the reality of public education, our analytical approach must produce a somewhat linear, sequential understanding. Drawing on this argument, we propose a model which displays education reform trajectories and explore the model in terms of empirical objects. With the distinction between entities and relationships, we facilitate analytical definitions in Policy-Practice Research regarding what affects what and how it does so. Relationships are units of re-contextualization, process, and transfer, which demand the presence of at least two entities. Moreover, Time becomes an analytical device. Each unit conditions the next. The prior development of ideas always conditions the current context of the analyses. Finally, we advocate comparative education reform policy analyses. While selecting (national and sectorial), cases become critical. Comparisons may uncover the different layers of universality and particularity.

**Keywords** Education policy · Education practice · Policy-practice nexus · Reform trajectories

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## Introduction

This chapter stems from an ambition to describe and explain education reform policy trajectories (henceforth reform trajectories): namely the path from policy text production (henceforth policy) to policy enactment at different levels in the complex system of public education (Cheng, 2005). The term reform comes from the Latin “reformatio”, meaning renewal, and is defined by Merriam Webster as a “change into an improved form or condition”. Due to the multidimensional, dynamic and value-based nature of reform policy processes and the complexity of public education systems, this area of study is challenging, ambiguous and full of pitfalls (Capano, 2009). The chapter aims to contribute to a further understanding of the complex nature of Policy and Practice Nexuses, the focus of this book volume. We aim to present conceptual considerations concerning how we can display various relations between the multiple arenas in which policy might be negotiated and translated. We also argue that, from policy to practice, several nexuses might exist.

We will construct and describe a model that can provide guidance for knowledge accumulation within the research field of education policy. Our work on depicting reform trajectories is conceptual and relational. We argue that analytical distinctions and complexity reduction will enable us to be as specific as possible in each analytical unit and in the analyses of the relations between different units. As a complex system, education is open, recursive, organic, non-linear and emergent (Gough et al., 2012). Complexity reduction provides an educational ontology that enables us to think productively about the drivers for educational change and improvement, as well as for processes of stability and stagnation or decline. Initially, scholars approached policy-making as a rational and linear process characterised by chronological stages. Later, there was a shift from the idea of stages to cyclical policy models, comprising e.g. problem definition/agenda-setting, policy formulation, decision-making, implementation, change and evaluation. Over time, scholars also came to emphasise feedback and the impact on various target groups and sectors as well as unintended consequences and side-effects. However, most studies have been concerned with particular stages rather than the whole cycle, and, frequently, policy has been approached as a top down and unidirectional phenomenon. In addition, many studies have been context-insensitive and generic rather than domain specific. Strong criticism has been put forward of epistemic assumptions of order, structure, function, cause and effect. Further, failure to capture the realities of influence, pressure, conflict and compromise in the policy-making process has been noted.

Scholars of education policy have shown that reform trajectories are, for the most part, neither linear (Lindensjö & Lundgren, 2000) nor unidirectional. Moreover, policy enactment is highly affected by contextual factors (Schulte & Wermke, 2019). In order to explain the complexity, non-linearity and non-causality of reform policies, several approaches have been developed (Schriewer, 1999). Some focus on narratives of success and failure, as a result, characterised education reforms as processes of borrowing and lending (Kauko & Wermke, 2018). Others have considered policy-making as an endless trial and error of reform endeavours, leading to

changes (or not) constituting a “tinkering towards utopia” (Tyack & Cuban, 1995). It has been stated that such reform stories are mostly important for politics and the input side of reforms. As artefacts of the political system, reforms are only loosely coupled to the pragmatic levels in schools and classrooms (Weick, 1976). Historically, reform processes oscillate or circulate mostly between only very particular alternatives, such as form versus content or decentralisation versus centralisation (Broadfoot, 1996). Education reforms can also be seen as instruments of disciplining (Foucault, 1972), operating to remind the “practice” about what is significant in the contemporary society (Ingersoll, 2003). Moreover, what is seen as significant is dynamic and differs across time and space (Pinar, 2003).

