Teacher training reform in French-speaking Belgium: A controversial translation process

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Abstract

A major reform of teacher training has been underway for the past three decades in French-speaking Belgium, in response to the low quality of teacher training and the consequences for school teaching and learning deemed to be in deep crises. Using a number of eclectic methods (metaphors, typologies, timelines, network maps), we map controversies that arise during four steps of the policy translation process—problematization, interessement, enrolment and mobilization—by various types of actors (people, texts, working groups, institutions, etc.). Scientific and pedagogical problematizations framed by two interest groups of field level policy actors can produce objects and devices that are transformed and negotiated by political and administrative actors. However, the translation process is rendered controversial and complex as political decision-making is also flavored with backdoor political interests that are negotiated. Administrative policy actors in stakeholder institutions are trying to barter their institutional "share" in the reform implementation, adding some operational problems on the level of organizing the reform, thus reframing some of the original objectives.

Introduction: Contextualizing teacher training reform in French-speaking Belgium

In this paper, we are accounting for genesis of the teacher training reform policy in French-speaking Belgium. As a response to the Bologna declaration, a host of European countries have launched since 1999[1] major reforms in order to achieve "greater compatibility and comparability of the systems of higher education" (Witte et al., 2008). Belgium is no exception in this movement of harmonizing degree systems in various institutions. In French-speaking Belgium,[2] which we shall

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henceforth call Federation Wallonia-Bruxelles (FWB), the most recent Bologna-related reform package includes a major reform of initial teacher training. It has been progressively built and planned since the last three decades, based on collaborative work between various groups of actors coming from different institutions.[3] The French-speaking Belgian Higher Education landscape thus unites 6 Universities, 15 Higher Education Teacher Training Colleges, and 13 Art Schools, which are concerned directly by the teacher training reform and which are now being regrouped around five regional (and political) poles.

The object of the reform, which is the *teaching profession*, is negotiated throughout the policy genesis and the following questions are at the heart of this process; what kind of skills and competences do teachers require in order to tackle a lack of quality in fundamental education and school failure of students; how to better equip them in order to meet the challenges of a new diverse social school context and of the development of science and technology; how will they be able to better manage classrooms?[4]

Broadly, the teacher training reform proposes to improve the overall quality of teacher training in FWB (Federation Wallonia-Bruxelles[5]), by;

- prolonging the Bachelor degree for pre-school, primary, and secondary school teachers from 3 to 4 years, and transforming it into a Master's degree (level 7);

- and involving Universities and Higher Education Colleges in a joint training and degree to improve the link between research-based education theory and reflexive teaching practice.

However, after having been decreed in 2019,[6] the policy implementation was adjourned in 2020 with a 3-year delay, coming into vigor in the academic year of 2023–24. Amidst political (non) decision-making and budgetary tensions, concerned actors and organizations, such as Universities and Higher Education Training Colleges voice the ambiguity of the policy through scientific articles, white papers, press interviews, etc. (Demeuse et al., 2018). The controversies arising from the content, planning and implementation of this reform, led us to undertake a policy study, which we account for in this paper.

We propose studying the policy genesis period (roughly 10 years) through the theoretical lens of translation (Callon, 1984): problematization, interessement, enrolment and mobilization. On the one hand, the reform involves many different educational institutions with their own histories, backgrounds, missions, and teaching professionals. We mainly focus on four types of institutional groups of actors, which are 1) Universities, 2) Higher Education Teacher Training Colleges, 3) the Higher Education Ministry and 4) an interinstitutional representative higher education organization (ARES[7]). We ask the following questions: who "thinks" the reform, who "promotes" these ideas, who becomes enrolled concretely and in what way, and how do these ideas translate into political and administrative terms? In this sense, we are interested in mapping a policy movement. To this purpose, *translation* is particularly suited, as it entails how ideas move, how interests change, how roles are identified, how they are shifted and transported and are mobilizing yet other actors to create a network (Ball and Juneman, 2012; Callon, 1984). What kind of devices (boundary objects, Star and Griesemer, 1989) are created during this process and how do they contribute to the movement?

A further concern of this paper is what kind of problems are at the heart of the policy genesis? During this policy movement, controversies arise. Accounting for *controversies* (Venturini, 2010; Venturini and Latour, 2010) can mean identifying constructionist "doors" that need to be traversed by actors in order to continue the policy movement, through perhaps a policy solution or negotiation.

Thus, although this paper draws on the French-speaking Belgian case, the reform under study puts a lens on a regional translation of a European policy, leading to institutional challenges and changes (Maguire, 2014; Perez-Roux, 2012). This can have scope beyond Belgium for understanding how Bologna-related reforms are being translated and processed in, between and through institutions (Czarniawska, 2008). Indeed, the decree problematization in French-speaking Belgium (Degraef et al., 2012) proposes a "successful" collective action plan for Belgian Higher Education institutions in reforming teacher training. It advises to do so by rethinking "institutions" (Dubet, 2002) in order to overcome a mainly organizational vision and the need to think of themselves more as "Institutions (with a capital letter), without underestimating or approaching organizational contingencies in an amateurish way." (Degraef et al., 2012: 81). This points to a tension between institutional and organizational concerns.

This paper addresses the following question: How are Belgian institutions involved in the reform process translating (organizing) this overarching policy call of Institutional (capital letter) change? In order to improve teacher training in response to the overriding problem of the teaching profession deemed being in deep crises (Maroy, 2008)?[8] In order to address this dual call, institutional and the organizational, we propose using ANT (Callon, 1984; Venturini and Latour, 2010) and related theories on networks (Ball and Juneman, 2012; Czarniawska, 2017), as we elaborate in the following paper.

Theoretical framework

Czarniawska and Sevon (2011) proposes that a key driver of organizational change can be imitation (post-Bologna). As will be discussed, the teacher training reform is intimately linked with other major higher and basic education reforms in French-speaking Belgium, such as the landscape decree,[9] and the pact for excellence reform,[10] aiming at improving the quality of school education (Croxford et al., 2009),[11] as is the case in several European countries after Bologna (Witte et al., 2008). The local translation of these Bologna-related reforms produces various *controversies*.[12] (Latour, 2010; Venturini, 2010). Local institutional actors are trying to find public solutions to a diverse set of ideological and institutional problems (Latour, 2005) Thus, it becomes important to account for the kind of local problems and the institutional actors these problems will interest, enroll and mobilize (Callon, 1984). Moreover, root-level organizational policy actors or "street-level bureaucrats" (Freeman and Sturdy, 2009; Lipsky, 1980) are producing and mobilizing policy texts (decrees, research reports, grids, charts and programs), which are intermediary devices or boundary objects in the chain of translation processes (Star and Griesemer, 1989).[13]

Policy genesis: A translation process

Venturini (2009) speaks about how controversies are reduction-resistant, meaning that rather than disagreeing on answers, actors cannot even agree on questions. Callon (1984) would call this a *difficulty in reaching common problematization*. As higher education actors discuss about how to introduce initial teacher training reform into their institutional structures and programs, they discover that they cannot agree on what teachers need to know in the first place. As soon as they can formulate a common question, other controversies crop up. *How do we train a good teacher for teaching students today?* What is "how," who is "we," what does it mean to "train," what means "good," and what is a "teacher," what is "teaching," who are the "students," and what is "today"? What we can observe is that problematization starts out with the *content of the teaching profession* ("what"), then moves on to *financing and approving the reform* ("who") then shifts toward the

feasibility ("how," organizational, financial, institutional). Thus, we observe three parallel streams of problematization—ideological (scientific and pedagogical), political and administrative—carried out by at least three different sets of (meta-[14]) interest groups, appearing at different stages of the policy genesis.

We can observe the second step, *interessement* (persuasion of one's point of view by force, seduction or solicitation, Callon, 1984) in the policy genesis. Actors (self-assigned or assigned experts, such as academics, didactical teaching staff, pedagogy scientists, pedagogical councilors, directors, Higher Education Ministry officials, deans, rectors etc.) form various intra-and inter-institutional working groups. These unite different series of problematization of the teaching profession and teacher training, and unite different institutional interests.

They also create a set of new interest devices (boundary objects, Star and Griesemer, 1989), such as organizational charts and program- and projection grids that undergo a series of modifications and adjustments as the decree modifies. These devices (grids, research reports, programs, notes) are carrying actors as spokespersons: they are living through the device itself (Callon, 1984; Star and Griesemer, 1989). People are not prisoners of spatio-temporal limits, and their contributions which take form in objects or devices are carried on in the policy movement. The device is rendered powerful, as it can cross space, time and borders. In this sense, *enrolment and mobilization* (Callon, 1984) through devices can happen. It makes people mobile, and mobilizes them, and mobilizes others. They become part of the network, convincing (or not) other actors of the grids or of the research output propositions, in their turn adding to or transforming the grids and programs (Ball and Juneman, 2012).

