Exploring teacher professional agency in the context of the bottom-up professional development conferences: perspectives and implications

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DECLARATION

I, Hasmik Kyureghyan, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

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ABSTRACT

This thesis investigates the interplay of teacher agency and bottom-up teacher professional development conferences in Armenia by exploring the types of teacher agency and the potential of bottom-up TPD conferences for practice. While teacher agency is an important phenomenon, it is an under-researched area, particularly in the context of teacher professional development. Nevertheless, the relevant literature suggests that there are two main approaches to the conceptualisation of teacher agency. According to the traditional approach, it is mostly viewed as a possession (Giddens, 1984; Hollis, 1994), an inner capacity. While, according to the ecological approach, agency is understood as an emergent phenomenon of the actor-situation transaction (Emirbayer and Mische, 1998, p.963), concerned with how actors critically alter their responses to problematic situations. The authors define agency as a 'temporally embedded process of social engagement, informed by the past (in its habitual aspect), oriented toward the future (as a capacity to imagine alternative possibilities) and 'acted out' in the present (as a capacity to contextualise past habits and future projects with the contingencies of the moment)' (ibid., p.963). This research looks at teacher agency through the lens of ecological conceptualisation of the phenomenon of teacher agency.

Building on the inductive and abductive approaches and thematic analysis, this qualitative exploratory study addresses the questions of what the relationship between teacher agency and bottom-up TPD is, what agency types can be observed within the bottom-up TPD conference context and what potential the explored context might have for practice. The participants were teachers who participated in the bottom-up TPD conferences for three consecutive years 2019, 2020, and 2021. Three different types of data collection methods were employed to gather rich accounts of data. I collected the data through the survey and semi-structured interviews (for 2019 and 2020) and field notes (for 2021).

The study identifies four types of teacher agency: i) *enquiring agency*: teachers who seek learning opportunities; ii) *autonomous agency*: teachers who take advantage of their

autonomy of choice and decision-making; iii) *change-maker agency*: teachers who are committed to making change both in their student's learning and their peers and iv) *acknowledging agency*: teachers who seek opportunities to be valued and recognised.

The results of this study suggest that there is a positive interplay between teacher agency and the bottom-up TPD conference approach. The bottom-up TPD conference features create a favourable environment for teachers to foster and exercise their agency. The relationship between teacher agency and bottom-up TPD conference approach is complex and influenced by characteristics of the education environment, teachers' past experiences, their orientation for the future and their current capacity to act, as well as their responses to opportunities and constraints. Nevertheless, by problematising teacher agency within the bottom-up TPD conference approach, this study provides insights into understanding the possible features of a model that has the potential to balance individual and system approaches for teacher agency within an alternative TPD context.

REFLECTIVE STATEMENT

This has been an incredible journey of learning and development, persistence and agility. Throughout my EdD journey, I have had the privilege of engaging with a diverse range of mandatory and elective courses that have shaped my understanding of the field of education and provided me with invaluable knowledge and skills.

I began my EdD in September 2016. By then, I had already worked with professionals from the UCL, Institute of Education. Working with them greatly motivated me to overcome the challenges of balancing my demanding work, personal life and EdD study.

During the first year, I had three mandatory courses: Foundations of Professionalism (FoP), Methods of Enquiry 1 (MoE1) and Methods of Enquiry 2 (MoE2). The Foundations of Professionalism (FoP) course was my first course in the EdD programme. It provided a comprehensive exploration of the challenges and tensions faced by professionals in the field of education. Through readings, face-to-face sessions, and the final assignment, I gained a new perspective on the development of professionalism and, specifically, teacher professionalism. The FoP assignment allowed me to reflect on the perceptions of professionalism of teachers and leaders from my workplace. The FoP assignment was invaluable in exploring the tensions of professionalism and understanding the importance of self-perception and status. This course has also boosted my confidence in managing my team of educators and understanding their self-awareness and professional perceptions.

