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# **Networks of Change: The Influence of Instrument Constituencies on Brazilian Blended Learning Policy**

A dissertation submitted to the Universitat Autònoma de Barcelona and the University of  
Glasgow for the Joint Master in Education Policies for Global Development

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“...you have to leave the island in order to see the island, that we can't see ourselves unless we become free of ourselves” — José Saramago, *The Tale of the Unknown Island*

Using Saramago's analogy, I summarize the Globed experience that allowed me to leave my island, Brazil, and embark on a remarkable journey of world exploration and self-discovery. I dedicate this thesis to all those who have shared this journey with me.

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## **Abstract**

This study examines the emergence and establishment of blended learning (BL) as a significant policy instrument in Brazil. It explores the mechanisms through which the Innovation Network for Blended Education (RIEH) policy, launched by the Brazilian Ministry of Education in 2022, has gained traction amid a contested upper-secondary education reform. Following Voß and Simons (2014)'s conceptualization of instrument constituencies, I explore the social dynamics of the BL policy instrument, investigating: (i) the role of RIEH's actors as policy entrepreneurs, advisors, advocates, and evaluators; (ii) the tools and mechanisms employed to foster support for the BL instrument; and (iii) their effect on RIEH's changes over time and across subnational contexts. Employing a process-tracing strategy based on interviews and desk research, the findings highlight the role of subsystem actors in shaping BL as a broad concept and an adaptable instrument to varying policy needs. The analysis also underscores the significance of RIEH's strategies of establishing a network, giving support for state implementation, and providing capacity building and monitoring and evaluation (M&E) tools. These efforts help attract and maintain support for the BL instrument, ultimately contributing to RIEH's policy change and translation.

**Keywords:** instrument constituency, policy instrument, policy translation, policy change, blended learning.

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# 1 Introduction

Over the past years, there has been growing advocacy for education policies that incorporate innovative features, such as blending face-to-face and technology-mediated moments (Rasheed, Kamsin, & Abdullah, 2020; Topping, Douglas, Robertson, & Ferguson, 2022; Xu, Zhao, Liew, Zhou, & Kogut, 2023). Although contemporary work, such as the UNESCO 2023 Global Education Monitoring (GEM) Report, highlights concerns about the reliability and external validity of education technology (edTech) implementation, particularly in the Global South (UNESCO, 2023), blended learning (BL) policies are progressively being intertwined into global educational reforms' policy rationales (Sahlberg, 2016).

In this context, it is essential to understand the supply-push dynamics of these policy instruments and the role of policy subsystem actors in promoting their adoption (Lascoumes & Le Galès, 2007; Simons & Voß, 2018). This work aims to fill this research gap by analyzing the mechanisms through which Innovation Network for Blended Education (*Rede de Inovação para Educação Híbrida*, RIEH), launched by the Brazilian Ministry of Education in 2022, has become a vital policy instrument, capable of surviving uncertainties in a turbulent upper-secondary educational reform context and during periods of political wrangling (Braga, Laborne, Marini, Souza e Silva, & Duarte, 2022).

Specifically, I draw from Voß and Simons (2014)'s concept of *instrument constituency*, exploring the social dynamics of the policy instrument. In my investigation, I will examine the varying roles of RIEH subsystem actors throughout policy stages and the tools and mechanisms employed by them to build support for BL instruments (Béland & Howlett, 2016; Capano & Engeli, 2022; Mukherjee & Howlett, 2015; Simons & Voß, 2018). By looking at instruments from a socio-material perspective, this research makes significant contributions to policy studies. Firstly, it enhances our understanding of policy instruments by clarifying their functions and effects (Capano & Engeli, 2022). Additionally, the work provides applied knowledge for sectors (education) and contexts (Brazil) that have yet to be explored in the literature on policy instruments (Béland & Howlett, 2016). The approach is innovative not only by focusing on a Global South context but also by investigating it across heterogeneous sub-national milieus (Schneider & Ingram, 1988).

I will also analyze the interplay between subsystem actors' agency and policy temporal and contextual evolution in Brazilian states. Combining streams of thought such as instrument constituency, policy change, and policy translation allows the exploration of instruments' semiotic malleability. The underlying hypothesis that guides this thesis is that the constituency's agency is a driver of processes of gradual policy change (Béland & Powell, 2016; Mahoney & Thelen, 2010) and adaptation to the contextual needs of particular actors (Hassenteufel & Zeigermann, 2021; Mukhtarov, 2014; Stone, 2017).

To understand the analysis of these complex policy dynamics, RIEH is treated as a single case study. I employed a process-tracing strategy (Bennett & Checkel, 2015; Collier, 2011; Fontaine, 2020) based on semi-structured in-depth interviews with national and state-level Brazilian actors involved in RIEH policymaking, as well as desk research. By qualitatively drawing inferences on RIEH's causal mechanisms, it was possible to map how the mechanisms of instrument constituencies influenced the selection of the policy instrument and contributed to RIEH's maintenance and gradual change over time and across states.

It is essential to clarify that this thesis aims to critically analyze the BL policy instrument within the Brazilian context, recognizing both the successes and pitfalls of RIEH's design and enactment as integral parts of its policy process. This critical analysis, however, does not seek to hold subsystem actors accountable but rather to comprehend the mechanics and dynamics of the policy process, shedding light on the creation of governance knowledge and the

design and implementation of policies.

The analysis of policy documents and interviews with national and subnational actors involved in RIEH's formulation and enactment underscores the significance of the instrument constituency (Béland & Howlett, 2016; Simons & Voß, 2018). The case of RIEH clearly demonstrates the roles of subsystem actors in developing, maintaining, and expanding BL adoption in Brazil. Through induction and co-creation mechanisms, they have been influential in promoting this policy solution and facilitating incremental policy change and translation.

The instrument has been strengthened by a broad BL concept able to reinforce the functional and structural promises of the BL model (Lascoumes & Le Galès, 2007) and to address varying educational problems (Béland & Howlett, 2016). Another source of strength included taking on qualities of collective actors (Béland & Howlett, 2016; Simons & Voß, 2018), which included strategies such as forming a network of actors, adopting a flexible implementation model, and providing network members with capacity building and monitoring and evaluation (M&E) tools.

In addition to this Introduction, the paper is structured as follows: section 2 presents the theoretical framework that guided this research, discussing contemporary policy theories that recognize the multifaceted power dynamics inherent in policymaking. In section 3, I present the Brazilian education context, highlighting the most important reforms and policies implemented in the last years. The section 4 outlines the research design, including the research question, data collection, and data analysis. Findings are described in section 5, while section 6 includes the analysis and interpretation of these results. Finally, summarized findings, concluding reflections, policy implications, and research limitations are discussed in section 7.

## 2 Theoretical framework

Public policy design and implementation do not operate solely on rational grounds. Institutions are best viewed as systems of regulations that are enforced or followed by various actors and organizations (Thelen, 2009). As a result, these regulations are not simply applied but are subject to constant interpretation, enforcement, and action by actors with distinct and sometimes opposing interests (Streeck & Thelen, 2005). The current understanding of policies as complex policy goals and means that undergo displacement, dislocation, transformation, and negotiation is a result of a significant departure from the traditional scholarly literature that heavily relied on positivistic concepts of rationality in policymaking (Béland & Howlett, 2016; Callon, 1984).

This shift in perspective was inspired by the groundbreaking works of scholars like Sabatier (1987), Kingdon (1984), and Sabatier and Jenkins-Smith (1993), who challenged the notion of policymaking as merely a rational problem-solving endeavor. While policy efficacy, effectiveness, legitimacy, and feasibility remain crucial, contemporary scholars acknowledge many factors that influence policymaking. These include, for example, policymakers' decision heuristics (Kahneman & Tversky, 1982; Schneider & Ingram, 1988) and cognitive limits (Elster, 2006; Pierson, 2000), unclear definition of policy problems (Béland & Howlett, 2016; Schneider & Ingram, 1988), public organizations' overload (Knill, Steinebach, & Zink, 2024), as well as political compromise and contestation (Gilardi, 2012; Maggetti & Gilardi, 2016; Orenstein, 2008; Thelen, 2009). In other words, the current literature has come to recognize, to a greater or lesser extent, the multifaceted power dynamics inherent in policymaking (Verger & Fontdevilla, in press).

To provide a deep understanding of the dynamics and mechanisms of education policymaking in current societies, I will delve into aspects of how social practices relate to policy development, maintenance, and expansion. More specifically, I will discuss central concepts from the literature on policy instruments and instrument constituency, policy change, and policy translation.

### 2.1 Policy instruments and instrument constituencies

Public policies are designed to solve problems but often fail to achieve this goal. Despite the continuous expansion of policy stocks over time (Knill et al., 2024), the 'massive proliferation' (Salamon, 1989, p. 3) of tools in modern democracies<sup>1</sup> frequently falls short in effectively tackling the problems they aim to solve (Béland & Howlett, 2016). This inefficiency is concerning because, in many cases, the development of policy options and their consideration as viable solutions do not align with the accurate identification of the underlying problems (Simons & Voß, 2018).

The complex interplay of factors within policy subsystems can explain the loose link between problems and solutions (Béland & Howlett, 2016). In the 1980s and 1990s, research expanded on the idea that internal actor groupings make concessions capable of redefining policy definitions and solutions. Kingdon (1984) proposed that policymaking results from the social dynamics among problems, policies, and politics. Those streams have independent lives but constantly interact based on their own logic and historical pathways. Other seminal works closely relate to this: while Sabatier and Jenkins-Smith (1993)'s concept of informal *advocacy coalitions* refers mainly to the politics stream, *epistemic communities*, actors with recognized expertise and authoritative knowledge in a particular domain (Haas, 1992), tend to influence more the problem domain (Béland & Howlett, 2016; Simons & Voß, 2018).

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<sup>1</sup>This phenomenon has been characterized as *policy growth* (Knill et al., 2024), *policy accumulation* (Adam, Hurka, Knill, & Steinebach, 2019), *rule growth* (Jakobsen & Mortensen, 2015), or *policy layering* (Daugbjerg & Swinbank, 2016)

Despite those conceptual advancements, the gap in understanding who is involved in policy solution articulation and what this task entails was just addressed with Voß and Simons (2014)'s notion of *instrument constituency* (Béland & Howlett, 2016). While capturing the social life and dynamics of instrumental knowledge in governance, the concept changes the perspective from seeing policy tools as simple cognitive constructs or sets of ideas and tools to viewing them as outcomes of social practices:

The notion of instrument constituencies thus re-conceptualizes instruments, designs, options, models, solutions and other kinds of functional models of governing in terms of their social life, that is, regarding the actors and practices that 'do' these models and which only actualize the knowledge that describes them, so that the instrument becomes a part of political reality (Simons & Voß, 2018, p. 17)

Building on this critical approach, policy instruments can be defined as “institutions in the sociological meaning of the term” (Lascoumes & Le Galès, 2007, p. 8). In other words, they are models and implementations that draw and foster agency in their support, thus acquiring autonomy over time (Capano & Engeli, 2022; Simons & Voß, 2018). By cultivating an instrument constituency around them, instruments actively nurture demand, advocate for particular solutions, allocate roles, and create social positions (Béland & Howlett, 2016; Simons & Voß, 2018; Voß & Simons, 2014). As the socio-material configurations that underpin these social practices expand, instrument constituencies develop their own dynamics and reflexive capabilities, leading to the creation of a unique form of agency that differs from other subsystem actors in their roles, characteristics, composition, and activities (Béland & Howlett, 2016; Simons & Voß, 2018). Table 1 highlights the main differences among them:

Table 1: Types of Subsystem Components

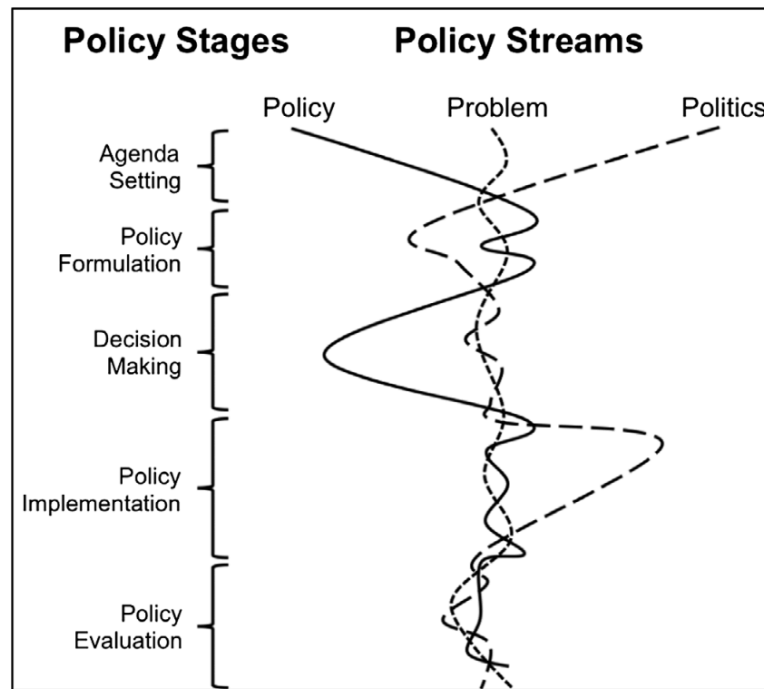
<b>Name</b>	<b>Role</b>	<b>Characteristics</b>	<b>Composition</b>	<b>Activities</b>
Instrument constituencies	Policy stream	Tool-based	Scientists, design experts, consultants administrators, technicians	Developing suites of tools and techniques
Epistemic communities	Problem stream	Knowledge-based	Scientists issue experts, NGO activists, public agencies	Developing conceptions of problems/goals
Advocacy coalitions	Politics stream	Interest/ Electoral-based	Politicians, parties, legislators, interest groups	Developing identities, interests and ideologies

*Note.* Adapted from Béland and Howlett (2016); Simons and Voß (2018).

The overall dynamics of subsystem actors throughout the policy process, illustrated in Figure 1, reveals how constituencies' crucial role across agenda-setting, policy formulation, decision-making, implementation, and evaluation phases (Mukherjee & Howlett, 2015). Instrument constituencies, represented by the policy stream line, act as 'policy entrepreneurs' (Kingdon, 1984) in the agenda-setting phase, linking solutions to problems and political contexts through lobbying and the discursive construction of policy problems (Simons & Voß, 2018). During policy formulation, they remain in a tight link with other subsystem actors given their position of technical experts and policy advisors (Mukherjee & Howlett, 2015; Simons & Voß, 2018). Although less active in the decision-making stage, they regain significance once a given solution has been proposed, creating necessary socio-material infrastructure that supports an instrument's practical implementation and assessing the instrument's effectiveness (Mukherjee & Howlett, 2015; Simons & Voß, 2018).

The power bestowed upon a constituency throughout the policy process is influenced by functional, structural, collective, and socio-material factors. This includes the degree to which policy instruments promise to achieve public goals (*functional promises*) and to fulfill constituency actors' long-term expectations about their roles (*structural*

Figure 1: Subsystem actors across policy stages



Note. Retrieved from Simons and Voß (2018).

*promises*) (Lascoumes & Le Galès, 2007; Simons & Voß, 2018). The characteristics of constituencies as *collective actors* also play a role (Béland & Howlett, 2016; Howlett, Mukherjee, & Woo, 2015). Self-awareness and self-coordination strategies, such as communication, networking, and capacity building, encourage coordinated effort (Simons & Voß, 2018). Additionally, socio-cognitive and socio-material strategies, like academic associations, university programs, conferences, and data utilization, support the viability of policy instruments by embedding actors' theories, values, and interests during the implementation and evaluation phases (Simons & Voß, 2018)

In summary, the presented theory provides a framework for understanding social practices and agency behind policy dynamics. Understanding these mechanisms is essential, as a policy solution can survive over time or be better adapted or translated to a given context based on the interest of policy subsystem actors in developing, retaining, and expanding it (Capano & Engeli, 2022; Mukherjee & Howlett, 2015; Simons & Voß, 2018).