Methods: Mapping controversies

We propose using Social Cartography (Latour, 2005; Latour, 2004) to map the controversies arising from the steps "problematization, interessement, enrolment and mobilization" (Callon, 1984). Venturini (2010) and Venturini (2010) postulate,[15] "social cartography is not meant to close controversies, but to show that they may be closed in many different ways." (2010: 11). In this sense, this study on the teacher training reform in French-speaking Belgium is not pretending to put an end or propose solutions other than those forwarded by the various actors involved in this study.

Eclectic and diverse methods and approaches were deployed to map controversies with various kinds of maps: we use policy discourse analysis (Czarniawska-Joerges, 1998; Fairclough, 2013; Wodak and Meyer, 2001), metaphors[16] (Goschler and Darmstadt, 2005), timelines (Becker, 2007; Berends, 2011; Denzin and Lincoln, 2003; Ezzy, 2002), and network maps (Czarniawska, 2008) (Table 1).

Different empirical and secondary data are analyzed and represented in these four maps:

Critical discourse analysis (Wodak and Meyer, 2001) was applied to the following secondary and gray data; scientific literature regarding teacher training and education; press and white papers; respective legal texts; formal notes and plans drafted by temporary working groups (involving various "experts" from different institutions); and scientific reports commissioned by the Higher Education Ministry concerning the reform for teacher training since 2013.

Secondly, we retraced the creation of formal and informal working—and evaluation group(s) created since 2010, including those commissioned by the government for the policy assessment process. We look at the composition, objectives, and outputs of these groups.

Thirdly, we undertook interviews with fifteen key actors from two Higher Education Teacher Training Colleges, five Universities, the Higher Education Ministry and the Academy of Research and Higher Education (ARES), all involved in the policy process in the Federation Wallonia-Bruxelles,

Table 1. Types of maps, data, and methods.

Maps/Types of Data	Secondary data/gray data	Policy genesis and historical data (empirical and secondary)	Interviews (empirical)	Methods for mapping controversies
Map 1 "Timeline of the Reform since 2010" Policy movement; Problematization, interressement, enrolment, mobilization	White papers in journals, Policy texts Scientific literature Research tender reports	Dates of Decree texts that were issued/Dates of notes and proposals by members of institutions and of government	Key moments were identified given by interviewees who participated in the policy genesis	Timeline (Becker, 2007; Berends, 2011; Denzin and Lincoln, 2003; Ezzy, 2002) CDA (Czarniawska-Joerges, 1998; Fairclough, 2013; Wodak and Meyer, 2001)
Map 2 "Key events, working groups and devices" Policy involvement: enrolment and mobilization	Policy texts Policy devices that are outputs of working groups (such as grids, charts, programs, powerpoint presentations, meeting minutes) Notes to the government Scientific reports	Working groups were identified in different organizations and inter-organizations	Mentions of types of devices used and constructed and sharing of confidential data by interviewees.	Metaphors (Goschler and Darmstadt, 2005; Skara, 2004) Network maps (Czarniawska, 2008)
Map 3 "Working group dynamics" Policy movement and policy involvement: interressement, enrolment and mobilization	Frequency and distribution of working groups was reconstructed using website data from different institutions.	Working groups were identified in different organizations and inter-organizations	Frequency and distribution of working groups was reconstructed using also confidential data given by interviewees.	
Map 4 "Professional Body of the teacher" Controversies ("doors"): Problematization; Policy doors	Policy texts Policy devices (such as grids, charts, programs, ppt presentations, meeting minutes etc.)	Working groups were identified in different organizations and inter-organizations	Interviewees' accounts of the policy problematization and types of interests.	

asking them about: their type of engagement; their work within the reform; their roles; their vision of the reform; the dynamics of the process they experienced; the kind of working groups they established; what devices were used or created; and what kind of actors they related with.[17] These actors comprise the following characteristics regarding institutional affiliation, type of engagement in the reform and personal characteristics (Table 2).

These three types of data are assessed to explore the two main research questions; firstly, how the four steps of translation (Callon, 1984) are carried out in the timeline of roughly a decade, and what problems and controversies (Latour, 2010; Venturini, 2009) they generate. Secondly, how diverse groups of actors are represented in the reform policy genesis (networks, Ball and Juneman,

Table 2. Interviewee characteristics, functions, engagements, and affiliations.

Interviewee	Institutional affiliation (anonymized)	Function	Engagement in reform	Engagement in reform since
Int1 (Female)	University A	Academic (Professor)	Mission "reform" appointed by rector	2005
Int2 (Male)	University B	Academic (Professor)/Director of research center	Mission "reform" through informal engagement in GT40	2005
Int3 (Male)	University C	Academic (Professor)	Research on teacher training/Co-Founder of GT40	2005
Int4 (Male)	University D	Dean/Academic (Professor)	Administrative discussions/GT40	2005
Int5 (Female)	Higher Education College E (Pedagogical Branch)	Reform counselor/Maître assistant (teaching staff)	Organizing the reform in the college and counseling directorial team	2018
Int6 (Female)	Higher Education College F (Pedagogical Branch)	Reform counselor/Assistant Professor	Organizing the reform in the college and counseling directorial team	2019
Int7 (Male)	Higher Education College E (Pedagogical Branch)	Director/Coordinator of internal and external working groups	Spokesperson with university A/coordinator of working groups	2019
Int8 (Female)	University A	Reform counselor/Academic (Professor)	Organizing the reform in the college and counseling rectoral team and faculty deans/coordinating with Int7	2018
Int 9 (male)	Academy of Research and Higher Education (ARES)	President	Coordinating the overall process of representation of various institutions in ARES	2018
Int 10 (male)	Academy of Research and Higher Education (ARES)	Officer in "Cell for Teacher Training Reform"	Coordinating the representation and meetings of various institutions involved in teacher training reform process	2019
Int 11 (male)	Higher Education College F (Pedagogical Branch)	Director of pedagogical branch	Coordination and organization of pedagogical branch	2020
Int 12 (female)	University A	Academic in Education Sciences and Psychology Department	Member of GT40 since its beginnings	2005
Int 13 (male)	University A	Dean/Academic in Social Sciences Department	Administrative discussions and representation of department in reform negotiations	2018
Int 14 (male)	Higher Education Ministry of Federation Wallonia-Bruxelles Government	Former advisor to Higher Education Minister	Political organization and negotiations in reform process, co-writer of 2019 decree	2005
Int 15 (female)	Higher Education College E (Pedagogical and Didactics Branch)	Assistant Professor in Mathematics and Didactics	Member of internal discussion groups created for the teacher training reform process	2018
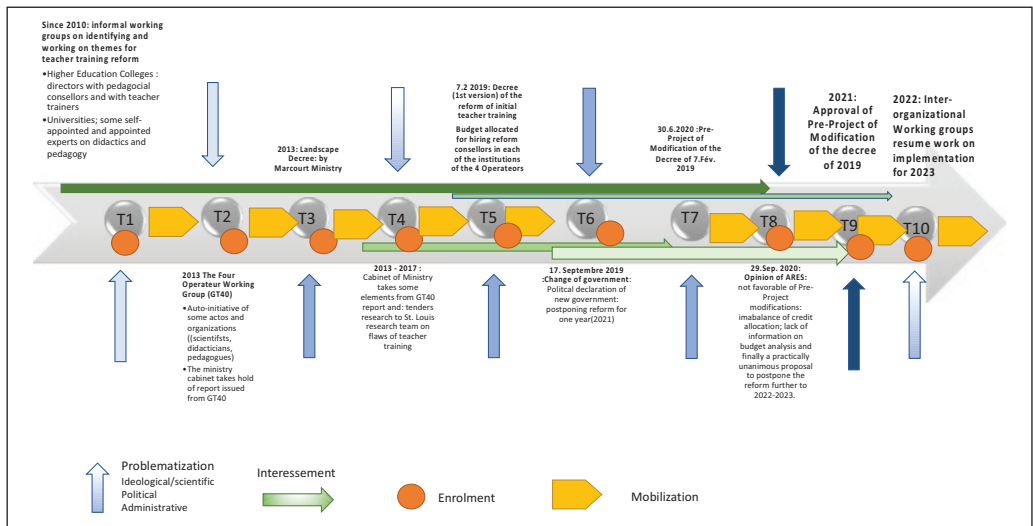
Map 1. Timeline of the reform since 2010; mapping key events or moments of reform, date/types of approaches/types of actors/four stages of translation at these key moments and in between/grade of problematization/moment of engagement of different interest groups, enrolment of different types of actors, mobilization of other types of actors through devices.