Public education has first and foremost been a national endeavour, with curriculum as the ‘program of the school’ (Fries et al., 2013), by which the state aims to plan what is to be taught to, and learnt by, a nation’s youth in order to secure the continuation of the society (Hopmann, 1999). Thus, the nation state has been the overall frame of the curriculum, and a clear-cut reference. During the last decades, we can see an increased complexity in public education due to processes of globalisation, digitalization and marketisation. These processes impact both the production and enactment of education reforms, and thus the complexity of the relation between policy and practice. Today, the powerful process of globalisation challenges the borders of the nation-state and the framing of curriculum requires a rescaling of what can be considered national, global or local (Lingard & Rawolle, 2010). In a similar way, digitalisation and marketisation have impacted the way time and space, and public and private appear in policy-making. Related to globalisation, this added complexity has been described in terms of policy spaces (ibid.), policyscapes (Carney, 2012), spaces conceived of as fluid scales (Robertson et al., 2002), glocalisation and glonacalisation (Marginson & Rhoades, 2002), cosmopolitanism (Popkewitz, 2003), and so forth. While these terms are indeed useful, they may actually complicate in-depth analyses of what happens with reforms on the road from policy production to enactment. In the end, everything might relate to everything else.

Like Ball (2012), we approach reform trajectories as historically and culturally embedded policy-making comprising policy text production and policy enactment. Trajectories relate to policy as a social entity, which moves through space and changes as it moves, and also changes the spaces it moves through. The model we put forward enables us to explore processes of interpretation and translation through which agents enact policy. Policy-making highlights not only the context of text production and the context of practice, but also the context of influence.

Against this backdrop, in this chapter we present and explore reform trajectories as historically embedded policy-making, which, while interrelated can analytically be neatly distinguished into conceptual maps, in which each entity can be examined as a unit in its own right, but above all as a discrete process focused on relationships between different entities. Such maps can be used to plan complex research designs of policy-making. Moreover, the maps provide an analytical structure for research syntheses and thus the production of cumulative knowledge in the field of education policy.

First, we develop the idea of analytical distinction and theoretical complexity reduction by drawing on the work of Margaret Archer and Henry Mintzberg. Next, we present the graphical form of the so-called entity-relationship models (ERM), in order to map complex reform trajectories in a comprehensive way. Then, we give an example of such a model, employing insights from relevant policy studies. Following this, the model is employed to systematically organise studies of reform trajectories focusing different empirical objects. Further, consequences of different epistemological approaches for the structure-agency duality are discussed. The model exemplifies a strategy for cumulative knowledge building through analytical distinctions and entity relationships.

## Complexity Reduction Through Analytical Distinctions, Sequencing and Relationships

The organisation theorist, Mintzberg (1979), argues that, in a sense, structural configurations do not exist at all, but rather constitute a theory, and every theory necessarily simplifies and distorts reality. However, this should not lead to a rejection of the configuration. The choice is not between theory and reality, so much as between alternative theories, and the

choice of theory is normally based on two criteria: How rich is the description, that is, how powerfully it reflects the reality (or, alternatively, how little it distorts the reality), and how simple it is to comprehend. The most useful theories are simple when stated yet powerful when applied, like  $E=MC^2$ . (Mintzberg, 1979, p. 469).

Coming from a similar perspective on theorizing, Archer (1988) warns against the fallacy of conflation: Fundamentally, what is wrong with conflationary theorizing is that it prevents clear cut analysis of the interplay between structure and agency. This is because mixing up the two elements withdraws any autonomy or independence from one, if not from both of them. In many theories, structure and agency are intertwined, and both parts without autonomy. Archer's suggestion is to analytically separate structure from agency, chronologically, as they relate sequentially to each other. This is further explored in her idea on morphogenesis (change) and morphostasis (stability) of social systems.

As a process morphogenesis refers to the complex interchanges that produce change in a system's given form, structure or state (morphostasis is the reverse), the end product being termed "elaboration". Of course, action is ceaseless and essential to both the stable continuation or the further elaboration of the system. However, when morphogenesis results, then subsequent interaction will be different from earlier action precisely because it is now conditioned by the elaborated consequences of that prior action. Hence, the morphogenetic is not only dualistic but sequential. (Archer, 1988, p. xxii)