## 2.2 Policy change

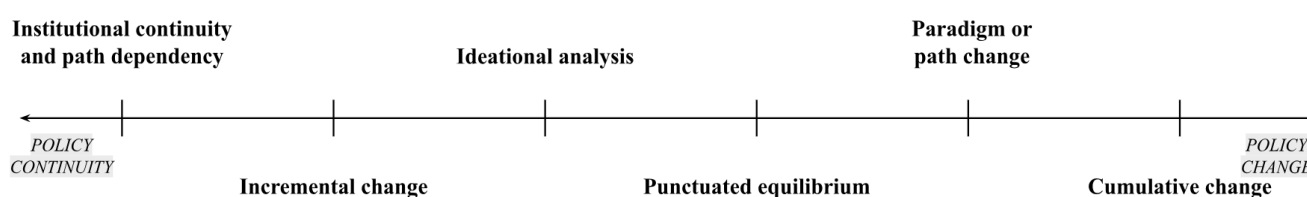
Instrument constituencies are vital drivers of policy change. Their development is a crucial outcome and a significant force behind the innovation journey of policy instruments (Mukherjee & Howlett, 2015; Simons & Voß, 2018). Constituencies possess independent social dynamics that become integral to the overall process of governance change, influencing the innovation trajectory of policy tools through a 'supply push dynamic' (Voß & Simons, 2014, p. 736). Therefore, to comprehend how solutions evolve into policies in the field, it is essential to grasp the function and impact of instrument constituencies (Simons & Voß, 2018).

Unraveling policy change, a pivotal task in contemporary policy and social science analysis, is a journey through

diverse perspectives on policy continuity and change (Mahoney & Thelen, 2010; Pierson, 2000; Seeleib-Kaiser, 2008; Thelen, 2009). The heterogeneous views, mapped along Figure 2's spectrum from no significant to paradigmatic change, enrich our understanding of the subject. Although more traditional schools of thought, such as *historical institutionalism* (Pierson, 2000; Zehavi, 2012), tend to overvalue the concept of isomorphism, in recent years, there has been a shift to the right of the continuum (Thelen, 2003, 2009).

Contemporary social policy literature has focused on processes of slow but cumulative and transformative adjustments that “although less dramatic than abrupt and wholesale transformations, [...] can be equally consequential for patterning human behavior and for shaping substantive political outcomes” (Mahoney & Thelen, 2010, p. 1). *Change agents* play a crucial role in these piecemeal changes as they gradually adapt existing institutional practices, regulations, and habits while advocating for preferable policy solutions (Mahoney & Thelen, 2010).

Figure 2: Degree of policy continuity and change



Note. Adapted from Béland and Howlett (2016).

Analyzing the locus of institutional transformation is mandatory to capture better subtle and gradual changes. Mahoney and Thelen (2010), building on previous works of Hacker (2004) and Thelen (2003), provide a framework centered around two key questions: the extent of *veto possibilities*, which refers to the capacity of actors to hinder change through institutional or non-institutional means, and the degree of *discretion in institutional enforcement and interpretation* (Mahoney & Thelen, 2010). Based on this intricate interplay of factors, one can identify four main types of institutional change associated with specific change actors' profiles, as shown in the 2x2 matrix in Figure 3.

The characteristics of the target institution and the political context lead to specific patterns of change. *Displacement* involves replacing existing rules with new ones, often driven by radical shifts initiated by *insurrectionaries* aiming to eliminate current institutions or rules (Mahoney & Thelen, 2010; Thelen, 2009). *Layering* adds new rules onto existing ones, altering how the original ones affect behavior, a process often instigated by *subversives*, who subtly advocate for institutional change while working within established norms (Thelen, 2003). *Drift* occurs when formal rules stay the same, but practical implementation changes due to contextual factors, driven by *parasitic symbionts* who exploit institutional neglect to serve their own interests (Hacker, 2004; Mahoney & Thelen, 2010). Lastly, *conversion* happens when formal rules remain unchanged but are interpreted differently, propelled by *opportunists* who exploit institutional ambiguities to repurpose the institution towards new goals (Mahoney & Thelen, 2010; Thelen, 2003).

In summary, policy change and instrument constituency theories share vital similarities. They both acknowledge the potential for institutions to change gradually over time (Béland & Howlett, 2016; Thelen, 2009). They also recognize the impact of both external and internal factors, which can either support or undermine transformative change (Jacobs & Weaver, 2015). Moreover, they emphasize that policy formulation and enactment are not passive or neutral processes but rather depend upon subsystem actors' reinterpretations of institutional rules according to their interests

Figure 3: Policy change and change actors

		Level of Discretion in Interpretation/Enforcement	
		Low	High
Veto Possibilities	Strong	Layering → Subversives	Drift → Parasitic Symbionts
	Weak	Displacement → Insurrectionaries	Conversion → Opportunists

Note. Adapted from Mahoney & Thelen (2010).

and objectives (Mahoney & Thelen, 2010; Simons & Voß, 2018; Thelen, 2009).

### 2.3 Policy translation

Just as policy instruments can develop over time, they are not “tools from a kit” (Jordan & Huitema, 2014, p.390) that can be applied without contextual interpretations. Various streams of thought examine how policy ideas are developed, maintained and expanded across borders, acknowledging transnational policy dynamics and mechanisms in the globalized world (Kingdon, 1984; Verger & Fontdevilla, in press). Although scholars differ in the degree and mechanisms by which globalization affects policymaking, they recognize that policies across countries tend to share similarities (DiMaggio & Powell, 1983; Schneider & Ingram, 1988).

The global dissemination of public policies is widely explored by traditional theories, such as *policy diffusion* (Maggetti & Gilardi, 2016) and *policy transfer* (Dolowitz & Marsh, 2000), that posit that policy convergence is primarily driven by cultural, political, and economic ties between nations, along with common institutional affiliations and memberships<sup>2</sup> (Holzinger & Knill, 2005; Maggetti & Gilardi, 2016). The literature recognizes the influential role of international organizations (IOs) in spreading global norms, crafting and disseminating attractive policy instruments through various dynamics and mechanisms, such as policy borrowing, competition, emulation and imposition (Béland & Howlett, 2016; Dobbin, Simmons, & Garrett, 2007; Gilardi, 2012; Holzinger & Knill, 2005; Mundy & Verger, 2015; Orenstein, 2008; Shipan & Volden, 2008; Simmons & Elkins, 2004; Verger, Parcerisa, & Fontdevilla, 2019).

The phenomenon extends to contemporary education policy, the focus of this study. It is widely acknowledged that significant changes in educational systems transcend national boundaries, given the influential roles of IOs such as the World Bank and the Organisation for Economic Co-operation and Development (OECD) (Mundy & Verger, 2015; Verger & Fontdevilla, in press; Zapp, 2021). The *Global Education Reform Movement* (GERM) framework exemplifies this argument, illustrating that educational reforms worldwide often address similar problems and priorities

<sup>2</sup>Verger and Fontdevilla (in press) and Gilardi (2012) clearly explain diffusion, transfer, and other transnational policy schools of thought, highlighting similarities and differences between them.

and are guided by comparable policy rationales (Verger, 2016; Verger et al., 2019). As a result, most of the instruments adopted worldwide follow very similar accountability, standards, decentralization, and school autonomy principles (Sahlberg, 2016).

While transnational policy processes and the role of IOs are widely acknowledged, the convergence thesis has faced criticism for its narrow interpretation of the policy process (Verger & Fontdevilla, in press). Recent research has embraced a more nuanced, multi-scalar reality that rejects the view of contemporary policymaking as a ‘binary way’ (Verger & Fontdevilla, in press, p.22), acknowledging a certain degree of agency in the local reinterpretation of global scripts (Ball, 1998; Hay, 2004; Mukhtarov, 2014; Stone, 2017). *Policy translation* theory integrates the realms of ‘contingency and meaning-making in the analysis of policy-making’ (Verger & Fontdevilla, in press, p.36), providing valid explanations for the phenomena of hybridization, adaptation, and mutation observed in the global policy landscape (Stone, 2017). The term ‘translation’ borrowed from language studies, when applied to policy analysis, suggests that policy ideas undergo necessary modifications when they traverse jurisdictions, sectors, and territories (Mukhtarov, 2014; Verger & Fontdevilla, in press).

The literature attributes significance to *policy translators*, actors engaged in various policy domains who actively foster a shared comprehension of policy proposals, simultaneously facilitating their transferability in the field (Hassenteufel & Zeigermann, 2021). Contemporary research reveals ways in which they act as important subsystem actors, shaping norm diffusion by adapting transnational educational norms to their beliefs and practices and, thereby, contributing to policy change and translation (Simons & Voß, 2018; Stone, 2017). To elucidate this point, Verger and Fontdevilla (in press) map three scenarios in which education policy convergence manifests as a multi-dimensional perspective: policies with the same paradigm but employing different instruments (such as the case of New Public Management in education), those adopting similar instruments but with different legitimizing rhetoric (varying discourses and rationales of large-scale assessments), and different policies that achieve similar outcomes (education privatization) (Verger & Fontdevilla, in press).

To sum up, analyzing the social dynamics of public and, more specifically, education policy is a constituent of all contemporary theories discussed so far. Contemporary literature aligns on the semiotic malleability of instruments, recognizing that policy enactment does not fully follow policy prescriptions (Streeck & Thelen, 2005; Thelen, 2009) and adopting a multi-dimensional understanding of policy convergence in temporal and contextual terms (Béland & Howlett, 2016; Mukhtarov, 2014). By identifying constituency actors’ capacity to promote endogenous processes of gradual change (Mahoney & Thelen, 2010; Mukherjee & Howlett, 2015; Simons & Voß, 2018), they present evidence of how instruments can be adopted as ‘boundary objects’ (Voß & Simons, 2014, p. 742) prone to adapt for specific needs of particular constituency actors (Balen & Leyton, 2016; Simons & Voß, 2018).

## 3 Context

### 3.1 Brazilian public education system

The Brazilian education system is a complex and vast undertaking, striving to cater to the unique needs of students from diverse profiles, backgrounds, cultures, and regions. Public upper secondary education, known as *Ensino Médio* (EM), is provided to over 6.7 million teenagers across more than 21,000 schools (Inep & MEC, 2024). A significant majority of EM enrollments, over 84%, occur at state schools (Inep & MEC, 2024), reflecting the historical and structural factors inherent in the Brazilian federal system (Segatto & Abrucio, 2016).

The country's public educational system, rooted in the Federal Constitution of 1988 principles<sup>3</sup>, is a unique example of *federative coordination* (Abrucio et al., 2010; Segatto & Abrucio, 2016). It operates on a model of autonomy and interdependence between different levels of government (Elazar, 1987). The Union, led by the Ministry of Education (MEC), coordinates and guides national educational policies, while local education departments overseen by subnational authorities manage education at the grassroots level (Brasil, 1988). The Union's role in federal coordination (Obinger, Castles, & Leibfried, 2005) is pivotal to ensuring equal educational opportunities and a national minimum standard of teaching quality (Brasil, 1988). Public policies' articulations (Wright, 1988) happen through what is called *regime de colaboração*, which involves the Union, states, Federal District, and municipalities, all working together to ensure quality education nationwide (Brasil, 1988).

While the Brazilian education system aspires to high standards through a collaborative model, it grapples with persistent challenges. In the early post-constitutional years, there was centrifugal and disorganized decentralization in education provision, a trend reversed in the mid-1990s with the approval of crucial educational bills, such as the one that encompasses all educational principles and guidelines (LDB) and a new system for educational resource redistribution (Brasil, 1996a, 1996b). These legislations, along with other policies implemented during the administrations of Presidents Fernando Henrique Cardoso (1995-2003) and Luís Inácio 'Lula' da Silva (2003-2011), contributed to strengthening intergovernmental coordination, expanding access to primary school and raising Brazilians' average years of schooling (Abrucio & Segatto, 2014; Alves, Soares, & Xavier, 2016). Between 2002 and 2015, the percentage of the poorest youths attending upper secondary education at the correct age increased by 264%, as shown in Figure 4 (Gadotti, 2009).

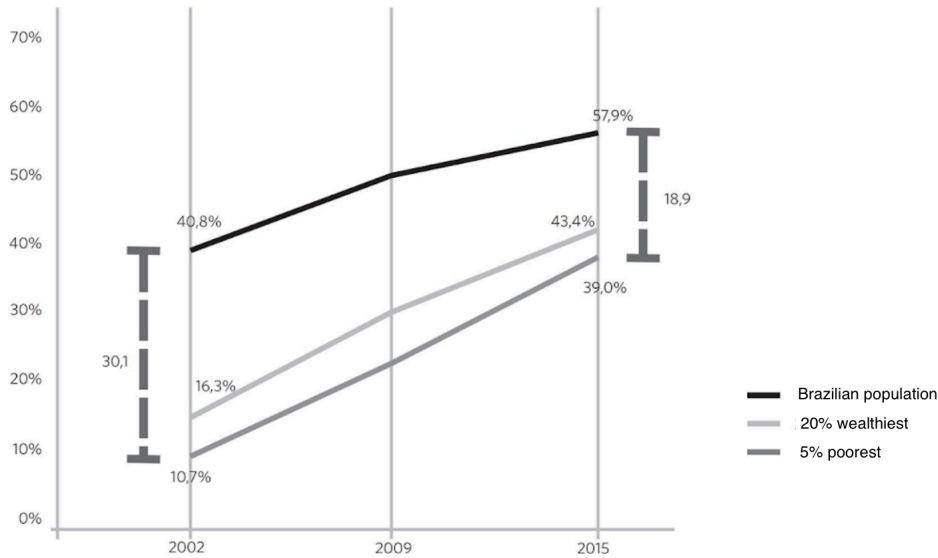
However, despite historical pro-equity educational efforts, the country remains marked by heterogeneities among and within states that reflect functional, structural, and cultural aspects of the local education systems (Schweisfurth, 2019; Vazquez, 2005). The different forms of provision respond, in part, to regional demands, exemplified by the fact that one-third of the country's bilingual Indigenous schools are in a single state (Amazonas) (Inep & MEC, 2024). They also mirror local incremental policy changes (Béland & Howlett, 2016), like the state of Pernambuco, which diverges from the national trend of short compulsory instruction time (averaging 4 hours a day) by having 67% of upper secondary enrollments with longer school time (Inep & MEC, 2024).

Access, performance, and retention indicators also reveal the unequal scenario. The country presents generally low standardized test results, having performed 65th among 81 countries participating in OECD's Programme for International Student Assessment (PISA) in 2022 (OECD, 2023). The data show that even the wealthiest Brazilian students aged 15 to 16 perform worse than those with a similar socioeconomic profile in countries like Vietnam and Turkey

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<sup>3</sup>After the country's re-democratization process, which took place between 1974 and 1988, and the enactment of the 1988 Constitution, social policies began to be guided by three objectives: the universal expansion of access to public services, decentralization, particularly in the implementation of policies, and the creation of public policy systems (Abrucio, Franzese, & Sano, 2010).

Figure 4: Percentage of the Brazilians attending EM at the appropriate age, by income bracket



Note. Adapted from Gadotti (2009).

(OECD, 2023). In addition, racial and socioeconomic inequalities within classrooms remain latent and persistent, reproducing inequality mechanisms inherent to Brazilian society (Alves et al., 2016). Figure 4 illustrates that despite efforts to increase school enrollment, there remains a significant gap between the percentage of the total population and the poorest attending upper secondary education at the appropriate age (Gadotti, 2009).

### 3.2 Educational reforms in Brazilian upper secondary education

The challenges in the quality, equity, and availability of Brazilian education have led to an internal movement towards the effectiveness of the educational system. Many policies implemented in the mid-2010s reflect the principles of GERM (Sahlberg, 2016). The discussion on curricular standardization and the establishment of quality standards (Verger et al., 2019) emerged in the LDB itself, which advocates the existence of a national common core complementary to a diversified part that respects local heterogeneity (Brasil, 1996a).

The development of this common educational framework, known as the *Base Nacional Comum Curricular* (BNCC), began in 2014 and included a lengthy process of public consultation, debate committees, seminars with teachers and policymakers, and approvals by national education regulatory bodies (*Conselho Nacional da Educação*, CNE) (MEC, 2024). National and international organizations, contributed to shaping the curriculum until its third version was approved in 2017<sup>4</sup> (MEC, 2024; Plank, 2016). Even with the attempt to incorporate school actors into the process, BNCC's approval was not without its share of resistance. Some researchers have characterized the process as “undemocratic, lacking transparency, and without broad discussion with society” (Peroni, Vidal, Caetano, & Arelaro, 2019, p.43). Others highlight concerns about the influence of hegemonic groups who imposed their proposals (Hypólito, 2019). Moreover, the version approved in 2017 is criticized for breaking with the idea of a global common core,

<sup>4</sup>They include Movimento pela Base (Brazil), The Curriculum Foundation (UK), Accara (Australia), and Lemann Center (Stanford University, USA) (Plank, 2016).

as it did not include the upper secondary education curriculum (BNCC-EM) due to the ongoing discussion of a reform entitled *Novo Ensino Médio* (NEM) (Peroni et al., 2019). NEM was approved in February 2017, resulting in the BNCC-EM ratification only in the following year (Brasil, 2017; Brasil, 2018).