2012), and whether their interests are taking form in concrete interest devices (Callon, 1984; Star and Griesemer, 1989).

Mapping the genesis: A timeline for the reform process

In order to trace back the different steps in the teacher training policy reform genesis since 2010, we map these steps according to a series of information. Firstly, we group events (T1–T10) according to the number of actors mentioning this activity or event as being important in their personal and institutional engagement in the reform. Dates are reconstructed through policy reports and decrees, as well as through mentions in interviews. Some working groups have been formed before 2010 in a more informal manner, but involving lesser actors.

The timeline also maps the moments and types of problematization, interessement, enrolment and mobilization (the latter of which is also done through devices) occurring during the policy genesis.

From this Timeline (Maps 1 and Map 2) 10 key events are reconstructed and studied through documentation, interview and working group data (T1–T10) (see Research Blog[18]). We can observe the *progressive increase in the type of actors* becoming involved in the policy translation process (Callon, 1984) and *changing dynamics of interests reshuffled in working groups* as well as of the creation and transformation of *organizational devices*. Map 2 (Research Blog) allows us to trace the creation of working groups (WG) and devices (D) in more detail.

First period (T1): Ideological Problematization—interessement and enrolment of higher education institutions—first mobilizing devices

The increase in multiple types of actors ranges from pedagogical working groups (WG1) to scientific working groups (WG2, WG3) in the beginning of our translation period (T1). The

T1: Since 2010 Informal working groups work on identifying themes for teacher training reform (Higher Education Colleges and Universities)

A loose set of actors, involving HE Colleges (HEC) in FWB on the one hand and Universities in FWB on the other hand work separately in *informal working groups* towards identifying themes and problems of teacher education. *HE College working groups in each of the various HEC (WG1)* unite mainly pedagogical directorate and associated working staff, teaching staff as well as pedagogical advisors with in mind mainly the goal of assembling themes that they deem necessary for a teacher training reform. In HEC E (see grid), two workshop days are organized involving all teaching staff at the College, in order to brainstorm and *assemble themes and noteworthy topics (creating a first set of tables and grids)* (D1) for reforming teacher training. The subject of teacher training reform seems according to HEC interviewees to have been a preoccupation for the last three decades for teacher training actors. Meanwhile, the *six universities unite loosely some academics working on higher education and teacher education, pedagogy and didactics from each university (WG2)*. The aim of this loose working group, according to university actor interviewees (see grid, Int1, Int2, Int3, Int4, Int12), is to decide together that it is time for universities to be involved in initial teacher training, which is sofar solely organized by HE Colleges.

WG1: potentially twelve HEC internal working groups, however for the study, only four were effectually identified.
D1: First set of HEC grids pertaining to themes for teacher training to be changed, and program grids
WG2: Inter-university loose working group involving at least six universities

T2: Creation of the Four Operators Working Group (GT4O, *Groupe de Travail 4 Organisateurs*): Higher Education Colleges, Social Promotion Colleges, Art Colleges, Universities

The loose informal working group of university actors sends out a *proposal (D2)* to HE Colleges, Art Colleges and Social Promotion Colleges for a joint collaborative working group; proposing at the same time to be involved jointly in a newly defined teacher training. In 2013 the loose set of actors from the various institutions reform a new working group, naming themselves the *4 operators working group (GT4O) (WG3)*. They begin assembling their various ideas to envisage a teacher training reform to be submitted as a *proposal to the Higher Education Ministry of the Federation Wallonia-Brussels Government (D3) (FBW Higher Ed. Ministry: WG4)*. On the agenda of GT4O formulated as a *note (D4)* are the following themes:

- Unity of the profession: a common training basis for all teaching professions (primary, pre-school, secondary)
- « Tiling » of the initial teacher training program (Cross-level teaching cycles); allowing preschool teachers to teach up to 2nd primary standard, from 3rd primary to 2nd secondary, 3rd secondary to 6th secondary.
- 5 years of initial teacher training leading to a Master's Degree (Level 7)
- Co-Graduation (HE and University joint degree)
- Reinforcement of research-based and reflexive professional development
- Collaboration between Universities and Higher Education Colleges, especially linking educational/social sciences theory with professional practice

WG3: GT4O working group, meeting regularly between 2013 and 2017 at least twice annually.
WG4: Higher Education Ministry Officials assembled in Ministry working group
D2: Proposal from Universities to HEC, Art and Social Promotion Colleges
D3: Proposal to FWB Higher Ed. Ministry

Map 2. *(Continued)*

T3: Landscape decree by Minister Marcourt

Simultaneously to T2, in 2013, the then appointed socialist Minister for Higher Education emits a decree, called the *__landscape decree (D4)__*, proposing a re-landscaping of Higher Education in FWB, following the lines of the Bologna Agreement. Its main features are a harmonizing of the higher education institutions and degrees of Bachelors and Masters, to allow the mobility of students from one type of institution to another according to individual study pathways and requirements. The administration of Higher Education Colleges and Art and Social Promotion Colleges and their degrees offered are to be aligned to the European Higher Education Landscape. Moreover, the decree abolished the previous three large academies (around 3 Universities) in favor of *one Academy of Research and Higher Education (ARES) uniting all Higher Education Institutions WG5)* and introducing *five Higher Education Poles (WG6)* according to regions and regrouping around five university units in FWB the various HEC and Art and Social Promotion Colleges. This decree is insofar directly linked to teacher training reform, as Higher Education Colleges, Art Colleges and Social Promotion Colleges were required to *transform degrees into European degrees (Bachelor and Masters) (D5)*, thus paving the way for transition of students and their mobility toward university-based training. Moreover, Universities were offering *Masters programs in didactic specialization and aggregation (D6)*, allowing discipline-based students to acquire teaching skills, to be able to teach in higher secondary school.

D4: Landscape decree
D5: HEC Degrees progressively transformed into Bachelors and Masters
D6: University based specialized Masters' program in didactics/pedagogy for trainee teachers or established teachers
WG5: ARES
WG6: 5 Higher Education Poles grouped around 9 universities (Bruxelles (2), Hainaut (3), Liège-Luxembourg, Namur (2), Louvain)

T4: Selection of some points from the GT4O note by Ministry and tender appointed to St. Louis university for study on status quo of teacher training in Wallonia-Brussels Federation.

Between 2013 and 2015 a *__note is elaborated and forwarded by the GT4O toward the FWB Higher Education Ministry (D7)__* with the points recommending teacher training reform. The Ministry seizes the note, and tenders a *large-scale study (D8)* to a *research team in St. Louis University in Brussels (WG7)*. The study aims at identifying the lacks and gaps of teacher training in FWB Higher Education institutions. Nothing less than a *thousand actors from the field of teacher training (WG8)*, according to the study, are mobilized to participate in the two-year study (Dufrasne, 2013). The main results discuss the lack of quality of teacher training programs throughout FWB and the requirement of teacher training to be reformed, improving quality. A *series of recommendations (D9)*, reuniting previous recommendations issued by various groups of actors and education-based associations and syndicates are forwarded by the research team. A *follow up committee to the reform (WG9)* is created at the Academy of Research and Higher Education (ARES) uniting the different stakeholder representatives of the reform, such as university rectors, HEC directors and Higher Education Ministry Officials.

D7: Note from GT4O toward FWB Higher Ed. Ministry
D8: St. Louis study
D9: Recommendations from St. Louis study
WG7: Research team of St. Louis university in Bruxelles
WG8: Participants/Practioner in study of St. Louis University
WG9: Follow-up committee pf the reform at ARES

Map 2. *(Continued)*

T5: 1ˢᵗ version of decreeᵇ on reforming teacher training: reform proposal and budget allocation for appointing pedagogical advisors for the reform in each of the four types of organizations.

In 2019, based on a selection of recommendations from the St. Louis study, as well as some points forwarded by the GT4O, the Higher Education Ministry issues a *first decree (D10)* on reforming teacher education. This first version of the decree gathers the following broad proposals:

- Prolonging/upgrading the initial teacher training from 3 years to 5 years (240 Credits), 180 credits for a Bachelor and 60 credits for a Master's degree for pre-school, primary and lower secondary school teachers. A Master's degree with specialization for higher secondary school teachers.

- Cross-level teaching cycles: 1 to 3ʳᵈ Preschool teachers can teach up to 1ˢᵗ and 2ⁿᵈ primary school (S1), 3ʳᵈ pre-school up to 6ᵗʰ Primary school (S2), 5ᵗʰ and 6ᵗʰ Primary school up to 1ˢᵗ, 2ⁿᵈ and 3ʳᵈ secondary school (S3), 3rd – 6th Secondary school (S4).