Methods of Enquiry courses allowed me to dive into the world of social research by exploring different methodological paradigms and research designs and being aware of the complexity of the research process.

For my Institution Focused Study (IFS), a research assignment, I focused on a specific TPD (Teacher Professional Development) reform programme I was leading. This programme was part of a more extensive education reform project initiated at that time in my country by a non-governmental educational foundation and the government. Examining teachers' learning experiences and core components of the programme could potentially contribute to the

design and implementation of other TPD programmes in countries with a similar studied context. Despite the challenges, I persevered and utilised the findings from my IFS to write an article, which I successfully published in Teacher Development: An International Journal of Teachers' Professional Development. This accomplishment holds both professional and personal significance for me.

I utilised the knowledge and skills gained from the Methods of Enquiry and Institution Focus Study (IFS) courses and assignments. The courses provided me with a solid understanding, confidence, and a valuable practical toolkit for my thesis and other research endeavours. My interest in teacher professional development was reflected in my thesis, where I explored the interplay of the bottom-up TPD conference approach and teacher agency in Armenia. I integrated various aspects of my professional experience and interests, using my knowledge of theoretical perspectives and research methodologies from mandatory courses. This final stage of the EdD programme has greatly influenced my understanding of my professional role and the field, which will have a significant impact on my future career.

Thesis Writing has been instrumental in my growth as a researcher. In this process, I understood how the whole EdD is designed to guide and lead the EdD student gradually to becoming an independent researcher upon finishing the thesis. That is a fascinating feeling of understanding, growth and development. Thesis writing, without a doubt, was one of the most demanding yet rewarding processes in my EdD journey. The support and mentorship I received from my supervisors during this process were instrumental in shaping the outcome of my thesis and forming me as an independent researcher.

Reflections on my Learning and Research

My thesis writing was interrupted after my upgrade due to my maternity leave. And then the Pandemic started. I returned to my EdD study in 2021 after a year and a half interruption. By that time, there were two more bottom-up TPD conferences; thus, for the richness of data, I decided to restructure my study and gather more data than was initially planned. My decision increased the pressure on me and demanded additional effort.

The pandemic created challenges requiring adaptation in data gathering approaches and impacted the response rate. Just at the peak of the Pandemic, Armenia was involved in a war that psychologically affected all its citizens. Against the backdrop of these realities, I had to return to my thesis and rethink/restructure it again. These challenging times forced me to rethink the importance of learning and development and, in general, the key role that education can play in the lives of people-reassuring myself the right choice of my profession.

Being a part-time EdD student was rewarding and challenging. Being a working professional and being able to implement the learning immediately in my professional work is what kept me going. The challenges, though, were that most of the time, I felt detached from the university, desire to be engaged in the community or have access to the library still needed to be met. I understand that, along with all the benefits, not having the opportunity to engage in discussions with peers and form relationships with other researchers was the price I paid for being a part-time international student.

Nevertheless, despite the challenges, the enormous learning process that I have gone through is unmeasurable. Looking back on my journey, I realise it was not merely about acquiring knowledge and developing practice but also about personal growth. It pushed me out of my comfort zone, encouraging me to challenge existing assumptions and adopt a critical mindset. My EdD journey nurtured my intellectual curiosity and cultivated my ability to think analytically, reflectively, and innovatively.

IMPACT STATEMENT

The impact of this thesis on my thinking and professional career is profound. As a teacher education professional and a researcher in the field, a thorough understanding of the teacher professional development environment, its up-to-date literature, and the importance of teacher agency in the context of TPD have greatly enriched my knowledge and expertise.

To disseminate my research findings, I plan to engage with colleagues and various education communities through formal and informal meetings and discussions. By sharing my findings, I will contribute to debates about the importance of teacher agency in TPD and its consideration within policy development. My aspiration is that the findings of this study are integrated into the education system, particularly addressing the deficiencies of top-down TPDs by supporting teacher agency enactment, as described in the thesis. This approach acknowledges and supports teacher agency while encouraging professional development through interaction and reflection.