NEM stands out as the most significant and structural change in Brazilian education over the past two decades. This reform proposes a comprehensive and innovative reorganization of upper secondary education provision (Brasil, 2018). The measures include extending class hours, better integrating regular upper secondary with technical and vocational education and training (TVET) provisions, and systematically revising the curriculum. This revision is based on a more flexible BNCC-EM, which allows students to choose their academic pathways through what are termed *itinerários formativos* (IFs) (Brasil, 2017). Table 2 outlines the main changes in the version approved in 2017 compared to previous characteristics of upper secondary education provision.

Table 2: Features of Brazilian Upper Secondary Education (Ensino Médio) over time

Feature	EM Until 2017	NEM – Law N. 13.415/2017	NEM - PL N. 5230/2023
Compulsory instruction time	<ul style="list-style-type: none"> <li>- 800 hours per year (2,400h in total)</li> <li>- Around 4h/day at school, local discretion to define the workload</li> </ul>	<ul style="list-style-type: none"> <li>- Maximum workload of 1,000 hours per year (3,000h in total), with a maximum of 1,800h for common core and 1,200h for IFs</li> <li>- Around 5h/day at school</li> </ul>	<ul style="list-style-type: none"> <li>- Minimum workload of 1,000 hours per year (3,000h in total), with a minimum of 2,400h for common core (2,100h for TVET) and a minimum of 600h for IFs</li> <li>- Around 5h/day at school, discretion to allocate extra hours among common core and IFs</li> </ul>
Curriculum organization	<ul style="list-style-type: none"> <li>- Rigid curriculum with at least 13 mandatory subjects (English, Arts, Portuguese, Literature, Mathematics, Biology, Physics, Chemistry, History, Geography, Philosophy, Sociology, Physical Education (PE))</li> </ul>	<ul style="list-style-type: none"> <li>- Learning objectives for four areas of knowledge (Languages, Mathematics, Natural sciences, Applied Human &amp; Social Sciences) without specific curricular components</li> <li>- Mandatory study of Arts, PE, Sociology, Philosophy</li> <li>- IFs focus on areas of TVET</li> <li>- Minimum of 2 IFs/municipality</li> </ul>	<ul style="list-style-type: none"> <li>- Specification of curricular components that integrate the four areas (Languages: Portuguese, Arts, PE, Literature, English; Mathematics; Natural sciences: Biology, Physics, Chemistry; Applied Human &amp; Social Sciences: History; Geography, Philosophy, Sociology)</li> <li>- National and state-level collaboration to build orientation guidelines</li> <li>- IFs focus on areas or TVET</li> <li>- Minimum of 2 IFs/school</li> </ul>
BL provision	<ul style="list-style-type: none"> <li>- No legal provision</li> </ul>	<ul style="list-style-type: none"> <li>- BL applies preferably to IFs' provision and may account for up to 20% of the regular curriculum (30% for night schools), with appropriate technological and pedagogical support</li> </ul>	<ul style="list-style-type: none"> <li>- Education must be in-person, exceptionally allowing technology-mediated teaching regulated together with state-educational departments</li> </ul>

Note. Adapted from TPE (2024).

The implementation of the reform was scheduled to start in 2022, covering all students by 2024. It was supported by the World Bank, which invested US\$ 250 million through an agreement with MEC <sup>5</sup> (Brasil, 2018). Even guaranteeing financial resources and technical assistance, various challenges related to acceptance, instrumental, political, and contextual factors marked its enactment. Student entities and teachers' unions have been opposing NEM since its initial proposals in 2012, with the criticism reaching a peak when its approval was rushed in February 2017 through a

<sup>5</sup>The first WB Program for Results established with the Brazilian Federal Government allocates US\$ 221 million to improving educational outcomes and decreasing regional and socioeconomic gaps, and US\$ 29 million for technical assistance (Brasil, 2018; World Bank, 2017).

legal instrument considered authoritarian<sup>6</sup> and in a moment of political wrangling and institutional instability<sup>7</sup> (Braga et al., 2022; Silva, 2018).

Upon implementation, NEM revealed various design issues. While some perceive it as a tool for reducing inequalities and fostering essential human capital (Brasil, 2018; World Bank, 2017), the case underscores the argument that reforms in upper secondary education can inadvertently perpetuate inequalities by sorting students into tracks based on socioeconomic and other contextual factors (Van de Werfhorst & Mijs, 2010). The 2017 law granted schools significant discretion in selecting IFs but provided inadequate support. Consequently, pathways were determined based on local capacities (Braga et al., 2022), leading to students being unable to pursue their preferred pathways (Palhares, 2023) and encountering subjects not aligned with the common core<sup>8</sup> (Exame, 2023). The pandemic aggravated this scenario, as NEM implementation began competing with more urgent educational agendas, such as emergency remote provision (Braga et al., 2022).

NEM's enactment also faced political challenges. Significant changes and controversies occurred within the MEC during Jair Messias Bolsonaro's mandate (2019-2022), including budget cuts, several Ministers' appointments<sup>9</sup>, ideological disputes, and controversial statements (TPE, 2022). When former President Lula returned to office in 2023, discussions about NEM were back in the spotlight. Intense public pressure led to pausing its implementation to conduct public consultations for improvements (MEC, 2019). Public hearings, meetings with state-level policymakers and NGOs, seminars and webinars with specialists, and an online survey with over 100,000 school actors revealed several of the previously discussed problems and the overall dissatisfaction of the school community<sup>10</sup> (MEC, 2019).

Although discussions are still ongoing, it is already possible to identify that the results will influence the design of a new reform. By October 2023, MEC integrated public consultation's feedback into a new NEM bill, which was sent to Congress and saw a Substitute Amendment approved by the Chamber of Deputies in March 2024 (Brasil, 2023). As shown in Table 2, the new version retained core principles of NEM, such as extended class hours, curriculum flexibility, and TVET integration, while addressing previous shortcomings, like better regulation of IF choices (TPE, 2024). The proposal still awaits approval in the Senate, bringing uncertainty about what Brazilian upper secondary school education will be like in 2025 and beyond.

The conceptual shifts and future uncertainties surrounding NEM also affect other policies developed under its umbrella, including the Innovation Network for Blended Education (*Rede de Inovação para Educação Híbrida*, RIEH). This strategic initiative aims to promote blended learning (BL) experiences nationwide (MEC, 2022) and will be further explored in the subsequent subsection.

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<sup>6</sup>A *medida provisória* is a legal instrument issued by the President of Brazil in urgent and relevant situations. It has the force of law immediately upon publication but requires subsequent approval by the National Congress to become a permanent law.

<sup>7</sup>NEM was one of the first measures enacted under Michel Temer's pro-reform government (2016-2018) following the impeachment of former president Dilma Rousseff (2011-2016).

<sup>8</sup>Examples include Role-playing games (RPG) and Homemade *brigadeiro* (traditional Brazilian dessert) (Exame, 2023).

<sup>9</sup>Ricardo V. Rodríguez (January 1, 2019 – April 8, 2019), Abraham Weintraub (April 9, 2019 – July 1, 2020), Carlos A. D. da Silva (appointed but resigned before officially taking office), Milton Ribeiro (July 16, 2020 – December 31, 2022).

<sup>10</sup>Criticisms stand out regarding the low percentage of the curriculum allocated to the common core, the weakness in structuring the IFs, concerns about increasing inequality, the importance of learning recovery alternatives, and the lack of articulated policies to improve school infrastructures, including technological aspects, and resistance of the majority of those consulted to the offer of distance learning modality (MEC, 2019).

### 3.3 The integration of blended learning into Brazilian educational reforms

In November 2022, Brazil launched RIEH, its inaugural national strategy to promote BL experiences in public schools. The terminology is an umbrella concept (Graham, 2006), encompassing various pedagogical experiences with distinct forms, models, and tools for integrating remote and in-person moments (Spring & Graham, 2017; Yang, Carter Jr, Zhang, & Hunt, 2021).

BL and other edTech policies have become increasingly intertwined with global education agendas driven by optimistic perspectives on the use of technology for learning goals (Sahlberg, 2016; UNESCO, 2023). The momentum of this movement increased significantly during the pandemic, as a combination of face-to-face and technology-mediated learning experiences became common in educational practices worldwide (Camargo, Tempski, Busnardo, Martins, & Gemperli, 2020; Topping et al., 2022; Xu et al., 2023). Advocates argue that BL combines the advantages of in-person and remote learning, providing flexibility, pedagogical depth, and cost-effectiveness (Broadbent, 2017; Graham, 2006), and catering to multiple learner profiles (Dziuban, Graham, Moskal, Norberg, & Sicilia, 2018).

The potential positive effects of digital technology in real educational settings are still uncertain. EdTech programs often fail to effectively integrate technology and pedagogy (Tondeur, Krug, Bill, Smulders, & Zhu, 2015; Tondeur et al., 2021) and can elevate the risks of perpetuating inequalities, as the digital divide is closely related to socioeconomic, regional and racial disparities (Ching, Basham, & Jang, 2005; Gonzales, Calarco, & Lynch, 2018; Hoffman & Novak, 1998; Tondeur et al., 2021; Volman, Van Eck, Heemskerk, & Kuiper, 2005). As a result, there is doubt about the level of replicability of such policies. Scholars have also pointed out that BL and other edTech policies have produced biased or non-replicable results (UNESCO, 2023). Recent literature examines its potential benefits and drawbacks and emphasizes the need for further research, particularly on diverse contexts (Escueta, Nickow, Oreopoulos, & Quan, 2020; Rasheed et al., 2020; UNESCO, 2023).

In this scenario, RIEH was designed as a BL national strategy under NEM's policy umbrella. The blended model enhances NEM's effectiveness by expanding its curriculum offerings, especially for IFs (NEES, 2024). Consequently, it standardizes education departments' capacity to deliver BL programs to upper secondary students (MEC, 2022; NEES, 2024), addressing Brazilian schools' technological infrastructure gaps (Camargo et al., 2020). The justification for RIEH's conception, however, also relates to different educational challenges. Although policy documents officially categorized it as a way of expanding NEM curriculum offerings (Souza & Sousa, 2022), RIEH is also seen as a solution for emergency and learning recovery scenarios, as shown in Table 3. This implies that BL provision might be expanded to Brazilian early childhood, primary, and lower-secondary education<sup>11</sup> (Brasil, 2022a).

The flexibility can explain the extensive coverage of RIEH, encompassing 89% (24 out of 27) of the federative units across all Brazilian regions<sup>12</sup>. State-level education departments joined RIEH voluntarily in two waves, in January and July 2023<sup>13</sup>. RIEH's deployment across all 24 education departments is assisted by the Center for Excellence in Social Technology (*Núcleo de Excelência em Tecnologias Sociais*, NEES) affiliated with the Federal University of Alagoas (UFAL). Based on its expertise in crafting edTech solutions, NEES researchers and consultants act as MEC's

<sup>11</sup>One way this can be achieved is through the *National Policy for Learning Recovery*, established in May 2022, promoting national collaborative actions to foster learning recovery and address dropout rates. Its implementation envisages the development of axes that are directly related to blended education, such as teacher practical training in edTech (axis 4), support for the improvement of edTech infrastructure (letter c, axis 5); strengthening and expanding existing educational practices and approaches through the use of ICT and digital resources (letter e, axis 6) (Brasil, 2022a; RIEH, 2024b).

<sup>12</sup>Brazil has 27 states grouped into five macroregions: North, Northeast, Central-West, Southeast, and South.

<sup>13</sup>1st wave: Acre, Alagoas, Amapá, Ceará, Federal District, Espírito Santo, Goiás, Maranhão, Minas Gerais, Mato Grosso do Sul, Mato Grosso, Pará, Paraíba, Rio de Janeiro, Rio Grande do Norte, Rondônia, Roraima, Rio Grande do Sul, Santa Catarina, Sergipe, Tocantins. 2nd wave: Piauí, Pernambuco, Bahia (RIEH, 2024d).

Table 3: Scenarios for BL use according to RIEH materials

Scenario	Use of BL
Expansion of curriculum offerings	Expansion of offerings of training itineraries, electives, and IFs, meeting students' needs and interests
Emergency	Maintenance of pedagogical activities during natural and sanitary emergencies
Learning recovery	Recovery of various learning gaps systematically and personalized

Note. Reprinted from Souza and Sousa (2022).

technical partner for RIEH's equitable and effective implementation (Souza & Sousa, 2022).

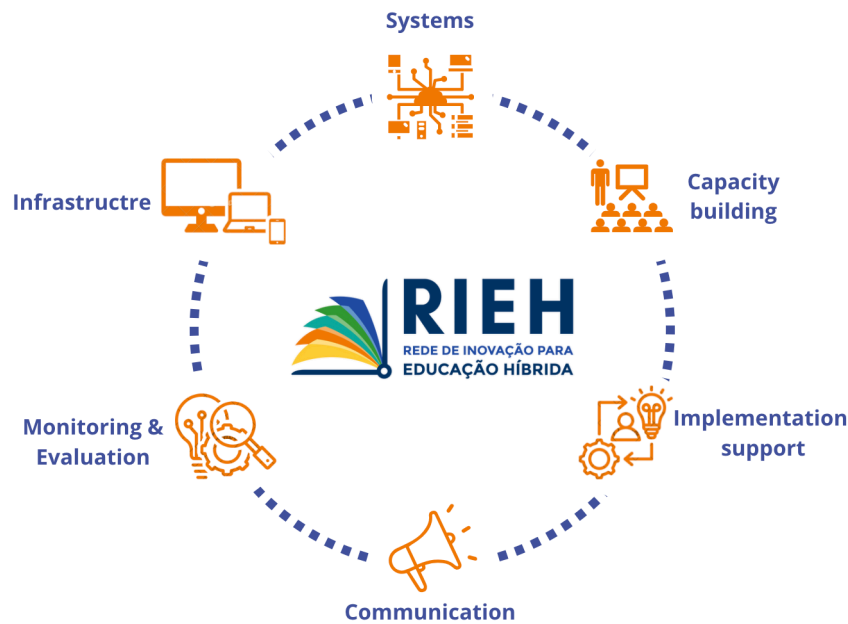
RIEH, which includes the word 'network' in its name, aims to facilitate collaboration among state-level education departments to create digital content and promote BL practices (Souza & Sousa, 2022). Upon joining the network, sub-national agencies gain access to various collaborative resources and support mechanisms to implement BL strategies, as outlined in Table 4 and graphically displayed in Figure 5. They include technological infrastructure for establishing innovation hubs (IH), systems (virtual learning environments-VLEs, repositories for digital educational resources-DEs, and student enrollment management and analytics) (NEES, 2024; Souza & Sousa, 2022). Additionally, they receive technical training for local policymakers, M&E tools through a public observatory (RIEH, 2024d), recommendations of school actors' communication and engagement initiatives, and support to implement all the aforementioned policy fronts through a team of consultants hired by NEES (NEES, 2024; Souza & Sousa, 2022).

The implementation of RIEH began in 2023. Table 4 shows the progress made by April 2024, including the establishment of eight operational IHs, the successful development of RIEH systems, and the launch of various capacity-building programs, such as a *Specialization in Public Policy Management for Blended Learning* (RIEH, 2024c, 2024d)<sup>14</sup>. However, uncertainties surrounding NEM have caused delays in RIEH's execution in some states, as education departments' prioritization of RIEH's actions was affected by the uncertainty (RIEH, 2024d).

The ongoing debate regarding upper secondary education provision can potentially impact the legality of adopting RIEH to expand curriculum offerings, as shown in Table 3. While the 2017 version allowed for up to one-fifth of the curriculum to be delivered remotely, the current version under Senate scrutiny mandates in-person public education (see Table 2). Brazilian federal agencies responsible for advising and assisting in the formulation and evaluation of national education policies and guidelines are still discussing BL implementation. This includes recent regulations for higher education that may offer insights applicable to upper secondary education (Brasil, 2022b, 2022c), as well as a public consultation for BL in primary and secondary education (RIEH, 2024a).

<sup>14</sup>This *Latu Sensu* Postgraduate course offered through the UFAL Faculty of Economics, Administration, and Accounting emerged as a strategy to qualify the professionals involved in RIEH local implementation. It combines innovative pedagogical approaches and leverages RIEH technological infrastructure, with classes being recorded and transmitted from UFAL innovation hub (RIEH, 2024c).

Figure 5: RIEH fronts of action



Note. Own elaboration.