- A diagnostic test for the mastery of the French language is to be obtained by all trainee teachers. An upgrading of the quality of French teaching for all trainee teachers is proposed.

- A joint degree (Co-graduation) obtained by all trainee teachers through HEC and Universities, as well as Art Colleges and Social Promotion Colleges and Universities.

Moreover, a *follow-up committee (COCOFIEᶜ) (WG10)* is allocated through the Ministry uniting all concerned stakeholders in order to process the reform. A *budget is allocated (D11)* to each stakeholder institution for employing a full-time pedagogical advisor to the reform.

Around during this time, *several interinstitutional working groups (WG11)* are created in each Academic Pole, in order to start joint discussions about how to co-organize the reform between HECs and Universities. And simultaneously, *inner-institutional working groups in Universities and HECs (and probably Art Colleges, although not part of study) (WG12)* are re- or newly launched to discuss the organization of the reform within the organizations, uniting various representative actors from different departments/faculties.

D10: First decree of 2019
WG10: First COCOFIE
WG11: First interinstitutional working groups
WG12: First inner-institutional working groups

T6: Change of government (political shift: from socialist Ministry of Higher Education to Liberal Ministry); political declaration note of new Ministry includes a postponing of teacher training reform to 2021.

Map 2. *(Continued)*

In September 2019, the **FWB changes its government (WG13)**, which now involves a Higher Education Minister (female) from the liberal party. The new FWB government ministers issue a **political declaration (D12)**, in which there is a mention of the intended teacher training reform. This mention elaborates that the process of implementing the reform is delayed by one year (2021). Furthermore, the **Ministry appoints the ARES with the mission (D13)** to:

- "Examine the operational capacity of higher education institutions to implement the reform;
- If necessary, adapt the reform in terms of its modalities and implementation;
- Evaluate the cost of organizing the reform of initial teacher education and its integration into the budgetary trajectory;
- Clarify the status of the diagnostic test in French at the beginning of studies.

The government will also use this period to evaluate the cost of the reform of initial teacher training, which will be extended to four years. The estimate will cover a period of at least 20 years." (p.11, Political Declaration 2019-2024ᵈ)

The important changes to the initial decree are the delay in implementation, but also the declaration of 4 years of initial teacher training to be envisaged instead of 5 years as previously planned.

WG13: New liberal Higher Education Ministry of FWB
D12: Political declaration of new Higher Ed. Ministry and government
D13: Mission from Ministry to ARES

T7: Issue of Pre-project of modifying the 1ˢᵗ version of the decree under discussionᵉ.

In 2020, a **new decree version (pre-project) (D14)** is proposed by the Higher Education Ministry forwarded towards the concerned stakeholders of the reform. The new modified text now includes the points recommended by GT4O and the St. Louis study, however adds the following requirements to the decree:

- Specify the objectives of the initial training, the generic competences of the teacher and the level to be reached at the end of the training;
- Review the composition and missions of the COCOFIE and strengthen the steering of the reform;
- Review and make more flexible the distribution of credits within the training axes;
- Review the pairings to take into account the implementation of the Pact for Excellence in Teaching and to integrate disciplines related to French as a Foreign Language (FLE), French as a Learning Language (FLA), digital technology and cultural education;
- To introduce clarification of the French language proficiency test;
- To increase the density of practical activities in the final year;
- Make the distribution of credits between the partners of a co-degree agreement more flexible;
- To abolish the first cycle of the program leading to the academic degree of "Master in Teaching section 4" and modify the cycle leading to the degree of Master in Teaching section 4 in order to ensure that all objectives of initial teacher education are pursued;
- To take into account the specificities of initial teacher education in the arts.

Changes are therefore suggested as to the length of the training to four years instead of five as intended by GT4O. And as to a practical-based fourth year of training. Also, important changes in credit distributions are proposed whereby universities lose some credits in research-based teaching and gain credits in practice-based teaching.

D14: Modified decree version (2020)

T8: Non-favorable positioning of ARES (Association of Higher Education Institutions of Wallonia-Brussels) towards points of pre-project text: budget allocation and favorable to postponing to 2022.

In 2020, the representative association body ARES assembles and forwards *reactions of the 4 operators (D15)* towards this modified decree proposal, identifying three common complaints towards the Higher Education Ministry:

- An imbalance of credit distribution between the stakeholder organizations (mainly Universities) in the new version.
- A lack of information given to stakeholders concerning the budget to be allocated toward the reform.
- A unanimous desire to postpone the implementation of the reform one year, in 2021.

D15: Reactions of stakeholder Organizations compiled in a note by ARES to Higher Ed. Ministry

T9: 2nd pre-project to decree for reforming Teacher Education is approved by the government: discussions with institutions under way.

The *pre-project to the decree is now approved by the government (D16)*, however with the following additions or changes to the decree text of 2019:

9 categories of changes in the 2019 decree:

1) Objectives and competences to be achieved by all FIE students specified (addition of Education towards life, affective and sexual relationships, gender and media literacy)
2) Revision of composition and role of COCOFIE, steering of the reform
3) Abolition of Bachelors section 4
4) Balance between partners in co-graduation
5) Revision of credits within the training axes
6) Revision of the pairings for section 3 in line with the pact of excellence (another ongoing reform concerned with fundamental education)
7) Clarification of the French language test: addition of credits in the curriculum
8) Distribution of practical activities during the course and supervision: "Professional load" possible after a few validated internship credits, status of the "student teacher" to be defined / professional integration / fight against shortage
9) Abolition of several specialization Masters to keep only 2

D16: Decree 2nd version 2021

Map 2. *(Continued)*

T10: Interorganizational working groups work on implementing the reform for 2023

The *old inter-organizational working groups constituted in 2019 are remobilized and regrouped in January 2022 (WG14)* to work on Sections 1, 2 and 3 (pre-school, primary and lower secondary), as well as another working group on Sections 4 and 5 (higher secondary). Moreover, *two commissions for the implementation of the reform (WG15)* involving representatives of each stakeholder institution are established, one involving more administrative actors and the other the pedagogical councilors of each institution. The members of the working groups are sofar including representatives of involved pedagogical HEC as well as the referent University as per academic pole. The idea is to trickle down the distribution of credits as per faculties within universities according to the competences they can contribute toward the teacher training program, as well as the trickle down to organizing the cycles in each of the concerned HECs. *Institutional internal working groups (WG16)* for thematic courses (pedagogy, didactics, disciplines (sciences, linguistic, historic), social and human sciences, psychology, philosophy and letters, educational sciences) are in the making within the universities, however without yet any distribution of credits and competences for each concerned faculty.

WG14: Interorganizational working groups on S1S2S3 and S4S5: 2 working groups (2 working groups in each Higher Education Pole: 10 interorganizational working groups at least in the whole of FWB)

WG15: Two decision-making commissions with administrative heads and with the Higher Ed. Ministry Officials.

WG16: Institutional inner working groups on S1S2S3 and S4S5 in concerned Universities, and in each of the concerned HEC and Art Colleges (Pole Brussels (12), Namur (7), Louvain (6), Hainaut (9), Liège-Luxembourg (9)): Roughly, at the least 43 internal institutional working groups of concerned stakeholder organizations. Possibly the double number, as inner institutional working groups probably will be split into working on either S1S2S3 or S4S5: so we could also potentially have 86 inner institutional working groups as per organizing. Moreover, in Universities, Masters programs concerning a specialization in "Teacher Trainers" is being launched in Liège. Potentially, this could be the case for all FWB universities (9). So we could be looking at roughly 100 working groups.

Map 2. Key "events" (T1–T10), working groups[a] (WG1-WG 12) and devices (D1–16).[b,c,d,e]

[a]By **working group**, we understand groups of various actors striving to problematize, build, organize and coordinate the reform, or assemble various interest groups

[b]https://www.gallilex.cfwb.be/document/pdf/46261_000.pdf

[c]https://www.gallilex.cfwb.be/document/pdf/46261_000.pdf

[d]http://www.federation-wallonie-bruxelles.be/index.php?eID=tx_nawsecuredl&u=0&g=0&hash=d46c9f4830a54be6e1cd75d62c91dbd4bfd19b73&file=fileadmin/sites/portail/uploads/Illustrations_documents_images/A._A_propos_de_la_Federation/3._Gouvernement/DPC2019-2024.pdf

[e]https://www.gallilex.cfwb.be/document/pdf/50119_000.pdf

problematization is mostly ideological (what kind of teacher training do we require?). With this first set of problems of "what?," a series of actors are interested and enrolled: teacher trainers in HECs (teaching assistants) are enrolled in working days with the theme of "identifying the gaps in teacher training and formulating specific contents and requirements."[19] These workshops are organized by HEC school directors and HEC pedagogical councilors. An important device (D1) is created: a set of grids that identify the needs of HEC programs in terms of skills and competences of trainee teachers. These needs are identified as not covered by existing programs, and a new proposition for an improved teacher training program is drafted. These grids will be mobilized throughout the whole 10-year period at different moments (T1, T2, T4, T5, T5, T6, T8, T9, T10), mobilizing the initial involvement of HEC teacher trainers in the determining of contents, in their turn mobilizing other actors (other HECs, Universities).