With prior research experience in teacher management policies and teacher learning and professional development, I can now offer valuable insights on teacher agency and professional development to the field regarding both the conceptual framework, findings, as well as methodology. As I have worked in a relatively underexplored field, the groundwork that I have done, as well as the conceptual framework and research approach, can spark new ideas and inspire further research. Sharing methodological perspectives of this study can make a significant contribution to agency research field and drive future studies. My research findings can also hold the potential for influencing policy change in countries with similar educational contexts, like Armenia and beyond. The findings impact my professional understanding of teacher agency and teacher professional development, providing an opportunity for further learning and research.

Regarding academic impact, I have the privilege of presenting this research at the European Conference on Educational Research in August 2023 in Glasgow, Scotland. My aim is to enrich the academic community, actively engaging peers into the debate about teacher agency and professional development and providing stimulus for other researchers to build on my study

and benefit from gaining a deeper understanding of its literature, methodology, analysis and findings.

In addition to the conference presentation, I intend to publish a journal article based on my thesis, which contributes new insights, empirical evidence, and analysis to the existing body of knowledge base in the field of teacher agency and teacher professional development.
While working on my thesis, I published an article on Teacher Learning Experiences and Components of the TPD programme in The International Journal of Teachers' Professional Development. I shared the paper with the MoESCS minister and vice minister, as well as with other education professionals who work on TPD policies. I plan to host an open discussion based on my article with the field professionals, teachers, and policymakers to engage them in the topic of teacher professional learning and development and contribute to the evidence-based approach to TPD.

My previous work (leading the TPD reform programme) and current role (education researcher and co-founder of Paradigma Educational Foundation) have cultivated extensive connections to policymakers (e.g., RA Minister of Education, Science, Culture and Sport) and other education professionals, enabling me to collaborate directly with them in translating my research findings into actionable policy reforms. Therefore, I will meet them to present the findings of my thesis and discuss possible ways of policy implementation. This will contribute to a deeper understanding and emphasis on the importance of teacher agency and promote it to become part of educational discourse in Armenia. I will capitalise on established connections with policymakers, enhancing the potential for implementation of the results and real-world impact.
In conclusion, the impact of this thesis extends beyond personal growth, reaching academia, policymakers and education practice. Through disseminating my research findings in several ways presented above, I aspire to facilitate positive change in the field of teacher agency and professional development.

CONTENTS

FIGURES AND TABLES

GLOSSARY

ASPU	Armenian State Pedagogical University
BERA	British Educational Research Association
CPD	Continuous Professional Development
EU	European Union
EdD	Doctor in Education
IoE	Institute of Education
MoESCS	Ministry of Education, Science, Culture and Sport
NaCET	National Centre for Educational Technologies
NIE	National Institute of Education
NCEDI	National Centre for Educational Development and Innovation
OECD	Organisation for Economic Cooperation and Development
PLC	Professional Learning Community
RA	Republic of Armenia
TA	Teacher Agency
TP	Teacher Professionalism
TPD	Teacher Professional Development
UNICEF	United Nations International Children's Emergency Fund
UCL	University College London
STEM	Science, technology, engineering, mathematics and computing
WB	World Bank

CHAPTER ONE INTRODUCTION

1.1 INTRODUCTION

My thesis explores the interplay of teacher agency and bottom-up teacher professional development (TPD) conferences, aiming to identify types of teacher agency and the potential of this type of TPD approach for practice. The perspectives and experiences of the three years (2019, 2020 and 2021) conference participants contribute to the understanding of the rationale behind the emergence of the bottom-up TPD conferences in an interesting context like Armenia and their potential to create a favourable environment for fostering and exercising teacher agency.