While recognising the nonlinearity of reform trajectories, as well as direct and indirect interactions between units, we argue for the benefit of analysing trajectories sequentially. For the sake of understanding the different nexuses, analytical devices

must have a certain linearity - one “step” follows another. Reforms can result in change (morphogenesis) or stability (morphostasis). In order to analyse such processes, we must analytically decide, when and where we start our investigation. In doing so, it is not necessary to state whether we believe that change processes are bottom-up or top-down, or some combination of both. Instead, we decide analytically for a starting point, e.g. the formal introduction of a reform. From this starting point, the reform can be tracked on its way to a potential teacher practice in order to improve educational outcomes. Time and space can be included in each unit/entity of our model. In our reform tracking, we have an analytical time dimension, the sequence of structures and agency, and structure again. Consequently, new structures (change) or the confirmation of old structures (stability) are the results of present agency in the trajectory of a reform.

Still, there are various logical perspectives on how agency relates to structures given and structures created. We put forward three main conceptualisations of how agency may draw on different epistemological ideas in social science: An *interactionist approach* which argues that meaning and structure are produced through the interactions of individuals; A *structural-functional (also functionalist) approach*, which assumes society is a complex system whose parts work together regarding a particular function. This function results in both structure and agency among the system’s parts. Both units relate to each other in a complementary or sequential way. Finally, there is the *cognitive epistemological approach*, which focuses on mental (cognitive) activities such as thinking, planning, or learning. To clarify, we suggest an openness to various epistemologies, enabling different ways of conceiving of the relation between structure and agency.

## Entity Relationship Models: Mapping Education Reform Trajectories

To clarify analytical units and relationships, we employ a so-called *entity-relationship-model (ERM)*, originally developed to sketch out the design of a database and show the relationships between entities and entity sets stored in it.<sup>1</sup> In our context, an entity is a key object or component of fundamental data within the research field of education policy. Entities, in turn, have attributes that define their properties. The advantage of employing the ERM is that we can distinguish analytically between entities (objects of what) from relationships (objects of how), while retaining the ability to relate objects to each other in a conceptual map. Moreover, the use of commonly shared symbols makes collaboration between scholars easier, and increases the potential for cumulative knowledge production within a field of research. Figure 4.1 shows a generic ERM which depicts the sequential format of

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<sup>1</sup><https://www.smartdraw.com/entity-relationship-diagram/>. ER models have for example been used in education by social network scholars (see Roldan & Schupp, 2005).

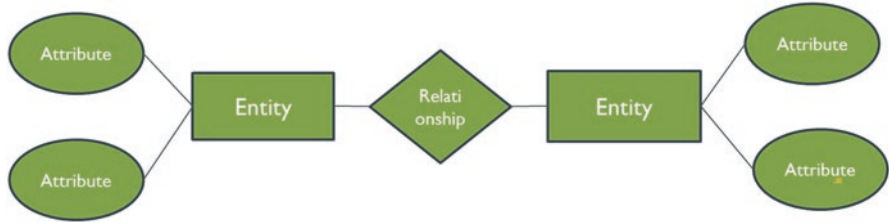


Fig. 4.1 Generic Entity Relationship Model (ERM)



Fig. 4.2 An education reform trajectory map using ERM symbols

the model and various elements of the model, i.e. entities and their attributes, and the relationships between entities.

In Fig. 4.2, a reform trajectory using ERM symbols is presented. Following the rationale of ER modelling, by depicting entities connected to each other by relationships and defined by attributes, this provides a common space for exploring and analysing various trajectories. In addition, the database enables comparisons over time and in different contexts. Below, the generic model is employed to explore a policy reform trajectory, i.e. policy-making in terms of policy text production and policy enactment within the context of a public education system. Even though the analytical model starts with the introduction of a new formal policy, we recognise that reforms are indeed often inspired by practical problems. Thus, there are no arrows in the model, which would indicate bottom-up or top-down rationales. Rather, the relationship represents the way a reform is re-contextualised (Bernstein, 1977). *Thus, the relationships are the nexuses in the map, the mediating devices. Here, entities meet and policy is enacted, negotiated, and at times, contested.*

As stated, starting on the left-hand side of the map with the entity *Policy* does not imply a unidirectional or linear and rational direction of reform trajectories. Policies are made through negotiations, affected by national and international trends, cultures, ideologies and public opinions. Key attributes of policy as text production are e.g. *Agenda setting* and *Policy formulation*. These attributes are related to the employment

of specific policy instruments, such as regulation through law, ideology, economy, organisation and evaluation (see e.g. Forsberg & Nordzell, 2013). Policy agents at different spatial levels and arenas are involved, but, analytically, they occur within the entity. In other words, in this entity, agenda setting or policy formulation, as in our conceptual example, might indeed occur through the intersection of various spatial levels. These can be of a local, national or international character.