Parallelly, university actors, mainly (around 10) educational scientists (academics in pedagogy, sociology and didactics, from six universities) unite in order to discuss university-involvement in initial teacher training. They propose to HECs (note, D2) to collaborate in creating a new joint initial teacher training program and degree. HECs are enrolled in this proposition (see T2, WG3), and jointly mobilize their efforts to produce two notes (D3, D7) to the government in T2 and T4. A successful enrolment of Higher Education Ministry occurs through this joint proposal.

Second period (T2–T6): Political and administrative problematization—enrolment in the Bologna process—and creation of new mobilizing devices

In a second period, in T2 through to T5 we can observe a gradual addition of political actors in working groups (WG4, WG5 and WG6, WG9, WG10), as interorganizational political interest groups are reassembled. These groups will henceforth involve the Higher Education Ministry, as well as teacher syndicates and rectors from universities. These working groups begin to politically problematize teacher training with questions about "who?" will carry out the reform.
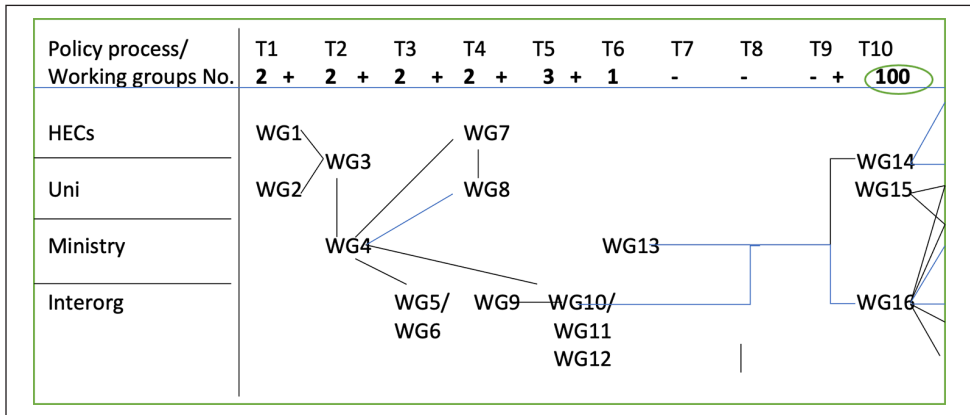
At the same time, various devices are created, such as the landscape decree by the Higher Education minister (D4), which enrolls HECs and Universities in a Bologna reform process, creating new undergraduate and graduate degrees (D5, D6). This seems to slowly slip the institutions into an administrative problematization of "how?." In T4, we see the enrolment of a research group tendered by the Higher Education Ministry to work on a research study concerning teacher training, enrolling in their turn around 1000 actors throughout FWB (teachers, school directors, HEC teacher trainers, University teacher trainers, syndicates, associations etc.) and creating mobilizing devices (research study D8, proposition D9). These enrolments and mobilizations create a new set of ideological ("what?") around teacher training reform.

With the issuing of a first version of the decree for Initial Teacher Training Reform (D10), we see a regrouping of inter- and inner-organizational actors in working groups (WG11 and WG12), starting discussions about "how?" to implement the reform in each and between stakeholder institutions.

In T6, a change of government introduces and enrolls new members of the Higher Education Ministry in the teacher training reform process. They produce a new mobilizing device with their program suggestions and some changes of plans (D12, postponing teacher training reform by 1 year).

Third period (T7–T10): New political enrolment and (re-) mobilization

During a third phase, we notice from T7 to T8 a relative stability in the type of actors involved in the process, whereby the interinstitutional Higher Education organization ARES is enrolled and

Policy process/ Working groups No.	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10
	2 +	2 +	2 +	2 +	3 +	1	-	-	- +	100

HECs   WG1   WG7   WG14
WG3   WG15
Uni   WG2   WG8
Ministry   WG4   WG13   WG16
Interorg   WG5/   WG9   WG10/
WG6   WG11
WG12

Map 3. Working group dynamics.

mobilized as well as mobilizing (D13[20]). They take a lead in communicating with the new Higher Education Ministry (WG13).

With the governmental approval of the pre-project of the (new version) decree (D12), from T9 to T10, important changes take place in the regrouping and reassembling of scientific and administrative interest groups. D12 revives old and mobilizes new working groups (WG14, WG15, WG16), as the implementation phase of the policy process kicks in.

Working groups and devices

The mobilizing devices are classified as involving **proposals and notes** (D 1, 2, 3), gradually leading to **propositions and decrees texts** (D4, D5, D6, D10, D12, D13, D14, D16), amongst which, only one **budget allocation** is identified (D11[21]). However, these decree text developments are nurtured by new **scientific and stakeholder proposals and reactions** (D7, D8, D9, D15) by reassembled scientific and administrative actors in interorganizational interest groups.

The shuffling network dynamics of institutions (involving only HECs and Universities as implementing stakeholder organizations for this study) regrouped in various working groups can be illustrated in this approximative Map 3.

What we can observe is a steady apparition of other types of actors and interest groups to transform and interact with the original two interest groups, HEC actors (teacher trainers, directors, councilors) and University actors (academics). What is initially a scientific and pedagogical preoccupation, soon transforms into an interorganizational scientific and pedagogical working group, presenting a proposal to the Higher Education Ministry. These tender in their turn a scientific team to interrogate people in the field of teacher training. A first decree is issued, resulting in a (collective) reaction by the ARES (interinstitutional organization). It triggers a rewriting of the decree by the Higher Education Ministry in two parts, finally resulting in an interessement and re-enrolment of previous actors (HEC and University). We can see a kind of standstill in terms of networking dynamics in T7 and T8, which coincides with the period of the Covid pandemic in 2019 and 2020. However, whether the pandemic has contributed to slowing down the decision-making process of the ministry remains shady.

Interestingly, we traced moments of enrolment throughout the period from T1 to T10, *excepting in T7*. The change of government that should partially account for a lapse in decision-making

at that period of the timeline, as new members of government and ministries are taking up the reform file. Moreover, with D7, the new government's program is met with an outcry of involved implementing institutions in the reform process, leading to a kind of paralysis and temporary lack of enrollment amongst previously enrolled institutional HEC and University actors.

As we see problems and objects constantly redefined, we propose extending our definition of working groups as *new interest groups (interessement)*, as their objects to be problematized change toward *organizing practices, structures and devices*. On the whole, we can see a steady addition of interest groups, two or one each year (excepting in T7 and T8), and an explosion in T10, where more than 100 new working/interest groups are being created throughout FWB, involving all (roughly 43) stakeholder institutions (HECs, Universities, Art Colleges, ARES, Higher Ed. Ministry).

Initially HEC internal teaching staff are enrolled in the reflection process about creating a reform and mobilized throughout the process through the program grids that undergo a series of changes or additions (D1), although these actors are no longer physically present in working groups from T2 to T10. Significant enrolments followed in T1 when a university working group was able to enroll HEC actors to engage in a joint venture for a teacher training reform, creating a joint degree (this was not the initial intention of the Higher Education Ministry, according to Int14). In T10, with the explosion of new working/interest groups in roughly 43 stakeholder institutions, enrolment and mobilization is clearly happening as new actors are engaging themselves for a collaborative inter-and intra-institutional organizing and teaching process. Mobilization has thus brought back the policy organizing to the original actors who started the genesis in the first place: teacher trainers in HECs and (new) academics in Universities, in a kind of cycle.

Mapping three types of problematization controversies

We observe that with this progressive addition and changes in decree texts and their reactions from stakeholders, new problematizations are created at each of the events or moments T1−T10. Thus, problematization is *renewed* at each event, renewing discussions between a growing set of actors with an increase and change of objects to be discussed. The timeline allows us to identify in what way these problematizations contribute in the process of translation to create particular interest groups and whether this leads to enrolment and mobilization (Callon, 1984)? In the following section, we propose identifying forms of problematization that will eventually form new interest groups, who need to overcome controversies (Venturini, 2009) for concrete institutional and inter-institutional organizing.