Table 4: Description and Status of RIEH Implementation Fronts

Front	Description	Status (April/2024)
<b>Phase 1 - Preparation for BL Offering</b>		
1.1 Structuring BL	Adherence to RIEH and design of local BL plans	3 plans finished, 22 in progress
1.2 Implementing IHs	Organization, set up, and operationalization of IHs, including the preparation of physical space, installation of equipment, and team selection and training	52 IHs adhered, 21 remodeled, and 8 operational
1.3 Accessing & Using Systems	Access, training, registration, and availability for school actors of systems provided by RIEH, including VLEs, DERs repository and administrative	197 policymakers enrolled in the Specialization Training on the use of VLE
1.4: Structuring DERs	Planning, preparation, review, and availability of DERs on RIEH platforms and structuring its distribution to students according to BL plans	26 VLEs and 1 DER repository created
<b>Phase 2 - BL Implementation in Schools, Promotion of Engagement and Sustainability</b>		
2.1 Implementing in Schools	Providing BL to teachers and students	2 VLEs available to students
2.2 Engaging	Encouraging school actors' engagement with platforms, including communication and support strategies	Training for policymakers on the use of VLE
2.3 Monitoring & Evaluating	Tracking the process and seeking evidence that attests to the results are in line with each BL plan's goals	40 indicators created, webpage under construction

Note. Adapted from NEES (2024); RIEH (2024d).

## 4 Methodology

### 4.1 Research questions and research design

This research uses the RIEH case to critically explore the concept of policy instruments, exploring the tools and mechanisms employed by subsystem actors to draw and foster agency in the support of the BL particular policy solution, and the effects it produces in the evolution of the instrument over time and its adaptation across contexts (Béland & Howlett, 2016; Capano & Engeli, 2022; Mukherjee & Howlett, 2015; Simons & Voß, 2018). Based on these goals, the research question and subquestions that guide this study are:

- Through what tools and mechanisms has blended learning become a strong policy instrument in the Brazilian educational context?
  - What roles have different subsystem actors played throughout the RIEH policy journey?
  - How has their agency influenced the evolution of RIEH over time and its adaptation and translation to diverse subnational contexts?

To achieve this goal, I employ a process tracing strategy, a qualitative technique for causal analysis that involves tracing the causal mechanisms of an outcome back to a set of conditions, searching for intervening variables that link an independent with a dependent variable (Henry, Ingold, Nohrstedt, & Weible, 2022). Process tracing's ability to trace causal mechanisms makes it a variable tool for understanding complex policy dynamics (Fontaine, 2020), such as the case of RIEH.

Yet various techniques and uses of process tracing exist, I will adopt Fontaine (2020)'s realist approach. Scientific realism, also known as critical realism, stands between positivism and post-modernism, asserting that causal explanations of the world extend beyond observable phenomena (Bhaskar, 2013). As the paradigm recognizes that social phenomena result from diverse mechanisms that interact in particular contexts (Bhaskar, 2013), it suits the primary goal of this research to unpack RIEH's policy journey accordingly to different subsystem actors' perceptions of reality.

RIEH, a significant example of policy change, will be studied as a single case study. Process tracing is well-suited for within-case analysis that aims to draw inferences based on causal mechanisms and the temporal sequence of events (Bennett & Checkel, 2015; Collier, 2011). In this context, I adopt a view of the constituency as an essential subsystem policy actor that influences the selection of policy instruments and their evolution, adaptation, and translation.

### 4.2 Data collection

Following standard process tracing methods for analyzing single-case instances of policy change (Henry et al., 2022), I adopt inductive and exploratory qualitative methods to examine instrument constituencies' influence in developing, maintaining, and expanding RIEH (Kingdon, 1984; Simons & Voß, 2018), including semi-structured in-depth interviews and desk research. Since policy instruments are 'boundary objects' (Voß & Simons, 2014, p. 742) that connect heterogeneous actors embedded in varying institutional contexts such as politics, academic research, and business (Simons & Voß, 2018), I conducted semi-structured, in-depth interviews with various national and subnational actors involved in RIEH's policymaking.

The data collection phase, meticulously planned and executed from October to December 2023, was designed to ensure the highest quality and reliability of the findings. Regarding the interviews, I strategically avoided conflicts with

Brazilian school holidays (mid-December to January) and national or subnational election schedules (in October of even-numbered years). A qualitative purposeful sampling method (Patton, 2014) was employed, focusing on two units of analysis. The primary unit involved state-level policymakers who designed local BL policies, while the secondary unit comprised representatives from organizations influential in shaping RIEH at the national level.

Table 5 outlines the sampling details<sup>15</sup>. A total of 32 actors were interviewed, resulting in 23 interviews that, in total, account for over 19 hours of recorded sound and 145,000 transcribed words. Seven were conducted with primary units of analysis, while the remaining 15 were with secondary units. Most interviews took place remotely and individually, except for specific cases in the Northeast and Southeast regions where in-person data collection was possible and when interviewees opted for group interviews. The subsection 9.2 presents some of the photos of the fieldwork process.

Table 5: Data collection snapshot

Unit of analysis	Description	Interviewees	Interview	Type	Duration	Words
Primary	State policymaker - North	2	2	Remote, individual	01:16:09	13,633
Primary	State policymaker - Northeast	4	3	In-person, individual/group	01:47:38	13,484
Primary	State policymaker - South	3	1	Remote, group	00:52:11	9,006
Primary	State policymaker - Southeast	8	2	In-person/remote individual/group	01:59:04	27,662
Secondary	MEC policymaker	1	1	Remote, individual	00:46:22	8,433
Secondary	NEES researcher	7	7	Remote, individual	05:48:14	55,900
Secondary	NEES consultant	7	7	Remote, individual	06:14:10	64,291
Secondary	WB consultant	1	1	Remote, individual	00:50:02	8,311
<b>Total</b>		<b>32</b>	<b>23</b>	-	<b>19:33:50</b>	<b>145,379</b>

Note. Own elaboration.

The selection of the units of analysis was a meticulous process, targeting ‘information-rich cases’ (Patton, 2014, p. 54) based on the following criteria:

- **Primary Unit of Analysis:** Several institutional and personal factors drove the selection of the local-level policymakers that composed the sample:
  - **Region:** The sample sought to include policymakers from at least one representative state per macro-region to capture geographic, cultural, and socioeconomic differences. It ultimately reached five states across four macroregions (one North, one Northeast, one South, and two Southeast). Central West policymakers were not interviewed due to scheduling difficulties.
  - **Level of Engagement:** Acknowledging varying degrees of policy translation (Mukhtarov, 2014; Stone, 2017), the sampling considered territories at different stages of implementation as a proxy for local engagement. This criterion was vital as it allowed us to capture the different levels of involvement and

<sup>15</sup>For a detailed version of subsection 9.2, see subsection 9.1.

commitment to the policy. Due to their advanced implementation stage, most are RIEH first-wave states (four of five). The only second-wave exception (the Northeast one) was included due to its high engagement level.

- **Configuration of BL:** RIEH allowed states the autonomy to develop their BL innovation plans according to local needs. To better capture policy translation and change processes within RIEH, the sample included states with varying BL purposes, target audiences, and formats.
  - **Profile:** Effective technology-integrated policies in education require a balance between technological, pedagogical, and strategic aspects (Tondeur et al., 2015). The study sought to include policymakers with diverse managerial, pedagogical, and technological expertise within the same state to ensure a comprehensive and representative sample. All states had at least two interviewees, except one from the Southeast region.
- **Second Unit of Analysis:** The second unit of analysis included the following actors:
    - **MEC Policymakers:** Policymakers at MEC headquarters played a crucial role in designing and implementing RIEH. The initial plan involved including individuals from both Bolsonaro (2019-2022) and Lula (2023-present) administrations. However, due to scheduling conflicts and political reasons, accessing the current MEC management team was not feasible. Consequently, the final sample included one policymaker who had been closely involved in RIEH’s formulation before 2023 but left MEC during the government transition and did not participate in the implementation phase.
    - **NEES Researchers:** Since 2021, as RIEH’s executing partner, NEES researchers have contributed to devising the blended learning policy, producing knowledge about it, and supporting its implementation. The final sample included seven researchers from various academic backgrounds, from computer science to public policy and psychology.
    - **NEES Consultants:** NEES enlisted six consultants with interdisciplinary backgrounds (including pedagogy, political science, public policy, and management) to support states implementing RIEH-required actions. All six hired consultants, who played a crucial role in RIEH implementation, were included in the sample.
    - **WB Education Specialist:** During the data collection phase, the influence of the WB agenda emerged as powerfully relevant. As a result, a former WB employee, who was situated within MEC’s headquarters during Bolsonaro’s administration and contributed to NEM and RIEH’s policy design and M&E, was included in the sample.

Access to the field was successful due to easy access to the RIEH network. In this sense, I must clarify my positionality as a NEES research collaborator in diverse NEES research projects. My responsibilities do not encompass RIEH design or implementation tasks, thereby minimizing direct interaction with interviewees. Despite this, my researcher role grants an insider’s perspective on the phenomenon under analysis (Merriam et al., 2001). Reflexing on and acknowledging how personal perspectives, assumptions, and biases may influence data collection and analysis helps ensure the transparency and rigor of the analysis Deterding and Waters (2021).

The data collection also involved a desk research phase to improve the qualitative dataset. As clearly stated by Simons and Voß (2018, p.21), this step is valid because constituencies become visible by “looking through and behind

the instrument, by attending to the actors and practices that produce the [...] all the material of ‘analysis’ that makes a governance instrument an instrument, or a policy option an option.” In this sense, it is worth noting that my affiliation with NEES provided access to relevant data about RIEH’s history, current status, and local BL characterization, which immensely enriched the desk research phase.

### 4.3 Data analysis

I employed NVivo as my qualitative data analysis (QDA) software. To contribute to theory construction, I followed an abductive approach to identify anomalous and surprising empirical findings against existing sociological theories through systematic methodological analysis (Timmermans & Tavory, 2012). The coding process followed a *flexible coding* strategy, combining structure and adaptability (Deterding & Waters, 2021).

Flexible coding is particularly advantageous for this research for several reasons. First, it incorporates elements of modern qualitative research also adopted here, such as QDA software and larger samples, allowing a more reliable and efficient data analysis (Deterding & Waters, 2021). Second, it is particularly beneficial in exploratory research or studies with complex and evolving research contexts (Deterding & Waters, 2021), such as the case of RIEH. Finally, it focuses on meticulous coding process documentation, enhancing the qualitative analysis’s replicability and reinterpretability (Deterding & Waters, 2021). This is particularly important in the case of RIEH, as the evaluation of BL policies is still an emerging field (Yang et al., 2021), and more specific and contextualized research about edTech implementation is needed (UNESCO, 2023).

Following Deterding and Waters (2021)’s framework, thorough familiarization with the data was done by reading and re-reading transcriptions and making notes to understand the content deeply. A set of predefined analytic codes based on the theoretical concepts discussed in section 2 was developed and flexibly applied, allowing for incorporating others that emerged from the data. In other words, I followed an iterative process where coding and data analysis occurred concurrently, fomenting continuous refinement (Deterding & Waters, 2021). For example, although the initial coding framework included concepts from the literature on instrument constituency, the prevalence of the literature emerged while exploring cross-case memos and hypothesizing relationships between concepts, and codes related to which policy instruments are mainly adopted were added to the codebook later. The subsection 9.3 delves into those codebook versions.

After completing this process, codes were structured into broader themes and categories, and a subsequent round of analysis was conducted to verify their fidelity to the data and their relevance to answering research questions. In the final phase, the focus was on identifying key findings, data patterns, and relationships and interpreting lessons within the context of the research questions and theoretical framework. To fortify the theoretical validity of my findings, I adhered to a clear and systematic approach to test and refine the explanations developed, mapping data patterns and providing context for exceptions (Deterding & Waters, 2021; Silverman, 2021).

Last but not least, it is worth mentioning that data analysis was context-sensitive. Examining the intersection between attributes and analytic codes played a pivotal role in comprehending the intricacy of the RIEH’s implementation contexts, considering the specific circumstances, nuances, and background information that influence Brazilian states and, consequently, the data. This is particularly significant in the case of the RIEH, which underscores an instrument constituency that connects diverse national and local actors and a spectrum of activities (Simons & Voß, 2018).

#### **4.4 Ethical considerations**

In terms of research ethics, the *Economic and Social Research Council* (ESRC) framework meticulously guided each phase of the research process. All interviewees were formally invited to participate via email or WhatsApp and received and signed a consent letter explaining the research design (Ritchie, Lewis, Nicholls, & Ormston, 2013). The interviews adhered to a formal, semi-structured format based on a script derived from the research question and sub-questions (Silverman, 2021). They were audio-recorded and fully transcribed using an artificial intelligence (AI) tool, followed by human analysis to guarantee the accuracy of the transcription process.

The utmost respect for data confidentiality and respondents' anonymity was maintained throughout the collection and analysis phases and continuing into the dissemination phase, following ESRC principles (Ritchie et al., 2013). No personal questions were asked during interviews, and no identifying variables, such as actors' or states' names, will be shared. Additional precautions were taken, including giving interviewees access to the recordings and transcriptions and using secure methods for file transfer and data destruction (Ritchie et al., 2013).

## 5 Findings

Interviews and desk research yielded valuable evidence on the design and implementation of the Brazilian BL policy. To address the research question and subquestions, this section adopts a process tracing strategy (Fontaine, 2020) to describe the roles of RIEH subsystem actors throughout policy stages. It also highlights the tools and methods that contributed to establishing BL as a vital policy instrument in the Brazilian educational context and influenced RIEH's change over time and local adaptation and translation.

The RIEH policy subsystem involves various national and subnational actors. The World Bank plays a significant role, particularly in the agenda-setting phase. Policymakers from both the Ministry and state education departments are central during policy formulation and implementation. However, as will be discussed in the following subsections, the most influential actors in developing, retaining, and expanding the BL policy instrument throughout RIEH's journey were researchers and consultants from NEES.

### 5.1 Agenda setting

RIEH's agenda-setting phase took place during and after the pandemic when educational authorities were still addressing COVID-19-related challenges. Aligned with the scenarios presented previously discussed (Table 3), subsystem actors advocated for BL as a possible solution for emergencies, educational recovery, and expansion of curriculum offerings scenarios (Souza & Sousa, 2022). The first two are closely connected to the challenges presented by the pandemic, while the last one is more related to the aim of enabling NEM implementation, one of the main challenges faced by MEC at the time, according to interviewees.

In this sense, MEC and WB appear as the key actors in this phase. Even though RIEH was not initially included in the original NEM agreement, it was later established as one of its strategic objectives "as a way of diversifying the IFs and expanding NEM's provision through BL experiences" (MEC\_1). The organizations then linked the signing of the RIEH ordinance as one of NEM's conditioned goals. Interviewees highlighted that this measure strongly contributed to speeding up the publication of RIEH legislation, which took place in November 2022 (MEC, 2022). The approval, however, did not come without an intense debate with other central actors in the national educational scene, especially regulatory bodies (CNE) and the Ministry of Education itself:

By that time, this discussion [*about BL policies*] was very controversial. CNE was debating the topic, and they had just submitted the first version of a BL resolution that was heavily criticized [...] So, the RIEH ordinance stalled within the internal bureaucracy of the MEC. They questioned us: if CNE is still discussing BL and the resolution hadn't been signed, how could MEC launch a blended learning innovation network? What concept of BL are you considering within the network? And so, let's say the RIEH ordinance got stuck, stalled at MEC's high entities, no one wanted to sign it. At the same time, we were under pressure to sign because we believed in the purpose [...] Our basic idea, instead of debating what the BL concept was, was to follow what was outlined in the NEM proposal: a percentage of the curriculum delivered remotely, combined with in-person education. Later on, we could think about discussing the BL concept in other and more complex ways (MEC\_1)

The approval process was influenced by pressure from MEC policymakers, who wanted it to happen shortly after the October 2022 presidential elections but before the start of the new mandate in January 2023. According to interviewees, there were concerns that changes in the Ministry's governance, with the inclusion of actors more critical of BL implementation, could potentially postpone or even prevent the subsequent approval of the RIEH legislation.

To push the BL instrument, subsystem actors made efforts to disseminate remote and BL experiences implemented in other contexts. These include international best practices shared in WB documents, especially Rodriguez, Romani, Munoz-Najar, and Ciarrusta (2022) and Munoz-Najar et al. (2022), but mainly those from Brazilian states with well-established BL curricula, such as São Paulo and Amazonas, where RIEH actors organized field trips before conceiving RIEH policy proposal.

## 5.2 Policy formulation and decision making

RIEH's formulation and decision-making stages took place during a moment of government transition and uncertainty regarding the new directions of Brazilian educational policy. While MEC's and WB's influence in inducing the BL policy instrument is acknowledged, NEES, as an organization with technical knowledge and linked to a university, exerted influence on different design fronts and significantly contributed to "ensuring the continuity of policy and knowledge management during the government transition" (MEC\_1).