Policies made in public education condition two basic pillars that make public education practice possible: the entity labelled *Organisation* and the entity labelled *Profession* (Vanderstraeten, 2007; Luhmann, 2002). The public education systems constitute what Vanderstraeten (2001) calls organisationally framed interactions, interactions that to a certain extent are plannable. The education system is primarily characterised by social, face-to-face meetings, which open up particular forms of interaction within the system (ibid.). Inside every school, for example, the teaching profession is responsible for facilitating interaction with students, other teachers, parents and the school principal in different aspects of the school's everyday functioning. However, there is always an element of surprise in interaction, which takes on a life of its own depending on the participants and the context in which the interaction takes place (ibid.).

Consequently, there are organisational frames, which reduce the complexity of possible reactions in interaction and there is a certain professional scope of action for teachers which allows them to respond to different reactions from their students. Simply put, the public education system itself cannot handle the social interaction of education, but needs specially trained people to undertake this task: teachers, who can communicate educational objectives. Teachers, in turn, need the school organisation to reduce the complexity of practice. For example, teachers do not need to search for students every morning, but due to the organisation of schools they can regularly meet the same students of the same age group, who are to be educated on a given subject, which is regulated by the curriculum (Luhmann, 2002).

For sure, the organizational setting can be used to increase the freedom of professionals: the effective freedom to choose one's special line of work, to have access to the appropriate clients and equipment, to organize one's time and effort in accordance with one's plans and goals, to engage in conversations with competent colleagues that will sharpen one's knowledge and skill, and so on. But it is also well known that professionals frequently develop a critical, if not hostile, attitude vis-à-vis the 'bureaucratic' structures and methods of large organizations. To employed professionals, the organizational bureaucracy often appears as a *Fremdkörper* whose routine rules and hierarchical structures are at odds with the exigencies of intimate face-to-face contact [...]. They have difficulty coming to terms with organizational requirements or expectations. (Vanderstraeten, 2007, p. 629).

However, when analysing reform trajectories, it is critical to address the entities of both organisation and profession. Thus, the map has a bifurcation: It is possible to address mainly the professions in education, i.e. the groups who are responsible for the interactions of teaching and learning. Policies address, also, the organisations of education that refer to the structure or framework of schooling, for example the sequenced structuring of student cohorts by age, school buildings, behavioral codes, forms of co-operation and arenas of teachers, or local manifestations of school laws,

or the content of schooling laid down by curriculum. Included also is the organisation of home-school relations. Potential attributes of this entity can be *School structures* or *School culture* (Berg et al., 1999). Considering our example attributes here, we must clarify again that the trajectory followed in our chapter is just one example. In the organisation, we also see leadership practices both in schools and school districts as they might be constitutive of school structures and school cultures.

The *relationship* between *Policy* and *Organisation* can be described as a set of processes of *Administration*, which is the legal creation and enactment of curricula and other policies, e.g. related to inclusion or pandemic crises. Even if the ERM does not comprise variables of time and space, each unit (entity or relationship) is historically embedded in particular contexts. This can be illustrated by the example of the relationship labelled *Administration*, which connects policy and organisation. School administration has developed over time, and the emergence of compulsory schooling made it necessary to organise schools for all, where a certain subject matter is taught to a great number of students (Hopmann, 1988). Forms of organisation and curriculum had to be established. Mass schooling does not only mean a great number of individual schools; it means the existence of a public school *system*, in which various schools also are related to each other. Mass schooling systems emerged after developments of state, society and bureaucracy formation. These developments relate to negotiations of interests and focal ideas around necessary structures, such as mandatory schooling, years, subjects etc. (Ohlhaber, 2005). The creation of the organisation of public schooling institutionalised certain arenas, and processes and roles emerged.