A metaphor of the "professional body" of the teacher

For mapping these specific questions related to forms of problematization, we would like to propose the body metaphor (Goschler and Darmstadt, 2005). We argue that metaphors can be useful to understanding complex processes and associations.[22] As Goschler and Darmstadt (2005) explain, the first type of body metaphor (amongst three types) uses "body parts and body organs to describe other things such as communication, or complex things like teams and groups, cities, nations, or technological facilities. Thus, in these metaphors certain parts of the body are source domain to describe other things." (2005:36). In this study, we use the "professional body" of the teacher,[23] whereby each body part and some associated tools (lens, watch) symbolize problematizations of types of knowledge, competences and skills that teachers are required to acquire through a new teacher training; the necessary institutional organs and infrastructure this would imply; and the political means and time required for implementing these changes and innovations. However, for an overall healthy professional body of the teacher (whether it be female or male, or whether pre-school, primary or secondary

Dubois-Shaik 17
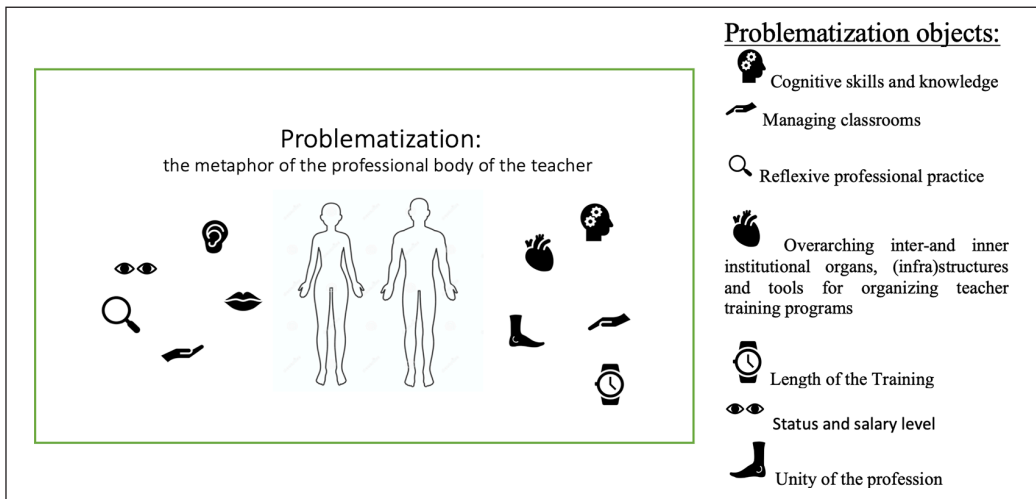
Map 4. Body-metaphor for the teacher training reform.

teachers), we need each organ and member of the body in order for it to function and be operational. In this sense, the professional body metaphor can point to the constructive process of teacher training policy reform, in which each type of problematization is a necessary step toward translating a living professional body while constructing its own environment (Latour, 2010).

Skara (2004) in her analysis of linguistic reframing of the human body in contemporary culture, refers to how "the whole body is structured to perform activities in order to reach information from our natural and cultural environment. The orientation of the head, ears, eyes, mouth, nose and hands depends on the orientation of the body as a whole to the earth as a whole. Our body has its own axes of reference, closely connected to gravity: head-foot, right-left, front-back." (Skara, 2004: 183). In this sense, using a body metaphor to describe a policy reform genesis and its associated objects can suggest that the activities carried out by body parts are intimately linked with kinds of information of its environment (such as institutional information or organization culture for example, or transparency of information between actors and interest groups). However, as per Latour (2010) the organisms/bodies are also creating their own environment in order to subsist. We could extend this to the idea of the creation of interinstitutional networks (Ball and Juneman, 2012). The different body parts and supports are enabling the professional body to "live" or to breathe life into this professional teaching body. The reform is also an organizing movement that is enacted by a body of actors and institutions, thus is depending on the body for its activity to take place.

What can be observed from the timeline (T1–T10) is that from what is previously an ideological problematization between mainly "scientific and pedagogical" policy actors (T1–T3), we see increasingly a political problematization of these ideological and scientific issues taken up or dropped by political Ministry officials in their elaboration of decree texts and political negotiations, whether it may be in T5, in T7 or T9. In reaction to these events, administrative policy actors are involved in the policy process and add an operational problematization (T3, T5, T10).

Ideological, political, and administrative controversies

Unity of the profession. A first issue that was at the heart of the first working and interest groups WG1 and WG2, indeed WG3 joining all four operators (four at that point, but with time, Social

Promotion Colleges seemed less favorable to joining the reform) is the "unity of the profession,"[24] which was understood as a common training basis for all teaching professions. This is an object that was unanimously agreed upon. This problematization gains interest with the Higher Education Ministry (Interviewee INT14 claims that it was an issue already on the political table prior to 2010), who will integrate this object in the first decree and second decree texts in 2019 and 2021. We can safely say that this problem was successfully translated into common interest and enrolled actors in its intended implementation.

The second object or problem was the « tiling » of the initial teacher training program (Cross-level teaching cycles), which would allow first level preschool teachers to teach up to second primary standard, third level preschool teachers to teach up to sixth primary school, and fifth class primary teachers to teach up to third secondary school classes. This associated objective related to the uniting of the teaching profession and finally creating multi-level teachers was also successful in unifying interest groups and enrolling them. HEC actors, as well as university actors work in T6 as well in T10 toward implementing this organizing in their respective institutions jointly.

Length of the training and salary levels. The initial working group WG3 (GT4O) had long before been jointly problematizing the ideal length of a teacher training of substance. The Bologna reform and subsequent landscape decree (2013) seemed to make this question easy to discuss. Instead of training teachers for bachelor's degrees, scientific and pedagogical actors propose extending teacher training to 5 years of initial teacher training. This would henceforth lead to a Master's Degree, reaching "level 7"[25] of knowledge, skills and competences. A reorganizing of the training would have been fairly easy, as Universities would involve themselves mainly on the master's levels.

However, this ideological object will suffer from a political controversy at the heart of the problem, which is the higher salary status a Master's degree would imply. The FWB government seems throughout the translation policy process to be reluctant to engage itself to financing such a vast sum of a salary rise proposed to the new trainee teachers to be employed at the end of the new teacher training cycle. Not to mention the outcry this would raise with previously qualified teachers with lower salary levels. Instead of approving the 5 years of Masters qualification proposed by the WG3, the Higher Education Ministry will create a political compromise. They end up proposing 4 years (see Devices D12 and D14) of Master's degree, without any mention of rise of salary. This problem is left conveniently aside for further discussions at the given time.

A further political controversy is the disjointed discussions about funding (salaries and structures) of the Higher Education Ministry on the one hand, and the Basic Education Ministry on the other hand; interviewees (Int3, Int9, Int10, Int14) point out the difficulty of coalition governments, where budget issues, which in reality need to be common problems, are disjointedly discussed and negotiated within each separate Ministry, instead of being thought of collaboratively. This can point to an important division between two separate interest groups of two Ministries. The Higher Education Ministry is actively involved in the policy translation process, whereas the Basic Education Ministry is excluded from administrative discussions, although the effects of the teacher training reform will impact directly on schools, local authorities and budgets.[26]

Knowledge, skills, managing, and reflexive practice: co-graduation. Scientific and pedagogical actors will problematize a deficiency or lack of quality for current teachers regarding appropriate and in-depth subject knowledge; the acquisition of skills such as managing heterogenous classrooms in a differentiated manner[27]; and having a keener reflexive practice, rooted in a more grounded education and social theoretical knowledge. This lack of grounded-ness is raised by both pedagogical actors from previous teacher training (HECs), as well as by university scientists (academics). The

latter propose co-graduating teacher training, a proposition willingly taken up by HECs. A Masterization of teacher training, involving a joint degree becomes a common object for all involved actors of the first working groups (WG1, WG2, WG3). Whereby the two main problems become the "reinforcement of research-based training" and "reflexive professional development."[28] Especially linking educational/social sciences theory with professional practice, acquiring what is called a "level 7" (see decree Art. 9) in terms of knowledge, skills and competences. This object is taken up by the higher education ministry in both Ministries (T3 and T6) and becomes a founding stone of the decree.