During policy formulation, RIEH has undergone profound changes. The initial proposal, according to the interviewed authors, overvalued technological elements. After considering knowledge from NEES experts, RIEH was modified in order to better integrate pedagogical and technological elements:

When MEC showed us the initial proposal that involved establishing IHs, [...] we highlighted that this had already been tried in Brazil and failed, so we were not interested [*in being a partner*]. Later, they invited us to design a different proposal for RIEH, and that's when the idea of our network was born (NE\_3)

This policy design phase was marked by replanning and subsequent inclusion of capacity building, communication, and implementation support activities, resulting in the current RIEH's fronts of actions displayed in Figure 5. Since these activities emerged over time, they were not initially foreseen in the contract established between MEC and UFAL. In order to carry them out, NEES had to plan and reorganize its budget:

At that time [...], we did not have a clear definition of what we needed. [...] The first step we took to meet the needs of both our stakeholders and the agreement signed between UFAL and MEC was to allocate time to planning. It may seem trivial, but planning contributed to really understanding how we would deal with this implementation process (NE\_6)

NEES researchers envisioned the establishment of an 'innovation network' where states could share technology, DERs, lesson plans, and other resources, leading to a collaborative policy design that is institutionalized and originates from the bottom up. Based on recommendations of edTech researchers, the policy aligned with Metcalfe's law, which states that the value of a telecommunications network increases as more users join it. In simple terms, RIEH was built to promote effective BL integration within the network by increasing participants' local agency and, then, their utility:

We believed [...] that when designing and implementing a public policy, it should not necessarily impose a vision, but rather be built together with the people who will implement it on the ground. What is the best BL model for that group of people? And for others? [...] So what we purposefully designed and made explicit, which became one of the basic assumptions of RIEH, was that we would have a menu of BL models. That is why we called RIEH an innovation network [...], to build a new model of education together with these actors" (NE\_2)

Consequently, this model reinforced subnational agencies' significance, which can be observed in the view of other subsystem actors: "I would not group all education departments as a unique stakeholder. Because each one is different and has its own policy design, I would say that today, in fact, RIEH has 24 main stakeholders" (NE\_6). They also recognize ways in which local agency encouraged the development of more contextualized and collaborative actions: "States present at events, share in the VLE, and comment on each other's work. Beyond just a discourse of shared values, we demonstrate the importance of sharing" (NE\_12).

Those actors have also contributed to shaping a BL conceptualization that could adapt to different Brazilian educational realities. RIEH's Implementation Guide document, written by NEES researchers, proposes a broad BL concept but establishes fundamental principles to guide the design of local BL plans that effectively integrate technology and pedagogy<sup>16</sup> (Souza & Sousa, 2022). This holds particular importance amid ongoing discussions within educational regulatory bodies regarding BL's conceptualization<sup>17</sup>.

This broadness accommodates under the umbrella of the policy instrument varying motivations for BL adoption: "We know that states' demands [*to adopt BL*] might be different [...], and we must respect that [...] to give the security they need to broaden their horizons through blended experiences (NE\_7)". Interview data reinforces this argument, showing subsystem actors' broad range of motivations. Hybrid learning is seen as a solution for learning recovery (NE\_8, NE\_10, NE\_13, NE\_2, ST\_1), edTech access and capacity building (NE\_3, NE\_10, NE\_13, ST\_3 ST\_8), expansion of NEM curriculum offerings (WB\_1, NE\_2, MEC\_1, ST\_8), contemporary teaching strategies and student engagement (ST\_2, ST\_3, ST\_6, ST\_8, MEC\_1), response to public emergencies (NE\_1, ST\_8), federative cooperation (MEC\_1, NE\_3), teacher shortages (NE\_9), access to remote regions/communities (NE\_10), and diversity, equity, and inclusion (DE&I) (NE\_12).

Consequently, this flexibility generates a mismatch in RIEH's characterization. Reflecting on its umbrella policy, some actors who participated in policy formulation openly recognized it as an integral part of the NEM reform since it "was even designed and coordinated in the MEC's Upper Secondary Education Division" (WB\_1). Others, adopting a position of deviating from the NEM controversy, argue that "it did not emerge from NEM, but from the National Learning Recovery Policy [...], in order to foment student learning after the pandemic by increasing instructional time" (NE\_6). A third group has a more pragmatic stance, evaluating changes in motivations in the adoption of BL policy as plausible and acceptable processes, "after all, RIEH can meet both NEM and learning recovery goals" (ST\_1). In fact, this flexibility is seen as a positive characteristic for some subsystem actors, who consider that it can increase BL policies' capacity to meet the diverse demands of the Brazilian education community:

Bringing education departments into [*the network*] to talk and structure things is different from imposing a top-down policy. [...] We are qualifying [...] the way public policies are made and the type of instruments that will emerge from this (NE\_8)

### 5.3 Policy implementation

In the phase of putting RIEH into action, state policymakers were the main drivers of the policy instrument. They were supported by NEES, which created the RIEH implementation model, and MEC, which oversaw and validated

<sup>16</sup>RIEH considers various BL conceptualizations "ranging from broader to more specific, theoretical to practical", which encompasses "DERs and more active and innovative methodologies in education" (Souza & Sousa, 2022, p.10). However, the policy document defines that BL implementation should be driven by strategic planning, pedagogical intentionality, learning flexibility, autonomy, and personalization, and integration and tutoring (Souza & Sousa, 2022).

<sup>17</sup>For further context, see subsection 3.3.

the actions. According to interviewees, however, WB involvement has diminished over time, elucidating Béland and Howlett (2016)’s argument that actors central to certain instruments can rise and fall during the policy process.

The implementation model is based on macro-actions that should be followed by all RIEH participants but purposely allows for varying BL local enactment experiences (Souza & Sousa, 2022). Interviewees characterize it positively, describing it as “important” (NE\_13), “innovative” (NE\_8), and “strategic” (NE\_7). As a consequence, each education department had the discretion to implement RIEH according to its own political and policy priorities and to policies that were already being implemented. Table 6 shows how each state included in the sample defined the main objective, the target audience, and the characteristics of its local BL plan.

Table 6: Objectives, target audience, and characteristics of BL local plans of the interviewed states

State	Objective to adopt BL	Target audience	Features
Northeast	Increase students’ school access	All state schools	- Implementation of RIEH systems and IH - IH built at education department building - Policymakers’ study group - School actors also designing BL plan
Southeast 1	Provide teachers with active methodologies	All state schools	- Experience in BL provision - Not implemented RIEH systems or IH
Southeast 2	Provide an technology-enriched teaching and learning environment	All state schools	- Implementation of RIEH systems and IH - IH built at a school
South	Provide teachers with tools to pedagogical planning and M&E	All state schools, except the ones with extended hours	- Implementation of RIEH IH and systems - IH built at education department building - Design of a handbook for school-level BL adoption, with curriculum guidelines
North	To be defined	State schools with adequate connectivity	- Pilot (2023) with 7 classes - On-going normative design of BL implementation and teacher training

Note. Own work.

This flexibility also contributed to the development of tools to respond to demands and challenges that emerge over time. Examples range from varying fronts of actions and include, for instance, the *Implementation Paths*, a game developed by NEES consultants to competitively foster the construction of local BL plans (RIEH, 2023b), in-person and virtual workshops (*Expo RIEH*) to share best practices and solutions for implementation challenges across states (RIEH, 2023a), and the *Specialization in Public Policy Management for Blended Learning* (RIEH, 2024c).

All activities within RIEH’s capacity building front, for instance, were “not initially within RIEH’s scope, but this concession was made, so to speak, to meet the different actors involved in the policy” (NE\_2). According to interviewees, these tools were central for “inducing local engagement” (NE\_12), “building a network” (NE\_12, ST\_5), “aligning a common discourse” (ST\_5, ST\_6), and “providing BL technical knowledge” (BL\_6, ST\_7). State policy-makers’ arguments openly supported their existence, characterizing them as “impressive” (ST\_4) moments capable of “really giving another perspective” (ST\_6) and addressing their needs:

These meetings, lectures, and discussions nourish our education department. Because those who work here, who deal with guidelines and policies, need to be nourished by the final product [...] We need to see the end to understand the purpose of what we are doing. And when we go to discussions, this is the nourishment (ST\_4)

Another striking aspect of RIEH is the presence of a team of consultants to support the 24 education departments in

implementation, communication, capacity- and network-building activities. It is worth noting that their work diverges from the typical IO consultancy model, focusing on local implementation of RIEH rather than on demands related to accountability, evaluation, or product delivery. Their profiles are quite diverse, including individuals from different regions and backgrounds<sup>18</sup>. The choice of a regionalized and interdisciplinary team was deliberate, but recruiters emphasized that the ability to engage was the key factor in their selection process: “we needed people who had a powerful inductive role and a consistent voice about the policy” (NE\_6).

NEES consultants’ role through the implementation phase is considerable, as they actively supported local policymakers in contextualizing national directives and constructing their local BL plans. The team also developed communication and engagement strategies that promoted collaboration within RIEH:

I think we already have a positive effect on this collaborative relationship between the states. Note that as an educational public policy, this is the first since the republic to position the states as direct partners in the exchange of equipment, DERs, lesson plans, and other materials in an institutionalized manner. So, we are talking about a paradigm shift (NE\_6)

Although education and network-building activities are highly valued, a risk to the consolidation of the instrument lies in the fact that RIEH implementation does not include training for school actors. Interviews reveal that teacher training was initially discussed with partners, but for public organizations’ overload reasons (Knill et al., 2024) it was not included in RIEH’s activities:

Another technical partner was responsible for teacher training, while it was incumbent upon us [NEES] to do everything else. For some reason, this organization did not deliver [RIEH’s teacher training]. In other words, although it is no longer integrated into RIEH, we continue to carry out all the other fronts of the project [...] It may be that the actions exist, [...] but we don’t know, and they just aren’t synchronized with the network itself (NE\_2)

Knowledge-dissemination strategies to address this challenge were designed within the network by both national and state-level actors. NEES capacity building team pushed all policymakers registered in the Postgraduate course to design a local teacher training plan. Notable state-level responses, implemented by the Northeastern state interviewed<sup>19</sup>, include establishing BL study groups within the education department to promote knowledge appropriation and involving school stakeholders in the construction of the BL plan: “Because many things in Brazil get mixed up, our concern is that it [BL] is not widely discussed with the education community. [...] We formed study groups [...] to understand it, discuss it, and then strengthen our education system” (ST\_4). However, there is still some uncertainty about these initiatives’ capacity to be scaled up. While some actors believe that teacher training processes will naturally be integrated into RIEH when it finally reaches schools, others see this inclusion as unfeasible due to the significant human, time, and financial resources required.

Despite this open discussion point, the case of RIEH reveals other ways in which state-level actors sparked a grassroots movement to incorporate implementation fronts. They have requested clearer guidelines from RIEH’s directive bodies on how to classify a given pedagogical experience as genuinely BL, emphasizing the need for a collective discussion and the establishment of basic and homogeneous criteria by MEC and CNE. In response, NEES

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<sup>18</sup>Each consultant is based in a state: South (Rio Grande do Sul), Central-West (Distrito Federal), Southeast (Rio de Janeiro and São Paulo), Northeast (Pernambuco), North (Acre). The team unites professionals from public policy, pedagogy, political science, and administration fields.

<sup>19</sup>For more information, see Table 6.

and MEC took measures to support the homogenization of the concept, such as lectures and formative meetings with BL experts. For instance, in October 2023 NEES brought together 120 experts, educators, and state policymakers involved in RIEH to discuss the BL concept from academic, practical, and management perspectives (RIEH, 2023a). In late 2023, a researcher specialized in BL was hired to produce knowledge on RIEH conceptualization and regulation and conduct workshops with local actors to discuss and co-construct a BL concept applicable to each context.

#### **5.4 Policy evaluation**

Last but not least, it is worth discussing the policy evaluation journey. NEES, besides being the most important implementation pusher, is also the organization responsible for evaluating RIEH. To achieve this goal, it has established an Observatory to generate and share data about the policy instrument (BL), and also to monitor and evaluate the implementation of RIEH across states (RIEH, 2024d).

Evidence collected regarding this phase is limited, given RIEH's current status of implementation. However, it is noteworthy that subsystem actors see M&E tools as crucial for the continuous improvement of RIEH, a sentiment that was echoed in this extract:

It's no use implementing a great policy if we can't monitor and correct it along the way. We need indicators to correct our mistakes because, obviously, we, as human beings, will make mistakes. There is no such thing as a perfect policy design or implementation (NE\_9)

## 6 Discussion

The case of RIEH provides additional evidence of the robustness of the concept of an instrument constituency put forward by Voß and Simons (2014) and how and when such constituencies prove influential for incremental policy change and policy translation processes. The analyses will be presented based on the central mechanisms identified by Simons and Voß (2018) that capture how and when a constituency gains or loses power and influence: promises, internal coordination, and socio-material infrastructure. In the case of RIEH, the interplay between the policy phenomena is captured by the broad definition of BL and its link to various policy problems, the establishment of a network, particular implementation model and support, and capacity building and M&E activities.

### 6.1 Linking the policy instrument with existing problem concerns

The findings presented in section 5 clearly illustrate how subsystem actors see the blended strategy as a response to various educational problems. The high-level degree of involvement of the World Bank in the agenda-setting phase highlights the role of IOs in creating such “constituency-induced supply push dynamics (Simons & Voß, 2018, p. 23). Aligning the signing of the RIEH ordinance as one of the goals of the results agreement established between the Bank and the Ministry for implementing NEM provides an exciting example of how edTech has become increasingly intertwined with global education agendas (Sahlberg, 2016; UNESCO, 2023). The fact that, according to the interviewees, this mechanism actively contributed to hastening the approval of the ordinance, ensuring the legal basis for BL integration, shows IOs as ‘policy entrepreneurs’ (Kingdon, 1984). Furthermore, it exemplifies the effectiveness of loan conditionalities to push policy instruments (Holzinger & Knill, 2005; Mundy & Verger, 2015).

The BL policy instrument’s degree of adaptability to different education challenges and actors’ priorities is revealed by policy documents and interview data. In this sense, the RIEH case provides an exciting example of Kingdon (1984, p. 215)’s finding that “advocacy of solutions often precedes the highlighting of problems to which they are attached”. RIEH’s breadth of possibilities relates, to some extent, to the intrinsic flexibility of the BL model (Graham, 2006). However, it also highlights the agency of the instrument constituency in the discursive construction of policy issues to match the available solutions (Simons & Voß, 2018).

Each subsystem actor, including local education departments, has its own policy priorities, shaping the policy process according to their interests (Béland & Powell, 2016). Considering each of the 24 education departments as a stakeholder clearly exemplifies the boundary nature of the instrument, and its ability to unite diverse actors who collectively advocate for its implementation despite their own goals (Simons & Voß, 2018). Another striking example of this argument resides in the way different actors reflect on RIEH’s umbrella policy, openly linking it to the upper-secondary curriculum reform or avoiding doing so.

The flexibility of the BL instrument is closely connected to its capacity to incorporate gradual changes, either over time or across territories (Hassenteufel & Zeigermann, 2021; Mahoney & Thelen, 2010; Mukherjee & Howlett, 2015; Mukhtarov, 2014; Thelen, 2009). As stated by one interviewee, “RIEH’s design made it locally adaptable, but also allowed it to adapt to national changes. So even today, with any NEM changes, we end up not deviating from what is foreseen in RIEH ordinance” (NE\_7)

Varying policy motivations among states underscore BL’s particular ‘innovation journey’ (Simons & Voß, 2018, p.19). The differences previously displayed in Table 6 highlight the autonomy and independence of the federalist model in the Brazilian education system (Abrucio et al., 2010; Segatto & Abrucio, 2016), the role of policy translators

in “embedding, dis-embedding, and re-embedding” (Mukhtarov, 2014, p.76) policy ideas from one context to another and the results of this process. The argument that such flexibility elevates the capacity to meet diverse demands also reinforces how heterogeneous actors were attracted based on promises related to the development and implementation of the BL instrument (Lascoumes & Le Galès, 2007).

## 6.2 Defining the policy instrument’s guiding concept

One strong indication of the influence of the instrument constituency relies on how it shaped the BL concept. The RIEH regulatory ordinance, as indicated in subsection 5.1, strategically avoided discussing the guiding concept, which was only elaborated further, albeit broadly, in RIEH Implementation Guide (Souza & Sousa, 2022). The contributions of NEES highlight ways in which constituency actors act as technical experts and policy advisors during policy formulation (Mukherjee & Howlett, 2015; Simons & Voß, 2018).

By adopting a discourse towards collaboration and policy effectiveness, those subsystem actors strongly advocated for the broadness of RIEH’s theoretical bases, reinforcing Kingdon (1984)’s interconnected policy, political, and problem streams. In this sense, by emphasizing functional and structural benefits of the BL approach to make policy decisions a technical and non-political process (Simons & Voß, 2018), NEES had an inductive role in the “mobilization of political support through lobbying and making promises linked to the implementation and use of the instrument” (Simons & Voß, 2018, p.27). It is also noteworthy that the absence of explicit national regulations on BL implementation supported the construction of the narrative around BL promises (Lascoumes & Le Galès, 2007).