This process has been called functional differentiation, manifested in chains of decisions in which one decision leads to the next (Luhmann, 2002; Stichweh, 2016). In order to make the task of public mass education possible, school administration historically underwent several processes: It was didacticised, i.e. the school administration came to be exercised by persons with a schooling background, educated in the science of teaching and instructional planning, didactics. A relation to academic disciplines was established, i.e. the school administration came to be differentiated in terms of school forms and curricula. A differentiation of various tasks in the administration was executed, i.e. school administration today comprises various departments with a particular expertise, such as curriculum making, school inspection, hygiene, examinations, and so forth (Ohlhaber, 2005).

Education reforms can also aim to affect the other pillar of public education: the entity called *Profession*. Significant attributes of *Profession* are *Professional standards* and *Professional culture* (e.g. needs, duties and status), often collected under the conceptual term “professionalism” (Evetts, 2003). Critical to professional work are prominent societal values such as health, justice, good education, and, today, also technical innovation (Pfadenhauer, 2003). Problems which professions are assumed to resolve, cannot, for the most part, be managed by technical knowledge alone. Professional knowledge builds on rules and regulation, but also on a certain number of complex (experience-based) routines to which specific problems can be adjusted. Such routines are foundational to professional action. They reduce risks and provide security, but they are also dynamic as well as learnable. Professions are also attached to a set of universal values which guide their orientation, such as an

interest in the public good. Professions are expected to be virtuous and prudent (Luhmann, 2002). Taking the example of the teaching profession: teaching started to professionalise in many parts of Europe in the second half of the eighteenth century, becoming a life-long, primary occupation, not only a side occupation for individuals attached to the church. Responsibility for school administration was given to individuals from the same group (teachers). The practice of teaching was expected to be professionally autonomous and, through increased salary and status, the occupation became attractive to the appropriate people.

To characterise the *relationship* between *Policy* and *Profession*, we suggest *Teacher education and teacher professional development*. Here it is possible to examine how education reforms affect the issue of who is allowed to become a teacher, what characteristics are preferred among teachers, what teacher expertise is, and how teachers should (be) develop(ed) for educational practice. In teacher education and development, academic and practice training merges, and this has various consequences for teachers' professional knowledge and identity formation. More generally, over time, teacher education and development might be characterised by oscillations between emphases on either generic knowledge of schooling (e.g. meta-cognitive knowledge), or on subject and more specific expertise knowledge (e.g. subject knowledge) (Luhmann, 2002).

From the entity labelled *Organisation* and the entity labelled *Profession*, the trajectory continues towards the entity labelled *Practice*. "Practice" is indeed a broad term, referring to what happens in and around classroom instruction. Potential attributes include *Teaching*, *Student composition* and *Professional expertise*. Teaching is the core activity of education and involves the didactic triangle of student body, teacher and content as well as interaction and assessment. Student composition refers to the grouping of students and relates to issues of tracking, streaming and ability grouping, which are critical to students' learning, performance and educational outcomes. These questions are directly linked to educational differentiation. Differentiation is the management of heterogeneity and complexity reduction in schooling: It can be done by providing different settings for different kinds of learners (Bönsch, 1995). The *Professional expertise* attribute relates to the practice of teaching which draws upon specific knowledge, applied planning, teaching and evaluation of classroom practice. Professional expertise is applied to describe individuals who exert a particular occupational practice, for which, in order to successfully solve various problems, long educational and practical experience is necessary (Bromme, 1992). Bromme (ibid.) sees expertise as the core (and content) of professionalism in a certain occupation.

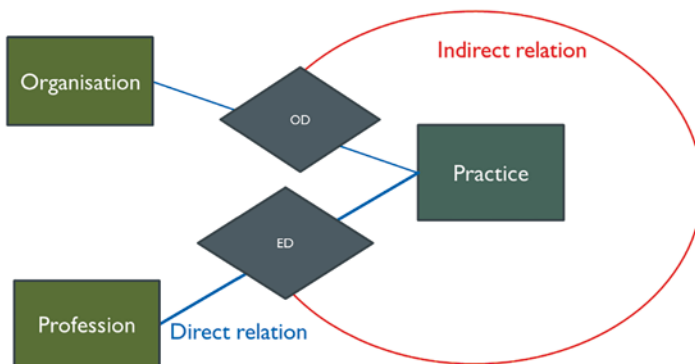
The *Organisational differentiation* relationship, which occurs between *Organisation* and *Practice*, points on the one hand to the organisational framing of teaching, student composition and professional expertise, and on the other hand to the way in which the practice may set the conditions for school organisation at different levels. Teachers arrange their work within given structures that are partly negotiable with their direct colleagues and superiors at their school. Both school organisation and collegial cooperation are necessary to enabling equality and equity between the various classrooms and schools in a public education system (Wermke & Salokangas, 2021). As Wermke and Salokangas (2021) have argued, this is a