However, the organizing of professional practice during this 4-year Masters teacher training program will become a controversy as the Higher Education Ministry will try negotiating with local political school authorities what could be an efficient way to reply to the problem of teacher shortage. Although, in this study, we did not pursue research to investigate this negotiation, actors and press papers imply that the decision to introduce a practically based fourth year during the 4-year training program was basically to allow trainee students to fill important teacher shortage gaps in schools. This would be done by allowing them to gain professional practice as interns, with a small remuneration. This decision (see Device D16) will encounter an outcry of stakeholder interest groups, especially HECs and Universities. They see this as a counter-decision to the reinforcement of teacher training to become more research and theory-based, and the competences of universities to offer this type of knowledge and skills are seen as undermined. As Universities were previously seen by WG3 to intervene in the training particularly during the fourth (and fifth) year of the training for a research-based training, now these seems more redundant. Moreover, university actors express their difficulty in intervening concretely in professional practice of teachers during a lengthy internship, wondering what type of mentoring or accompanying they could offer and whether they needed to enter schoolrooms with trainee teachers. A new set of controversies are created about the types of knowledge and skills that Universities can offer, and vice versa, how the redistributed credits (see Device D16) to HECs, who have now a larger share in theoretical credits, need to reboost their own type of knowledge and skills to impart to trainee teachers.

Another object that causes a controversy is the introduction in the political problematization of the requirement of a French language entry test (see Device D10), which according to the WG3 actors "cropped out of nowhere" (Int 2, 3, 12).

Overarching inter-and inner institutional organs, (infra)structures, and tools for organizing teacher training programs. A major object or problem is the actual organizing and implementation of the reform in the various stakeholder institutions. Since T3, working groups are preoccupied with how the reform decree in its various versions can and will or not be organized in the respective institutions. Several inter-institutional working groups are organized to this effect (WG5, WG6, WG9, WG10, WG11, WG12, WG16) for operationalizing the reform. This study looks mainly at the way HEC actors, University actors and Ministry Officials problematize this organizing process. As the decree version alters certain problems, such as the length of the training, the form of the fourth practical-based year, the French entry test, and the distribution of credits between types of institutions become administrative type of problematizations involving administrative actors, such as rectors, deans, HEC directors, pedagogical councilors in WG7, WG8, WG14, WG15, WG16.

At the time of the change of government (T6) the Ministry appoints the ARES with the mission (D13) to:

- "Examine the operational capacity of higher education institutions to implement the reform;

- If necessary, adapt the reform in terms of its modalities and implementation;

- Evaluate the cost of organizing the reform of initial teacher education and its integration into the budgetary trajectory; (. . .) The government will also use this period to evaluate the cost of the reform of initial teacher training, which will be extended to 4 years. The estimate will cover a period of at least 20 years." (p.11, Political Declaration 2019–2024[29])

However, although costs are evaluated during this period, stakeholder institutions are still kept relatively in the dark as to how much budget will be at their disposal to effectively organize the reform in their organizations. And lastly, credit and budget allocations seem to depend on how departments and faculties will barter out which kind of courses will be given in what form, by what kind of teaching personnel (existing or newly recruited) to how many students in which kind of places (regrouping several HECs!). Large trainee teacher student populations will have to be managed in creating appropriate programs, individually catered to and evaluated by both HEC and Universities (and Art Colleges). At the level of T10, we are therefore looking at multiple interests represented in numerous working groups, whereby a common interest to effectively organize the training in each department and faculty becomes the center of focus.

The organizing of the reform in each of the five academic poles has created some controversies as some universities and HECs are not reasonably close enough to permit students shifting from one institution to another during their teaching weeks. Due to this difficulty, some institutions were relocated or reshuffled to joining other academic poles, which did not render previous alliances favorable. New conglomerates are created through this reform that shift some alliances.

Many interviewees (Int1, Int2, Int3, Int4, Int12) account for the controversy that the teacher training reform has caused and is causing in their university, as there is a bartering as to who is "allowed" to teach in the reformed teacher training. Which faculties and disciplines are considered relevant to teacher training, and have the appropriate competences and knowledge to offer? As competence would mean a budgetary allowance to be attributed to the given department or faculty, there is a run for proving that the faculty or department in question is a legitimate contender of this kind of competence (budget). This points to how university departments have become self-entrepreneurs in creating budgets (Dubois-Shaik and Dubois, 2020). In this run, pedagogical advisors and administrative actors in universities try to bid for an overarching organ that represents teacher training in each university, especially as this becomes a decree requirement for each involved stakeholder institution in the reform (see D10). However, this is a most controversial affair, as other departments feel waylaid and cheated out of supplementary budgets. Inner-institutional working groups (W7, W8, W14, W15, W16) have an added complexity as to negotiating the "share" of each relevant department in the teacher training reform, once again pertaining to the very controversial nature of knowledge and skills that teachers require. The danger is that it could well be that these knowledge and skills (Level seven) attributed to teachers could simply become outcomes of administrative and political negotiations amongst actors (although some core lines are predefined by pedagogical actors), who perhaps are not directly specialists in these matters.

Discussion

As this qualitative study on the translation of the teacher training reform policy in Federation Wallonia-Brussels can portray, there is a shifting problematization of core objects that are negotiated increasingly throughout the interessement process (Callon, 1984) by political and administrative actors. We can also observe that with this progressive addition and changes in decree texts and their reactions from stakeholders, new problematizations are created at each of the events or moments T1–T10.[30] Thus, problematization is renewed at each event, renewing discussions between a growing set of actors with an increase and change of objects to be discussed. This does

not render interessement, or enrolment easy. However, we can see that as interests are reshuffled, eventually, new interest groups are created in T10 and enrolment becomes possible. Moreover, this enrolment at different stages of the policy translation process, enables to produce a series of devices that mobilize the actors that created them, and move forward throughout the process, mobilizing other actors in their turn.

One major conjecture that could be offered through this type of policy controversy mapping, is that the Teacher Training Reform in French-speaking Belgium has taken the given time and several versions of the decree. These were needing to be negotiated and re-negotiated due to the different sets of problematizations that have arisen each time a new interest group or actor group has been added to the discussion table. What initially was an ideological plea arising from a very select few concerned pedagogical and scientific actors from two very different institutions, HEC and university, became eventually a political and administrative affair. The change of government further complicated the ongoing negotiation process, as interests were once again reshuffled and ministries needed to become familiar with the process once again, in order to understand what institutional interests were at stake in order to enroll institutions in the process. The device D13 can show how the new ministry first tries to establish a kind of "status quo" through its mission for the ARES to check what are the actual competences, capacities and budgets of all stakeholder institutions involved potentially in the reform. As though new ministry actors needed to first acquire a certain insider knowledge about the finer organizational stakes of all institutions involved. We could not obtain information about this "status quo" from the ARES, as it was considered confidential material.

Moreover, mapping a policy genesis through the use of a sociology of translation (Callon, 1984; Latour, 2005; Venturini, 2010; Star and Griesemer, 1989), and associating this with elements of other network theorists (Ball and Juneman, 2012; Czarniawska, 2017) has allowed us to see the transformation, but also negotiation of key objects of the reform: In terms of the maintaining of original objects of the reform, in the initial phase of translation, we can see those pedagogical actors of the field of teacher training, as well as university scientific actors have paved the way (with some grassroot level involvement of teacher trainers) to identify objects and problems of the teaching profession, creating competency frameworks and program grids that still form the basis of current programs. In this sense, devices have still maintained most of the core suggestions that created them in the first place and managed to mobilize actors (Star and Griesemer, 1989). The Bologna reform has paved the way for the joint degree between HECs/Art Colleges and Universities in that a Masterization and the thickening and lengthening of substance of teacher training has been made easier through the Bologna system. Although, the bartering of competences to be distributed between involved institutions is not rendered easier through the Bologna system, as institutions that have altered degree systems over the last decade are required to remodel once again their programs in various concerned departments and faculties, not to mention their entire teacher training systems in HECs. Actors speak about additional weight added to ongoing structural transformations.

In this way, Bologna related reforms have the value of forcing very different institutions in terms of organization culture and structures to work together and to find ways of creating joint degrees. Especially through informal inter-institutional working groups. We can also safely say that the work of the working group WG3 (GT4O) has moved major lines that were not intentionally in the ministries plans; a collaboration between HECs and Universities (insisting on a co-graduation) and the creation of a dialog between research in social sciences and humanities and disciplines and professional practice. Most actors are happy to collaborate with the partner institutions, although uncertainties are expressed concerning University actors (by themselves) in contributing to professional practice (WG15/16) and HEC teacher trainers (by themselves) to be up to par with level 7 (Int15).

The budget about increasing the salary level of teachers is a major controversy that has played out in defining the length of the teacher training, and curtailing the intended 5 years proposed by WG3 to 4 years. Also, the professionally based fourth year leaves a question mark with WG3, WG5 and WG6, WG13 and WG14 actors, wondering how this change in the configuration of the fourth training year will coincide with the original object of the reform, which was the consolidation of theoretical and reflexive-based knowledge and skills. This political decision has in a way resisted to the Bologna-based landscape decree (T2), as it does not conform to the original 240 credit system suggested by a 5-year Master's degree. It questions the original "ideological" object of the teacher training reform to increase knowledge and skills and competence levels of teachers to Level seven. Perhaps, it has also led to an increasing bartering opened to decide who will teach what in which department or faculty, as Universities have to reposition themselves in the program.