Given the instrument’s capacity to structure public policy according to its own logic, the BL broad definition also reveals the interplay between instrument constituency and policy change and translation literature (Lascoumes & Le Galès, 2007; Simons & Voß, 2018). By allowing flexible pedagogical experiences, RIEH created mechanisms to encourage diversity in BL local implementations. As a result, it contributed to policy local adaptation and translation and reinforced state-level actors’ agency within the policy subsystem (Hassenteufel & Zeigermann, 2021; Mukhtarov, 2014; Stone, 2017).

Incremental policy changes and their consequential effects on shaping substantive political outcomes also relate to this discussion (Mahoney & Thelen, 2010; Thelen, 2003, 2009). Considering that institutional change takes multiple forms and its strategies systematically differ according to the character of institutions and the political settings in which they are situated (Hacker, 2004), a broader institutional framework expanded the possibilities for RIEH to transform. Indeed, as some interviewees highlighted, the very BL conceptualization can undergo gradual re-signification processes throughout its implementation, as it derives from a “maturation process of the network itself” (NE\_7), which occurs based on “how it [BL] materializes locally and the impact it causes on students” (NE\_3).

While contributing to such aforementioned phenomena, the ambiguity brings risks to the sustainability of RIEH. Enactors tend to mix BL and distance education concepts, especially given the ambiguity of the experiences implemented during COVID-19 emergency remote learning (Yang et al., 2021). Some of the interviewees involved in local policy formulation are concerned that school actors’ decision heuristics and cognitive limits (Elster, 2006; Kahneman & Tversky, 1982; Pierson, 2000; Schneider & Ingram, 1988), combined to a broad BL concept, might lead them to replicate distance education experiences ineffective to innovate the teaching and learning process.

### **6.3 Building strength through collective actors' mechanisms and tools**

The ambiguity around the instrument's guiding concept and the problems it addresses results in inherently paradoxical BL policies, which need to accommodate flexibility and direction to attract and generate agency in their support. In other words, RIEH, like other BL policies, must provide clear guidelines for implementation in schools, especially considering its degree of novelty (Yang et al., 2021) and the lack of evidence on the subject (UNESCO, 2023), but in a way that incorporates design and implementation strategies adaptable to different local contexts, educational challenges, and strategic priorities (NEES, 2024).

To grow a social constituency around it and achieve the objectives mentioned above, RIEH took on collective actor qualities that led to the development of constituency-internal institutions (Béland & Howlett, 2016; Simons & Voß, 2018). Several of the 'constituency institutions and organizations' (Simons & Voß, 2018, p. 25) developed within RIEH will be addressed in the following subsections. They include: network establishment, implementation model and support, capacity building, and M&E.

#### **6.3.1 Network establishment**

The constituency enacted its collectivity primarily by the establishment of an innovation network, a strategy that facilitated the emergence of a social realm advocating for the policy instrument (Simons & Voß, 2018). By focusing on promises of networks' collaboration and co-creation, the constituency was able to attract and generate agency to support the instrument (Mukherjee & Howlett, 2015; Simons & Voß, 2018).

This collaborative approach not only fostered a sense of shared ownership among stakeholders but also reinforced the functional and structural promises of the BL model, thus enhancing its acceptance, maintenance, and expansion of this specific instrumental model of governing, as is clearly shown in the following statement:

The design is very appealing to local education departments, which understand RIEH's importance. The concept of being in a network makes sense, and we communicate it well with the states. So I think these things, in a way, influence RIEH's survival up to this point (NE\_3)

It is worth noting that building a network based on parity relationships among members is a way to challenge the top-down approach to making education policies (Mukhtarov, 2014; Stone, 2017; Verger & Fontdevilla, in press). Analysis of the findings presented on section 5 show that RIEH state policymakers could use the network to change experiences and learn from its peers, somehow changing this power dynamic.

#### **6.3.2 Implementation model and support**

Aligning with Simons and Voß (2018)'s view that instruments may come to shape the policy process according to their own logic, it is interesting to note that policy tools developed by RIEH, such as its Implementation Guide (Souza & Sousa, 2022), laid the groundwork for policy enactment. This tool, even though previously unforeseen, essentially defined what would become RIEH locally, being a clear example of how cumulative changes can shape substantive political outcomes effects for (Mahoney & Thelen, 2010; Thelen, 2003, 2009).

The implementation model proposed in it conjugates macro-actions and local flexibility. Subsystem actors' positive views about it reinforce mechanisms in which RIEH developed constituency-internal institutions (Simons & Voß,

2018). The strength of the instrument, exemplified by the importance of its Implementation Guide, is such that one interviewee defined it as “a true Bible” (ST\_4).

Other implementation tools, such as the *Implementation Paths* game and the *Expo RIEH* reunions, can also be considered collective strategies. Through them, RIEH subsystem actors gathered “to learn, exchange news and experiences, form collective positions, and coordinate their public outreach” (Simons & Voß, 2018, p.25). According to interviewees, these activities significantly enhanced interaction and collaboration among states, reinforcing instruments constituency’s internal institutions and organizations (Simons & Voß, 2018).

The case of the NEES consultants, who assumed diverse responsibilities regarding policy implementation, demonstrates how explicit social roles can be established within instrument constituencies (Lascoumes & Le Galès, 2007). The importance allocated to these actors aligns with Simons and Voß (2018, p. 18)’s that “instruments do not only cognitively organize governing strategies, but that they shape practices, allocate roles and create social positions”. Their role also reinforces the collaborative structural promises of the model. The existence of a team of professionals accessing the 24 participating education secretariats facilitates the approximation of policymakers from different regions and the subsequent narrative around constructing an innovative public policy capable of fostering a collaborative regime (Segatto & Abrucio, 2016).

### 6.3.3 Capacity building

Education and capacity-building programs strengthen constituencies. RIEH has evolved its educational action fronts over time and currently includes courses to teach policymakers to use the systems, operate the innovation hubs, and conceive local BL policies. The fact that those activities did not even exist by the time RIEH was conceived elucidates how the policy has developed over time and shaped practices within the subsystem (Béland & Powell, 2016; Simons & Voß, 2018). They also highlight the power of change actors in strengthening the instrument constituency. Following Mahoney and Thelen (2010)’s typology, they can be characterized as *opportunists* who explore ambiguities within the system to drive it towards new functions.

Perhaps the most significant evidence of incremental changes in this area is the creation of the *Specialization in Public Policy Management for Blended Learning* (RIEH, 2024c). Discussions regarding its design began in the second half of 2023 in response to states’ demands. The course was officially launched on March 1, 2024, with the first cohort reaching 197 policymakers from all 24 partner education departments. The speed of these changes shows that gradual policy changes can significantly impact even over a short period (Mahoney & Thelen, 2010; Thelen, 2003).

Meetings organized within the network (*Expo RIEH*) (RIEH, 2023a) also have been ways to sustain and expand the policy instrument (Simons & Voß, 2018). State policymakers’ positive views elucidate the BL instrument’s high internal consistency and the role of capacity-building fronts in fomenting it (Simons & Voß, 2018). However, a risk to the consolidation of the instrument lies in the fact that RIEH does not provide training for school actors, those who will, in fact, implement blended experiences.

### 6.3.4 Monitoring and evaluation

During implementation and evaluation phases, constituencies usually make use of socio-cognitive infrastructures to support an instrument’s practical implementation and the assessment of its effectiveness (Mukherjee & Howlett, 2015; Simons & Voß, 2018). In the case of RIEH, these goals were achieved through M&E activities under the umbrella of the RIEH’s Observatory. Each one of the Observatory’s functions — M&E, knowledge production, and dissemination —

interacts and contributes to developing, maintaining, and expanding BL as a specific instrumental model of governance (Kingdon, 1984; RIEH, 2024d).

RIEH's collected evidence reinforces some of the theories regarding instruments' socio-cognitive infrastructure discussed in section 2 while challenging others. Interviewees see policymaking as a non-pragmatic process (Lascoumes & Le Galès, 2007), subject to constant interpretation, enforcement, and action (Streeck & Thelen, 2005; Thelen, 2009), and recognize socio-cognitive infrastructure's significance to reproduce and support the instrument (Simons & Voß, 2018).

However, a stark contrast emerges in the motivations of M&E. While scholars like Simons and Voß (2018) adopt a critical stance, suggesting that these tools are ways to generate promises and linked expectations favoring policy instruments, RIEH actors hold a predominantly positive perspective. Despite this divergence, they agree on the centrality of M&E activities to the innovation journey of instruments. While its full consequences are yet to be understood, this process underscores the role of the RIEH's Observatory as a key mechanism for the instrument constituency analyzed.

The significance of M&E activities becomes increasingly pronounced in contexts marked by incremental policy change (Mahoney & Thelen, 2010), as they serve as a vital means to check and validate decisions made throughout the policy's design and enactment process. Considering the evidence previously discussed regarding RIEH's high degree of mutation over time and across contexts, M&E seems an essential tool affecting the policy's change and translation processes.

## 7 Conclusions

This study provides significant insights into the robustness of the instrument constituency concept as presented by Voß and Simons (2014) and the mechanisms by which such constituencies gain and lose influence, interplaying with policy change and policy translation processes. Using the case of the Brazilian national blended learning policy (RIEH), the research illustrates some mechanisms by which BL has become a strong instrument. RIEH's BL broad definition, its loose link to policy problems, combined with implementation strategies such as network establishment, flexible implementation model, capacity building, and M&E tools, strongly contributed to its adaptation through turbulent times and its adoption across various educational contexts.

The findings also underscore the role of subsystem actors throughout policy stages, each bringing unique perspectives and goals but collaboratively supporting the boundary nature of the instrument goals (Simons & Voß, 2018). The significance of IOs in this specific education policymaking context is represented by the role of the World Bank as a policy entrepreneur, creating a supply-push dynamic through loan conditionalities, lobbying, and discursive construction. As the principal national body responsible for education, MEC was central to defending BL's structural and functional promises, such as broad conceptualization and contextual-adaptive implementation model, as well as rushing the approval of RIEH in order to guarantee its legality at a time of government transition. Local education departments, each with its own policy and political priorities, also played a critical role in shaping the policy process at the grassroots, allowing it to be adapted to real-world settings, and supporting the creation of many of the socio-material infrastructures analyzed in RIEH's case.

However, it is surprising that the most significant actor within the instrument constituency was an external academic entity. NEES, which joined as a technical partner of the Ministry during the formulation phase, played a crucial role during RIEH's policy journey. Initially, NEES researchers acted as technical experts and policy advisors and changed the course of policy design by advocating for broad theoretical bases, incorporating pedagogical aspects, and promoting a collaborative and adaptable policy framework. During implementation, the NEES team of consultants, supervised by researchers, significantly contributed to designing many of the solutions now offered within RIEH. Capacity building and M&E fronts, for instance, were tools to effectively develop internal institutions within the constituency, strengthening BL as an instrument and aiding the policy's local and temporal adaptation.

Although aligned with global educational reforms worldwide, this multi-level collaboration and the dynamic interaction between these actors facilitated incremental policy changes (Béland & Powell, 2016) and adaptation and reinterpretation across different contexts (Hassenteufel & Zeigermann, 2021). Subsystem actors acted as change agents and policy translators, playing a critical role in interpreting and contextualizing the policy to fit time and local needs, thereby enhancing its sustainability and effectiveness. This demonstrated the instrumental constituency's power in shaping, maintaining, and expanding the BL model in diverse educational contexts (Béland & Howlett, 2016; Simons & Voß, 2018).

This study enriches the literature on instrument constituencies by detailing how a specific instrumental model of governing interplays with policy change and translation phenomena, showcasing its flexibility and local adaptability. By examining the development, maintenance, and expansion of the BL instrument in the Brazilian context, the study highlights ways in which it can evolve independently, shaping preferences and enrolling allies. Furthermore, this research addresses the need for more empirical investigations into the decision-making processes behind policy instruments, as suggested by Schneider and Ingram (1988) and Simons and Voß (2018).

The research also addresses demands by scholars from contemporary schools of thought. For instance, it aligns

with Thelen (2009)'s call for a deeper conceptualization and explanation of institutional evolution and Verger and Fontdevilla (in press)'s invitation for research on the fundamental principles underlying the development of policy models within transnational policy spaces.

Findings indicate some policy implications. The significance of the collaborative and bottom-up governance model adopted by RIEH shows ways to strengthen coordination mechanisms among national and subnational education entities, fostering inclusive stakeholder engagement, and valuing policy translators' roles in shaping policy meanings in the field (Hassenteufel & Zeigermann, 2021). The model, widely accepted by actors within the policy subsystem, appears to be a viable path for other policies worldwide. In the specific context of Brazilian education, network establishment seems to be a feasible solution for implementing the collaborative regime advocated in the 1988 Constitution but rarely practiced (Segatto & Abrucio, 2016). Valuing subnational experiences and promoting exchange can contribute to the development of policies that are better contextualized to the diverse needs of Brazilian students and school actors, diminishing the influence of global educational reforms' policy rationales (Verger, 2016; Verger & Fontdevilla, in press).

However, the analysis of RIEH's subsystem also reveals challenges related to establishing a network that should be considered for policy recommendations. Firstly, while reinforcing policymakers' agency, RIEH's case emphasizes the necessity of involving school-level actors, as they are the ones implementing blended strategies. Ensuring their participation is vital to assess whether and how the governance model actually responds to problems in real-world settings, as well as to anticipate challenges that may arise when the policy arrives at schools, improving its practical application and sustainability.

Secondly, the involvement of different actors can lead to power imbalances and coordination challenges within the network. In the case of RIEH, the survival of the model relied heavily on the participation of an external institution in both the design and implementation phases. While this ensured the continuity of the policy even with government changes and institutional uncertainty, the importance of NEES could create difficulties for the policy's sustainability. It is essential to establish processes that prepare state policymakers to effectively implement their local BL plan after the exit of NEES consultants.

Limitations of this study are based on its scope of a qualitative single case study, which limits generalizability to other contexts or policy instruments and may introduce biases or subjective interpretations. Besides, by primarily covering the implementation of a flexible model of governing (BL) in a particular educational context (Brazil), this study can potentially overlook broader global perspectives or comparative analyses with other countries and generate findings time-sensitive and subject to change. Also, it is worth noting that this research follows Simons and Voß (2018)'s critical theory of instrument constituency, but other instrument typologies might be more suitable for comparative policy research across different countries, government levels, sectors, or time periods (Capano & Engeli, 2022).

Last but not least, this research underscores the need for continued exploration of how policy instruments gain and sustain influence within complex governance structures. Given the instrumental constituency's novelty, understanding and describing the relationships between policy instrument content and outcomes and investigating how these findings apply to other sectors and jurisdictions are crucial agenda items for future public policy research (Howlett et al., 2015; Simons & Voß, 2018). The findings also provide a foundation for further investigation into the dynamics of policy change and translation processes. Future research can better explore these interplay, focusing on, for instance, characterizing the relationship between instruments constituencies and exogenous and endogenous institutional changes (Béland & Powell, 2016).