delicate balance which can be examined by focusing autonomy in education. There are many examples of how schooling professionals in different contexts negotiate with school management, defined as representatives of the school organisation: school internal curricula, end of term examinations, final grading, timetabling, disciplinary policies, allocation of resources etc. involve both individual teachers, the teacher collegium and school management at the school and school district level.

In a similar way, the *Educational differentiation* relationship, connecting Profession and Practice, emphasises how professional standards and culture are foundational to the teacher's didactical classroom decisions on subject matter, interaction and assessment. Likewise, the practice, through its various attributes, frames the development of both professional standards and culture. With Pfadenhauer (2003), we argue that professionalism can be seen as the institutionalised expertise of an occupation. In the words of Luckmann and Sprondel (1972, p. 15 cited in Pfadenhauer, 2003, p. 30):

Professionalization means the process of the social stabilisation of vocational roles through the systematisation of a knowledge domain, the length and complexity of an institutionally specialised education and training, the confirmation of vocational categories (licenses) and a mesh of special knowledge related typologies of the own and other's occupations. And such vocations, which as result of historical professionalization processes – have gained an extended autonomy in the building of such issues, will be called professions (Our translation).

As stated above, in the entity labelled *Practice*, policy enactment links various attributes such as teaching, student composition and professional expertise. Moreover, it is in the practice that the core activity of education takes place. Thus, this is where all the other entities and relationships intersect in both direct and indirect ways (see Fig. 4.3 as an example). This does increase the complexity of the model, but also makes it possible to grasp the whole policy-making process. At the same time, entities and relations can be individually investigated, or various parts of the trajectory can be examined separately. Ultimately, the approach of policy enactment, in combination with the sequential ERM, enables scholars to study and analyse whether education policy reforms do indeed develop and become components of the



**Fig. 4.3** Direct and indirect relations in the reform trajectory

knowledge, identity and practice of education and whether this feeds back into new policies, teacher education and research on teaching.

## Re-Assembling Analytical Units and Relationships, and Conclusion

In this final section, we delineate briefly how reform trajectory maps may be used to organise and synthesise previous research in a cumulative way. We link a partial and illustrative rather than comprehensive and systematic selection of empirical objects to the various units in the above developed ERM. These objects are in turn based on different ways to make sense of structure-agency in research on policy-making. Frequently, *interactionist*, and *structuralist-functional* approaches are used in the reform trajectories. More infrequently, and mainly in relation to teacher professionalisation, *cognitivist* approaches are used. The contingency of how structure-agency can be understood opens up discussions on eclecticism in education policy research. With Gilberto Capano (2009), we would emphasise the importance of coherence in frameworks and awareness of epistemological choices and their consequences. We argue that the employment of the sequential ERM, with its analytical distinctions and relationships, may increase scholars' ability to manage such problematic issues in the design of reform trajectory research.

In Table 4.1, the headings represent entities, relationships and specific empirical objects which it is possible to study within the different analytical units. Together, they depict a selection of potential empirical objects which can be linked to the overall process of reform trajectories. The empirical objects represent sites, organisations, activities, agents and interests that influence and at the same time are influenced by reforms. A conceptual map such as we have suggested, facilitates the design of empirical work, also taking epistemological issues into account. This would increase the validity of the research methodology.

An overall depiction of the entities and relationships enables the planning of studies in terms of which results will be possible to combine with each other to illustrate a specific reform trajectory. Moreover, this supports an understanding of what can actually be explained by what. In the words of Capano (2009, p. 8):

The explanandum (change) is too frequently defined in an ambiguous manner, or its complexity is played down (when the contents of law or policy programmes are employed as a proxy for policy change). Too often the explanans (the independent variable or set of non-causal factors) is chosen in the biased belief that what really matters is that "theory must be validated". Too often we do what we are supposed to do without really reflecting on "what we are actually doing". The truth is that when designing a theory (or theoretical framework) of social, political, and policy change, we first need to solve (or decide on) certain structural epistemological and theoretical (and sometimes methodological) puzzles.