Through this empirical study we were able to show that the policy genesis of initial teacher training reforms not only structures and devices, but also types of knowledge, skills, competences that are required to teach teachers, but mainly to equip teachers with. The body metaphor (Goschler and Darmstadt, 2005) moreover enabled us to pinpoint that the creation of a new space of knowledge, skills and competences for future teachers can also be at the mercy of administrative games and bartering between and within faculties, and between institutions. It can be hoped that assembling professionals from both types of institutions finally would produce a richer training for future teachers, based on both reflexive practice and education research and theory. We hazard a guess that with T10 the mobilization of new teacher trainers and new devices such as new interdisciplinary courses can allow for the collaborative creation of new knowledge, skills and competences.

However, what we can observe is that a technical language of accreditation systems and degree allocation has allowed different institutions to speak a common language, but that it also reduced the exchanges to bureaucratic regulation sofar, rather than speaking about the actual content of courses to be given to future teachers. The stakes and the crises of the teaching profession which was originally the main objective for reforming teacher training were well formulated in the initial ideological problematization by scientific and pedagogical actors. But as we move further along the translation process, political and administrative interests have and are still bartering the content of the courses in terms of the Bologna jargon, which is the credit system, and financial budget allocations.

Conclusive thoughts

What this study can illuminate is a process of "associative democracy" (Saurugger, 2005), in which scientific and pedagogical problematizations framed by two interest groups of field level policy actors can provide objects and devices that are transformed and negotiated by political and administrative actors, although retaining some of their original core issues. However, the translation process is rendered controversial and complex as political decision-making is also flavored with backdoor political interests that are negotiated (such as budgets). Administrative policy actors in stakeholder institutions are trying to barter their institutional "share" in the reform implementation, adding to the original core problems, some operational problems on the level of organizing the reform, and thus again reframing some of the original objects (Level 7 for teachers).

What this study can show is that social cartography (Latour, 2005; Venturini, 2010) has allowed a constructive representation of the complexity of controversies in a policy translation process with shifting lines of problematization. We hope that policy actors as well as other readers can benefit from this study for better understanding the teacher training process seen through the lens of a timeline, the body metaphor, various shifting objects, interest groups and devices. This paper also

offers an example of benefits of using sociology of translation (Callon, 1984; Latour, 2010) and its lens to see how objects are changed, actors regrouped, mobilized and networks assembled and new ways of organizing created.

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Notes

1. In June 1999, 29 European ministers in charge of higher education met in Bologna to express their intention to build a "European area of higher education." At the core of the agreements made in the course of the Bologna process was the "adoption of a system essentially based on two main cycles, undergraduate and graduate" (Bologna declaration 1999) (Witte et al., 2008).
2. The French-speaking Community of Belgium is one of three constituent constitutional linguistic communities (French, Flemish, German).
3. Higher Education Colleges have until 2022 undertaken the initial teacher training. Art Schools offer teacher training for art and music teachers.
4. According to Belgian local research studies, the quality of teacher education is deemed in deep crises; pertaining to a massive teacher shortage, a low quality of fundamental education, a lack of skills in teachers to manage classrooms in a social context of diversity, and a struggle to update their knowledge in constantly evolving scientific and technological subjects ((Degraef et al., 2012; Maroy, 2008).
5. French-speaking Belgium has three different education systems, the provincial, communal and catholic (or free) networks. Although all three networks adhere to federal decrees (legal framework), the governance of the education systems is specific to each network.
6. https://www.gallilex.cfwb.be/document/pdf/46261_000.pdf
7. Académie de Recherche et d'Enseignement Supérieur (https://www.ares-ac.be/fr/)
8. Maroy explains how teaching has diminished in social value, in status, as well as being profoundly challenged by the explosion of diversity in student populations and with the onslaught of knowledge- and technological change. A major issue is considered an increasing number of newly recruited teachers leaving their profession during the first 5 years of teaching (Carlo et al., 2014; Sellier et Michel, 2013). To this can be added a systemic complexity in French-speaking Belgium, in which recruitment of teachers is a local authority concern, depending on waiting lists and the haphazard recruitment culture of each of the three teaching sectors (catholic, communal or provincial education) (Dumay, 2014).
9. https://www.gallilex.cfwb.be/document/pdf/39681_056.pdf
10. https://www.gallilex.cfwb.be/document/pdf/47165_000.pdf
11. The education minister Marcourt launched the landscape decree of 2013, introducing the undergraduate and graduate ICT-based higher education system. It was the forerunner of multiple successive reforms,

such as the reform for a new financing of higher education institutions and a pact for excellence (2019). The former decree involves creating budgets for pro student rates in concerned institutions, allowing a budgetary envelop to be given to each institution according to student population. The latter decree's multiple goals are reflected by heterogeneous policy discourses and approaches linking quality assurance and efficiency of basic education (Croxford et al., 2009).

12. "Controversies are situations where actors disagree (or better, agree on their disagreement). The notion of disagreement is to be taken in the widest sense: controversies begin when actors discover that they cannot ignore each other and controversies end when actors manage to work out a solid compromise to live together." (Venturini, 2009: 4)

13. Star and Griesemer (1989) describe how boundary objects can assemble scientists who try to come to a common understanding of meaning of the object through reconciling differences in significance to ensure cooperation.

14. Meta is used here to refer to larger interest groups adhering to scientific, administrative and political problematization. However, interest groups further split into smaller interest groups within these three meta groups as the empirical data will show.

15. "Actors (not scholars) are responsible for deciding controversies. Once again, it is a matter of respect. Controversies belong to actors: it was actors who sowed their seeds, who raised their sprouts, who nurtured their development. (. . .) It (Social cartography) just requires its practitioners to present other partialities besides their own (Venturini et al., 2009:11)

16. We used a body metaphor (Goschler and Darmstadt, 2005) to group different kinds of problematizations pertaining to the professional body of the teacher. As one of the key objectives of the reform was to create a single unified "professional body of teachers" (modified decree of February 2019 regarding initial teacher training: https://www.gallilex.cfwb.be/document/pdf/50119_000.pdf), we borrow the term from the reform discourse for our analysis.

17. However, there are limits as to the extent of data that we were able to gather. We were not able to divulge at the stage of the data collection, which was really in the midst of the policy genesis about how institutional actors were enrolling concretely, especially in the different universities. We had a little more insight in one specific French-speaking university of which the author is part.

18. Map 2 Research Blog.

19. This was done in workshops for teacher trainers in some of the HECs, as per Int15 and Int7, whereby brainstorming sessions were organized per discipline and departments.

20. A working group "Reform Cell" (*Cellule d'appui RFIE*) was created within the ARES, charged with working on the reform file and communicating with all stakeholders.

21. Creation of pedagogical councilor positions in universities; "thinking" and operationalizing the reform.

22. Metaphors and other literary aspects contain their own methodological pitfalls and deficiencies. However, as heuristic devises guiding rather than defining research, they are helpful in pinpointing problems and pro- posing possible solutions (Jacobsen and Marschman, 2008).

23. One of the main objectives of the teacher training reform was to create a unified "professional body of teachers," allowing pre-school, primary and secondary school teachers to receive a common core training aside their level-related specificities (modified decree of February 2019 regarding initial teacher training: https://www.gallilex.cfwb.be/document/pdf/50119_000.pdf).

24. Modified decree of February 2019 regarding initial teacher training for pre-school, primary, secondary: https://www.gallilex.cfwb.be/document/pdf/50119_000.pdf

25. Art. 9 Decree of 7. Feb 2019, modified and ratified in Feb. 2022: https://www.gallilex.cfwb.be/document/pdf/50119_000.pdf

26. During the fourth year, trainee teachers will undertake a long internship, needing mentoring from experienced teachers, integration into an existing school team and a minimum wage.

27. As an offset of a policy for greater inclusion, teachers are required to host children with special needs in regular classrooms. So far, however, initial teacher training does not provide any specific training for differentiated learning and teaching in view of special needs students.

28. Art.5 Point 4 Decree of 7.Feb 2019, modified in Feb 2022: https://www.gallilex.cfwb.be/document/pdf/50119_000.pdf

29. http://www.federation-wallonie-bruxelles.be/index.php?eID=tx_nawsecuredl&u=0&g=0&hash=d46
    c9f4830a54be6e1cd75d62c91dbd4bfd19b73&file=fileadmin/sites/portail/uploads/Illustrations_docu-
    ments_images/A._A_propos_de_la_Federation/3._Gouvernement/DPC2019-2024.pdf
30. Map 2: Research Blog.

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