## 8 References

- Abrucio, F. L., Franzese, C., & Sano, H. (2010). Coordenação e cooperação no federalismo brasileiro: avanços e desafios. *Estado, instituições e democracia: república. Projeto perspectivas do desenvolvimento brasileiro..*
- Abrucio, F. L., & Segatto, C. I. (2014). O manifesto dos pioneiros e o federalismo brasileiro: Percalços e avanços rumo a um Sistema Nacional de Educação. In *O Sistema Nacional de Educação: Diversos olhares 80 anos após o Manifesto* (pp. 40–57). Ministério da Educação.
- Adam, C., Hurka, S., Knill, C., & Steinebach, Y. (2019). *Policy accumulation and the democratic responsiveness trap*. Cambridge University Press.
- Alves, M. T. G., Soares, J. F., & Xavier, F. P. (2016). Desigualdades educacionais no ensino fundamental de 2005 a 2013: Hiato entre grupos sociais. *Revista Brasileira de Sociologia*, 4(7), 49–82.
- Balen, M. E., & Leyton, C. (2016). Policy translation: an invitation to revisit the work of Latour, Star and Marres. *Global Discourse*, 6(1-2), 101–115.
- Ball, S. J. (1998). Big policies/small world: An introduction to international perspectives in education policy. *Comparative education*, 34(2), 119–130.
- Béland, D., & Howlett, M. (2016). How solutions chase problems: Instrument constituencies in the policy process. *Governance*, 29(3), 393–409.
- Béland, D., & Powell, M. (2016). Continuity and change in social policy. *Social Policy & Administration*, 50(2), 129–147.
- Bennett, A., & Checkel, J. T. (2015). *Process tracing*. Cambridge University Press.
- Bhaskar, R. (2013). *A realist theory of science*. Routledge.
- Braga, F. M., Laborne, A. A., Marini, A., Souza e Silva, L., & Duarte, V. (2022). Implementação de reformas no ensino médio: Experiências internacionais e aprendizados para o Brasil. *D3E*.
- Brasil. (1988, February 23). *Constituição da República Federativa do Brasil de 1988*. [https://www.planalto.gov.br/ccivil\\_03/constituicao/constituicao.htm](https://www.planalto.gov.br/ccivil_03/constituicao/constituicao.htm).
- Brasil. (1996a, December 20). *Lei No. 9.394, de 20 de dezembro de 1996*. [https://www.planalto.gov.br/ccivil\\_03/leis/19394.htm](https://www.planalto.gov.br/ccivil_03/leis/19394.htm).
- Brasil. (1996b, December 24). *Lei No. 9.424, de 24 de dezembro de 1996*. [https://www.planalto.gov.br/ccivil\\_03/leis/19424.htm](https://www.planalto.gov.br/ccivil_03/leis/19424.htm).
- Brasil. (2017, February 23). *Lei No. 13,415, de 16 de fevereiro de 2017*. [https://www.planalto.gov.br/ccivil\\_03/\\_ato2015-2018/2017/lei/113415.htm](https://www.planalto.gov.br/ccivil_03/_ato2015-2018/2017/lei/113415.htm).
- Brasil. (2018, April 12). *Mensagem (SF) nº 19, de 2018*. <https://www25.senado.leg.br/web/atividade/materias/-/materia/132915>. (Online; accessed 13 May 2024)
- Brasil. (2018, November 21). *Resolução CNE/CEB nº 3, de 21 de novembro de 2018*. [https://normativasconselhos.mec.gov.br/normativa/view/CNE\\_RES\\_CNECEBN32018.pdf](https://normativasconselhos.mec.gov.br/normativa/view/CNE_RES_CNECEBN32018.pdf).
- Brasil. (2022a, May 23). *Decreto No. 11.079, de 23 de maio de 2022*. <https://www2.camara.leg.br/legin/fed/decret/2022/decreto-11079-23-maio-2022-792689-publicacaooriginal-165333-pe.html>.
- Brasil. (2022b, July 5). *Parecer CNE/CP nº 14, de 5 de julho de 2022*. [http://portal.mec.gov.br/index.php?option=com\\_docman&view=download&alias=252671-pcp034-23&category\\_slug=agosto-2023-pdf&Itemid=30192](http://portal.mec.gov.br/index.php?option=com_docman&view=download&alias=252671-pcp034-23&category_slug=agosto-2023-pdf&Itemid=30192).
- Brasil. (2022c, December 30). *Portaria No. 315, de 30 de dezembro de 2022*. <https://www.semesp.org.br/wp-content/uploads/2023/01/portaria-n315-30-dezembro-2022.pdf>.

- Brasil. (2023, October 26). *Projeto de Lei No. 5.230, de 26 de outubro de 2023*. [https://www.camara.leg.br/proposicoesWeb/prop\\_mostrarintegra?codteor=2351731&filename=PL%205230/2023](https://www.camara.leg.br/proposicoesWeb/prop_mostrarintegra?codteor=2351731&filename=PL%205230/2023).
- Broadbent, J. (2017). Comparing online and blended learner's self-regulated learning strategies and academic performance. *The Internet and Higher Education*, 33, 24–32. (Publisher: Elsevier)
- Callon, M. (1984). Some elements of a sociology of translation: domestication of the scallops and the fishermen of st brieuc bay. *The sociological review*, 32(1\_suppl), 196–233.
- Camargo, C. P., Tempiski, P. Z., Busnardo, F. F., Martins, M. d. A., & Gemperli, R. (2020). Online learning and COVID-19: a meta-synthesis analysis. *Clinics*, 75. (Publisher: SciELO Brasil)
- Capano, G., & Engeli, I. (2022). Using instrument typologies in comparative research: Conceptual and methodological trade-offs. *Journal of Comparative Policy Analysis: Research and Practice*, 24(2), 99–116.
- Ching, C. C., Basham, J. D., & Jang, E. (2005). The legacy of the digital divide: Gender, socioeconomic status, and early exposure as predictors of full-spectrum technology use among young adults. *Urban Education*, 40(4), 394–411.
- Collier, D. (2011). Understanding process tracing. *PS: political science & politics*, 44(4), 823–830.
- Daugbjerg, C., & Swinbank, A. (2016). Three decades of policy layering and politically sustainable reform in the European Union's agricultural policy. *Governance*, 29(2), 265–280.
- Deterding, N. M., & Waters, M. C. (2021). Flexible coding of in-depth interviews: A twenty-first-century approach. *Sociological methods & research*, 50(2), 708–739.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American sociological review*, 48(2), 147–160.
- Dobbin, F., Simmons, B., & Garrett, G. (2007). The global diffusion of public policies: Social construction, coercion, competition, or learning? *Annu. Rev. Sociol.*, 33, 449–472.
- Dolowitz, D. P., & Marsh, D. (2000). Learning from abroad: The role of policy transfer in contemporary policy-making. *Governance*, 13(1), 5–23.
- Dziuban, C., Graham, C. R., Moskal, P. D., Norberg, A., & Sicilia, N. (2018). Blended learning: the new normal and emerging technologies. *International journal of educational technology in Higher education*, 15, 1–16. (Publisher: Springer)
- Elazar, D. J. (1987). *Exploring federalism*. University of Alabama Press.
- Elster, J. (2006). Altruistic behavior and altruistic motivations. *Handbook of the economics of giving, altruism and reciprocity*, 1, 183–206.
- Escueta, M., Nickow, A. J., Oreopoulos, P., & Quan, V. (2020). Upgrading education with technology: Insights from experimental research. *Journal of Economic Literature*, 58(4), 897–996.
- Exame. (2023, Feb 13). *Após Reforma do Ensino Médio, Alunos Têm Aulas de 'o que rola por aí', 'rpg' e 'Brigadeiro Caseiro'*. <https://exame.com/brasil/apos-reforma-do-ensino-medio-alunos-tem-aulas-de-o-que-rola-por-ai-rpg-e-brigadeiro-caseiro/>. (Online; accessed 19 November 2023)
- Fontaine, G. (2020). Process tracing for comparative policy analysis: A realist approach. In *Handbook of research methods and applications in comparative policy analysis* (pp. 277–295). Edward Elgar Publishing.
- Gadotti, M. (2009). *Educação integral no Brasil: Inovações em processo*. Editora e Livraria Instituto Paulo Freire.
- Gilardi, F. (2012). Transnational diffusion: Norms, ideas, and policies. *Handbook of international relations*, 2, 453–477.
- Gonzales, A. L., Calarco, J. M., & Lynch, T. (2018). Technology problems and student achievement gaps: A validation

- and extension of the technology maintenance construct. *Communication Research*, 47(5), 750–770.
- Graham, C. R. (2006). Blended learning systems: Definition, current trends and future directions. In *The handbook of blended learning: Global perspectives, local designs* (pp. 3–21). C. J. Bonk, & C. R. Graham.
- Haas, P. M. (1992). *Knowledge, power, and international policy coordination*. University of South Carolina Press Columbia.
- Hacker, J. S. (2004). Privatizing risk without privatizing the welfare state: The hidden politics of social policy retrenchment in the United States. *American Political Science Review*, 98(2), 243–260.
- Hassenteufel, P., & Zeigermann, U. (2021). Translation and translators in policy transfer processes. In *Handbook of policy transfer, diffusion and circulation* (pp. 58–79). Edward Elgar Publishing.
- Hay, C. (2004). Common trajectories, variable paces, divergent outcomes? models of european capitalism under conditions of complex economic interdependence. *Review of international political economy*, 11(2), 231–262.
- Henry, A. D., Ingold, K., Nohrstedt, D., & Weible, C. M. (2022). Advocacy coalition framework: Advice on applications and methods. *Methods of the policy process*, 105–136.
- Hoffman, D. L., & Novak, T. P. (1998). Bridging the racial divide on the internet. *Science*, 280(5362), 390–391.
- Holzinger, K., & Knill, C. (2005). Causes and conditions of cross-national policy convergence. *Journal of European public policy*, 12(5), 775–796.
- Howlett, M., Mukherjee, I., & Woo, J. J. (2015). From tools to toolkits in policy design studies: The new design orientation towards policy formulation research. *Policy & Politics*, 43(2), 291–311.
- Hypólito, Á. M. (2019). BNCC, agenda global e formação docente. *Revista retratos da escola, Brasília*, 13(25), 187–201.
- Inep, & MEC. (2024). *Censo Escolar da Educação Básica 2023: Resumo Técnico (Versão Preliminar)*. Diretoria de Estatísticas Educacionais (DEED). Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira (Inep) e Ministério da Educação (MEC).
- Jacobs, A. M., & Weaver, R. K. (2015). When policies undo themselves: Self-undermining feedback as a source of policy change. *Governance*, 28(4), 441–457.
- Jakobsen, M. L. F., & Mortensen, P. B. (2015). How politics shapes the growth of rules. *Governance*, 28(4), 497–515.
- Jordan, A., & Huitema, D. (2014). *Innovations in climate policy: The politics of invention, diffusion, and evaluation* (Vol. 23) (No. 5). Taylor & Francis.
- Kahneman, D., & Tversky, A. (1982). Variants of uncertainty. *Cognition*, 11(2), 143–157.
- Kingdon, J. (1984). *Agendas, alternatives, and public policies*. Little Brown, Boston.
- Knill, C., Steinebach, Y., & Zink, D. (2024). How policy growth affects policy implementation: bureaucratic overload and policy triage. *Journal of European Public Policy*, 31(2), 324–351.
- Lascoumes, P., & Le Galès, P. (2007). Introduction: Understanding public policy through its instruments—from the nature of instruments to the sociology of public policy instrumentation. *Governance*, 20(1), 1–21.
- Maggetti, M., & Gilardi, F. (2016). Problems (and solutions) in the measurement of policy diffusion mechanisms. *Journal of Public Policy*, 36(1), 87–107.
- Mahoney, J., & Thelen, K. (2010). A theory of gradual institutional change. *Explaining institutional change: Ambiguity, agency, and power*, 1(1).
- MEC. (2019). *Sumário Executivo do Relatório da Consulta Pública do Ensino Médio*. Ministério da Educação.
- MEC. (2022, November 8). *Portaria No. 865, de 8 de novembro de 2022*. [https://www.gov.br/mec/pt-br/novo-ensino-medio/pdfs/DOU\\_da\\_Portaria\\_n\\_865\\_de\\_2022.pdf](https://www.gov.br/mec/pt-br/novo-ensino-medio/pdfs/DOU_da_Portaria_n_865_de_2022.pdf). (Online; accessed 20 April 2024)

- MEC. (2024). *Histórico da BNCC*. <http://basenacionalcomum.mec.gov.br/historico>. (Online; accessed 10 April 2024)
- Merriam, S. B., Johnson-Bailey, J., Lee, M.-Y., Kee, Y., Ntseane, G., & Muhamad, M. (2001). Power and positionality: Negotiating insider/outsider status within and across cultures. *International journal of lifelong education*, 20(5), 405–416.
- Mukherjee, I., & Howlett, M. P. (2015). Who is a stream? Epistemic communities, instrument constituencies and advocacy coalitions in multiple streams subsystems. *Epistemic Communities, Instrument Constituencies and Advocacy Coalitions in Multiple Streams Subsystems (April 10, 2015)*. Lee Kuan Yew School of Public Policy Research Paper(15-18).
- Mukhtarov, F. (2014). Rethinking the travel of ideas: Policy translation in the water sector. *Policy & Politics*, 42(1), 71–88.
- Mundy, K., & Verger, A. (2015). The World Bank and the global governance of education in a changing world order. *International Journal of Educational Development*, 40, 9–18.
- Munoz-Najar, A., Gilberto Sanzana, A. G., Hasan, A., Cobo Romani, J. C., Azevedo, J. P. W. d., & Akmal, M. (2022). *Remote learning during the global school lockdown: Multi-country lessons*. World Bank Group.
- NEES. (2024). *Policy brief Rede de Inovação para a Educação Híbrida (RIEH): Uma iniciativa para equalizar a capacidade de oferta de educação híbrida das secretarias estaduais de educação*. Núcleo de Excelência em Tecnologias Sociais/Universidade Federal de Alagoas. (Unpublished manuscript)
- Obinger, H., Castles, F. G., & Leibfried, S. (2005). Introduction: Federalism and the welfare state. In *Federalism and the welfare state: New world and European experiences* (pp. 1–50). Cambridge University Press Cambridge.
- OECD. (2023). *Pisa 2022 results (volume i): The state of learning and equity in education*.
- Orenstein, M. A. (2008). *Privatizing pensions: The transnational campaign for social security reform*. Princeton University Press.
- Palhares, I. (2023, March 25). *Itinerários do novo ensino médio são impostos e até sorteados aos alunos*. <https://www1.folha.uol.com.br/educacao/2023/03/itinerarios-do-novo-ensino-medio-sao-impostos-e-ate-sorteados-aos-alunos.shtml>. (Online; accessed 30 October 2023)
- Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. Sage publications.
- Peroni, V., Vidal, M., Caetano, M. R., & Arelaro, L. R. G. (2019). BNCC: Disputa pela qualidade ou submissão da educação? *Revista Brasileira de Política e Administração da Educação*, 35(1), 35–56.
- Pierson, P. (2000). Increasing returns, path dependence, and the study of politics. *American political science review*, 94(2), 251–267.
- Plank, D. (2016). *Base Nacional Comum Curricular 2016: Parte I: Implementação da BNC: Lições do “Common Core”*. [https://lemanncenter.stanford.edu/sites/default/files/Implementacao%20merged%20Portuguese%283%29\\_0.pdf](https://lemanncenter.stanford.edu/sites/default/files/Implementacao%20merged%20Portuguese%283%29_0.pdf). (Online; accessed 20 April 2024)
- Rasheed, R. A., Kamsin, A., & Abdullah, N. A. (2020). Challenges in the online component of blended learning: A systematic review. *Computers & Education*, 144, 103701.
- RIEH. (2023a). *1ª EXPO Presencial da RIEH*. <https://rieh.nees.ufal.br/por-dentro-da-rieh/1-expo-presencial-da-rieh-um-encontro-inspirador-sobre-educacao-hibrida/>. (Online; accessed 28 May 2024)
- RIEH. (2023b). *RIEH lança game híbrido para avançar nos processos de implementação*. <https://rieh.nees.ufal.br/por-dentro-da-rieh/a-nova-fronteira-da-educacao-ufal-realiza-aula-inaugural-da-especializacao-em-gestao-de-politicas-publicas-para-educacao-hibrida/>. (Online; accessed 29 May 2024)

- RIEH. (2024a). *A importância da consulta pública na educação híbrida*. <https://rieh.mec.gov.br/por-dentro-da-rieh/a-importancia-da-consulta-publica-na-educacao-hibrida/>. (Online; accessed 30 May 2024)
- RIEH. (2024b). *Normatização da Educação Híbrida e da RIEH no Brasil 2021-2023*. Núcleo de Excelência em Tecnologias Sociais/Universidade Federal de Alagoas. (Unpublished manuscript)
- RIEH. (2024c). *A nova fronteira da Educação*. <https://rieh.nees.ufal.br/por-dentro-da-rieh/a-nova-fronteira-da-educacao-ufal-realiza-aula-inaugural-da-especializacao-em-gestao-de-politicas-publicas-para-educacao-hibrida/>. (Online; accessed 29 May 2024)
- RIEH. (2024d). *RIEH em números*. Núcleo de Excelência em Tecnologias Sociais/Universidade Federal de Alagoas. (Unpublished manuscript)
- Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (2013). *Qualitative research practice: A guide for social science students and researchers*. Sage.
- Rodriguez, M. R. B., Romani, J. C. C., Munoz-Najar, A., & Ciarrusta, I. A. S. (2022). *Remote learning during the global school lockdown: Multi-country lessons*. World Bank Group.
- Sabatier, P. A. (1987). Knowledge, policy-oriented learning, and policy change: An advocacy coalition framework. *Knowledge*, 8(4), 649–692.
- Sabatier, P. A., & Jenkins-Smith, H. C. (1993). *Policy change and learning: An advocacy coalition approach*. Westview Press.
- Sahlberg, P. (2016). The global educational reform movement and its impact on schooling. *The handbook of global education policy*, 128–144.
- Salamon, L. M. (1989). *Beyond privatization: The tools of government action*. The Urban Insiteute.
- Schneider, A., & Ingram, H. (1988). Systematically pinching ideas: A comparative approach to policy design. *Journal of public policy*, 8(1), 61–80.
- Schweisfurth, M. (2019). Qualitative comparative education research: Perennial issues, new approaches and good practice. In L. E. Suter, B. Denman, & E. Smith (Eds.), *The SAGE handbook of comparative studies in education* (pp. 258–268). SAGE.
- Seeleib-Kaiser, M. (2008). Welfare state transformations in comparative perspective: shifting boundaries of ‘public’ and ‘private’ social policy? In *Welfare state transformations: Comparative perspectives* (pp. 1–13). Springer.
- Segatto, C. I., & Abrucio, F. L. (2016). A cooperação em uma federação heterogênea: O regime de colaboração na educação em seis estados brasileiros. *Revista Brasileira de Educação*, 21(65), 411–429.
- Shipan, C. R., & Volden, C. (2008). The mechanisms of policy diffusion. *American journal of political science*, 52(4), 840–857.
- Silva, M. R. d. (2018). A BNCC da reforma do ensino médio: O resgate de um empoeirado discurso. *Educação em revista*, 34, e214130.
- Silverman, D. (2021). Doing qualitative research. *Doing qualitative research*, 1–100.
- Simmons, B. A., & Elkins, Z. (2004). The globalization of liberalization: Policy diffusion in the international political economy. *American political science review*, 98(1), 171–189.
- Simons, A., & Voß, J.-P. (2018). The concept of instrument constituencies: Accounting for dynamics and practices of knowing governance. *Policy and Society*, 37(1), 14–35.
- Souza, A., & Sousa, A. (2022). *Guia de implementação da Rede de Inovação para Educação Híbrida*. Universidade Federal de Alagoas (UFAL).