To put this in a statistical language. The categories can be employed in analyses of variance, i.e. the comparisons of which category can be associated with certain values. Categories at different levels can, with non-parametric measures such as Phi or

**Table 4.1** Entities and relationships in reform trajectories linked to empirical objects

Entity	Relationship/nexus	Potential empirical objects
Policy		(1) Examination of policy production via bureaucratic, rational processes (driven by legality and legitimacy); or (2) policy production via negotiations and relations of various actors in time and space (locally, nationally, internationally)
	Policy to profession	(1) Examination of necessary competences to be learned and taught in relation to existing and new policies in teacher education and teacher professional development; (2) examination of negotiation of valid knowledge for teachers; (3) examination of cognitive learning opportunities in teacher education and development
Profession		(1) Examination of professionalisation as the creation of professional standards and culture, maintaining professional autonomy and status in relation to existing and new policies in public (mass) education; or (2) examination of negotiations by the educational professions with others on their status, autonomy and duties
	Policy to organisation	(1) Examination of school and curriculum administration as the structuring of public (mass) education; or (2) examination of negotiations of what knowledge is most valuable in public education, and thereby represented in curricula
Organisation		(1) Examination of schools as organisations and their particular organisational purpose and bureaucratic structure; or (2) examination of schools as micro-political configurations of various actors and their power relations
	Profession to practice	(1) Examination of educational differentiation in schools via the transfer of expertise to teacher education and curriculum; or (2) examination of the negotiations among various actors around what knowledge counts in teacher practice
	Organisation to practice	(1) Examination of the differentiation of organisational and professional standards in relation to each other in the practice of public education; or (2) examination of micro-political configurations of various actors and power relations in organisations
Practice		(1) Examination of instruction as core of the functional system of education; or (2) examination of negotiations of good/best practice in instruction; or (3) the examination of professional expertise in instruction

Rho, be related to each other. A statistical approach can indeed help to plan reform trajectory research in particular, since, in a quantitative research paradigm, it is absolutely necessary to decide beforehand which independent and dependent variables should be used in the analytical models. Furthermore, the entity-relationship models for the design of databases forces the researcher to make such considerations, since databases do not function with ambiguous, poorly defined relationships.

In conclusion, we have argued and illustrated a sequential and relational logic of Policy and Practice Nexuses as individual entities and relationships. With the distinction between entities and relationships we have facilitated analytical definitions in Policy-Practice Research, in terms of what actually affects what and how it does so. Relationships are units of re = contextualisation, process and transfer, which demand the presence of at least two entities.

Moreover, we have made decisions considering time and space. In the words of Archer (1988), what we observe empirically, both in entities and relationships, is always the present, situated historically.

However, this present time is peculiarly pivotal in the morphogenetic approach. As Markovic expresses it, both “past and future” are living in the present. Whatever human beings do in the present is decisively influenced by the past and by the future. [...] The future is not something that will come later, independently of our will. There are several possible futures and one of them has to be made. (Archer, 1988, p. xxvi)

What we investigate empirically is always local (in a very particular space) and possible to observe as a practice. Thus, when we investigate trajectories, we string together present, local, practical and analytical units. Time becomes our analytical device. Each unit conditions the next. In other words, while the reality is non-linear and complex, our analysis must possess a certain linearity. It is always the prior development of ideas (from earlier interaction) that conditions the current context of the analyses. Finally, we advocate comparative education reform policy analyses. While the selection of (national, sectorial) cases becomes critical, comparisons may uncover the different layers of universality and particularity, i.e. what is broadly universal, what is possible to generalise and what is unique to the given instance and context. The search for universals is indeed only made possible by attending to the details of the concrete case at hand (Erickson, 1986). Only in the particular case, i.e. the very particular practices, and their development over time, may we see change or stability. As researchers working in education policy, we draw on a comment made by Diane Arbus, the iconographic twentieth-century photographer, that “the more specific you are, the more general it’ll be.”

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