- Spring, K., & Graham, C. (2017). Thematic patterns in international blended learning literature, research, practices, and terminology. *Online Learning Journal*, 21(4).
- Stone, D. (2017). Understanding the transfer of policy failure: Bricolage, experimentalism and translation. *Policy & Politics*, 45(1), 55–70.
- Streeck, W., & Thelen, K. (2005). *Beyond continuity: Institutional change in advanced political economies*. Oxford University Press.
- Thelen, K. (2003). Insights from comparative historical analysis. *Comparative historical analysis in the social sciences*, 208–40.
- Thelen, K. (2009). Institutional change in advanced political economies. *British Journal of Industrial Relations*, 47(3), 471–498.
- Timmermans, S., & Tavory, I. (2012). Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological theory*, 30(3), 167–186.
- Tondeur, J., Krug, D., Bill, M., Smulders, M., & Zhu, C. (2015). Integrating ICT in Kenyan secondary schools: an exploratory case study of a professional development programme. *Technology, Pedagogy and Education*, 24(5), 565–584. (Publisher: Taylor & Francis)
- Tondeur, J., Petko, D., Christensen, R., Drossel, K., Starkey, L., Knezek, G., & Schmidt-Crawford, D. A. (2021). Quality criteria for conceptual technology integration models in education: bridging research and practice. *Educational Technology Research and Development*, 69(4), 2187–2208.
- Topping, K. J., Douglas, W., Robertson, D., & Ferguson, N. (2022). Effectiveness of online and blended learning from schools: A systematic review. *Review of Education*, 10(2), e3353.
- TPE. (2022). *Quatro anos de descaso com a Educação*. <https://todospelaeducacao.org.br/noticias/mec-jair-bolsonaro-descaso-com-a-educacao-basica/>. (Online; accessed 24 April 2024)
- TPE. (2024, march). *Análise sobre as mudanças no Novo Ensino Médio aprovadas na Câmara dos Deputados*. <https://todospelaeducacao.org.br/wordpress/wp-content/uploads/2024/03/nota-tecnica-mudancas-novo-ensino-medio-camara-todos-pela-educacao-marco24docx.pdf>. (Online; accessed 05 May 2024)
- UNESCO. (2023). *Global education monitoring report 2023: Technology in education – a tool on whose terms?* Paris, UNESCO.
- Van de Werfhorst, H. G., & Mijs, J. J. (2010). Achievement inequality and the institutional structure of educational systems: A comparative perspective. *Annual review of sociology*, 36, 407–428.
- Vazquez, D. A. (2005). Desequilíbrios regionais no financiamento da educação: A política nacional de equidade do FUNDEF. *Revista de Sociologia e Política*, 149–164.
- Verger, A. (2016). The global diffusion of education privatization. In *The handbook of global education policy* (p. 64–80). John Wiley & Sons, Ltd.
- Verger, A., & Fontdevilla, C. (in press). Ongoing directions in global studies in education policy: Something old, something new, something borrowed. In L. Cohen-Vogel, J. Scott, & P. Youngs (Eds.), *Handbook of education policy research*. American Educational Research Association.
- Verger, A., Parcerisa, L., & Fontdevila, C. (2019). The growth and spread of large-scale assessments and test-based accountabilities: A political sociology of global education reforms. *Educational Review*, 71(1), 5–30.
- Volman, M., Van Eck, E., Heemskerk, I., & Kuiper, E. (2005). New technologies, new differences. gender and ethnic differences in pupils' use of ict in primary and secondary education. *Computers & Education*, 45(1), 35–55.
- Voß, J.-P., & Simons, A. (2014). Instrument constituencies and the supply side of policy innovation: The social life

- of emissions trading. *Environmental Politics*, 23(5), 735–754.
- World Bank. (2017, December 14). *Programa para Resultados no Brasil vai apoiar a implementação da Reforma do Ensino Médio, beneficiando cerca de 2,4 milhões de estudantes*. <https://www.worldbank.org/pt/news/press-release/2017/12/14/brazil-program-for-results-supports-upper-secondary-education-reform>. (Online; accessed 10 May 2024)
- Wright, D. S. (1988). *Understanding intergovernmental relations*. Brooks/Cole Pub Co.
- Xu, Z., Zhao, Y., Liew, J., Zhou, X., & Kogut, A. (2023). Synthesizing research evidence on self-regulated learning and academic achievement in online and blended learning environments: A scoping review. *Educational Research Review*, 100510.
- Yang, S., Carter Jr, R. A., Zhang, L., & Hunt, T. (2021). Emanant themes of blended learning in K-12 educational environments: Lessons from the Every Student Succeeds Act. *Computers & Education*, 163, 104–116.
- Zapp, M. (2021). The authority of science and the legitimacy of international organisations: Oecd, unesco and world bank in global education governance. *Compare: A Journal of Comparative and International Education*, 51(7), 1022–1041.
- Zehavi, A. J. (2012). Veto players, path dependency, and reform of public aid policy toward private schools: Australia, new zealand, and the united states. *Comparative Politics*, 44(3), 311–330.

## 9 Appendix

### 9.1 Methodological details of interviews

Table 7: Data collection snapshot - Detailed

Code	Unit of analysis	Description	Type of interview	Inter- viewees	Duration
ST_1	Primary	State policymaker - North	Remote, individual	1	00:34:32
ST_2	Primary	State policymaker - North	Remote, individual	1	00:41:37
ST_3	Primary	State policymaker - Southeast	Remote, individual	1	00:26:11
ST_4	Primary	State policymaker - Northeast	In-person, individual	1	00:32:54
ST_5	Primary	State policymaker Northeast	In-person, individual	1	00:33:44
ST_8	Primary	State policymaker - Northeast	In-person, group	2	00:41:00
ST_7	Primary	State policymaker - South	Remote, group	3	00:52:11
ST_8	Primary	State policymaker - Southeast	In-person, group	7	01:32:53
ME_1	Secondary	MEC Policymaker	Remote, individual	1	00:46:22
WB_1	Secondary	WB Consultant	Remote, individual	4	00:50:02
NE_1	Secondary	NEES Researcher	Remote, individual	3	00:36:04
NE_2	Secondary	NEES Researcher	Remote, individual	8	00:49:08
NE_3	Secondary	NEES Researcher	Remote, individual	1	0:44:18
NE_4	Secondary	NEES Researcher	Remote, individual	1	0:53:00
NE_5	Secondary	NEES Researcher	Remote, individual	1	00:34:25
NE_6	Secondary	NEES Researcher	Remote, individual	1	1:01:00
NE_7	Secondary	NEES Researcher	Remote, individual	1	1:10:19
NE_8	Secondary	NEES Consultant	Remote, individual	1	1:15:43
NE_9	Secondary	NEES Consultant	Remote, individual	1	0:55:15
NE_10	Secondary	NEES Consultant	Remote, individual	1	0:51:46
NE_11	Secondary	NEES Consultant	Remote, individual	1	1:03:16
NE_12	Secondary	NEES Consultant	Remote, individual	1	0:58:16
NE_13	Secondary	NEES Consultant	Remote, individual	1	1:09:54
<b>Total</b>				<b>32</b>	<b>19:33:50</b>

Note. Own work.

## 9.2 Fieldwork photos

Figure 6: Fieldwork photos: In-person interviews - Southeast state



*Note.* Own work.

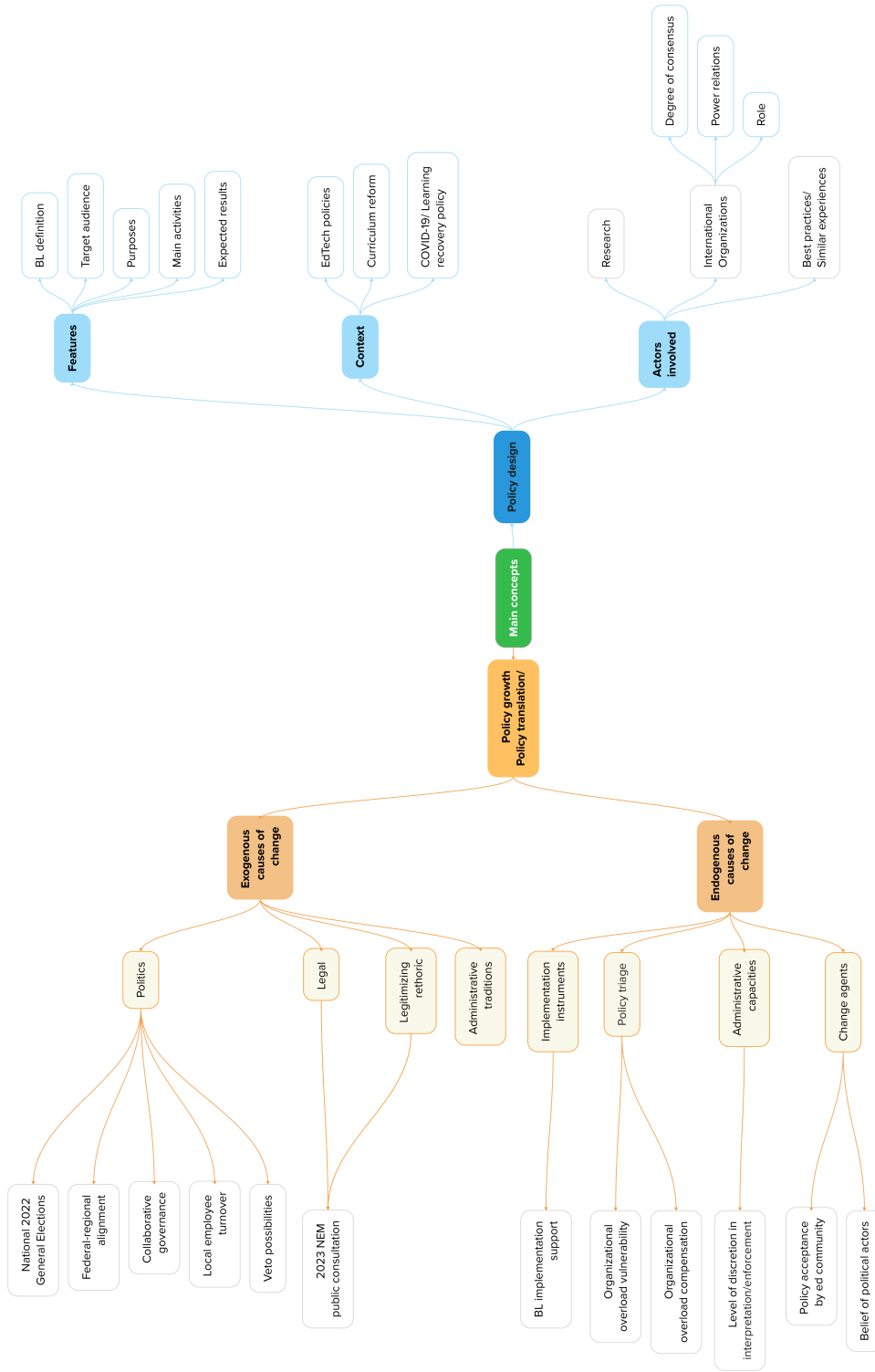
Figure 7: Fieldwork photos: In-person interviews - Northeast state



*Note.* Own work.

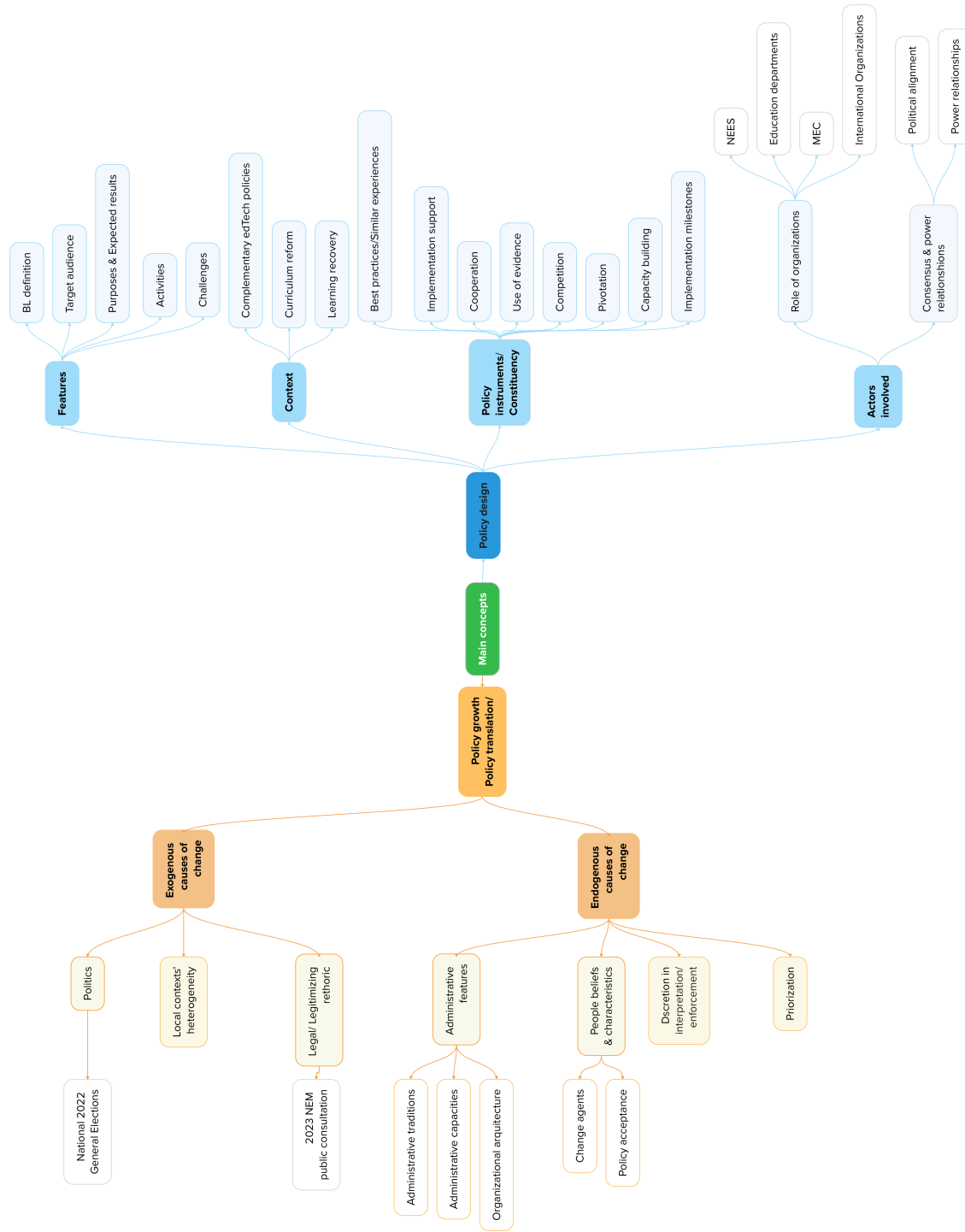
## 9.3 Codebook

Figure 8: Codebook development process - Phase 1



Note. Own work.

Figure 9: Codebook development process - Phase 2



Note. Own work.