There have been ongoing investments of public and private funds for teachers' professional development in Armenia since its independence in 1991; however, the quality of those TPD activities and their outcomes have remained unclear (UNICEF, 2022a). Since its independence, Armenia has had situational teacher training projects (for instance, in the framework of the Education Quality and Relevance loan project in 2004). Those training projects either fell within the scope of a particular initiative with specific goals or were the consequence of a curriculum [1] change to prepare teachers for new subjects or new interpretations or approaches. Most of the TPD activities were 'top-down' in nature through a 'one fit all' structured programme. A governmental body, the National Institute of Education (NIE), became responsible for training one-fifth of the teacher cohort every year (WB, 2003, 2010). Over the years, the NIE received criticism (World Bank, 2019) for the quality of its services (e.g., teacher training and attestation). In 2019, Armenia's post-revolutionary government dissolved the NIE (RA Decree on Dissolving the National Institute of Education,2019), and no transition mechanism was proposed. Teachers were left with no training and attestation for almost two years. There was no mandatory professional development for teachers during the

[1] By curriculum I refer to school curriculum unless otherwise mentioned.

initiation of the bottom-up TPD conference in Armenia. Only in 2021, after the government established the National Centre for Education Development and Innovation (NCEDI), were the mandatory TPD activities for teachers resolved. The state decentralised the TPD processes. Accordingly, currently, the TPDs are not planned and developed centrally, external training organisations are responsible for TPD provision. However, those organisations (apply and get accredited by the MoESCS) must meet the standards and include the topics developed by the NCEDI (NCEDI, 2021).

Throughout my professional career, I gained different perspectives and concerns on teachers and their professional development through my roles as a teacher, a class observer and an evaluator, a research and development assistant, and then TPD coordinator at a private school, a TPD department lead in a non-governmental educational foundation, an education consultant in international organisations and a co-founder of an educational foundation. My first-hand experience of the education reform initiative (I led a nationwide TPD programme), provided me with much knowledge and experience and gave me insights into the perspectives and developments in teacher professional development activities. In 2019, after co-founding (at the end of 2018) an educational foundation, I organised a nationwide bottom-up TPD conference. The goal of the conference was to introduce a culture of bottom-up TPD and to support local communities and individual schools in organising their bottom-up TPD conferences. Besides my professional interest in teacher professional development, what else informed the backdrop for this initiative is that the TPD system had become stale, 'a tick boxing' type of approach, a 'one size fits all' approach, creating a need for the establishment of alternative professional development opportunities for teachers in Armenia. This initiative has resulted in my interest in thinking about a broader environment of teacher professional development and taking a specific look at what bottom-up TPD has to offer in terms of teacher agency and, in doing so, exploring the interplay of teacher agency and bottom-up TPD conference.

This thesis explores teacher agency in the context of a bottom-up or how it is also called in the literature, a teacher-led professional development conference. The key elements of the

conference are peer learning (sharing and exchanging knowledge and experience), self-directed learning (selecting topics, engaging in professional discussions), autonomous decision-making, promoting engagement, knowledge creation/building, collaboration and positive communities among teachers. This thesis does not look at the specific form of TPD, e.g., the conference itself; rather, it explores the context as an emerging bottom-up TPD approach with specific features offering depth by exploring how this 'emerging paradigm to TPD' contributes to exercising teachers' professional agency within a given state system of traditional, top-down approaches to teacher education (both pre-service and in-service). The study is qualitative in nature, though it includes some quantitative data from the survey when assessing the teachers' experiences of participating in the TPD conference. However, the generated data is reported qualitatively, primarily as a narrative.

This chapter describes the context for teacher professional development in Armenia. It shows the link between my professional experience and research interest, presents the rationale for the study and research questions, as well as introduces the structure of this thesis.

1.2 TEACHER PROFESSIONAL DEVELOPMENT CONTEXT IN ARMENIA

This section discusses the professional development landscape and policy regulations and the role of teacher agency within that system by providing context for the bottom-up TPD initiative, which is the environment within which teacher agency is explored.

The current system of teacher professional development in Armenia is traditional, top-down, mandating teachers to undergo training[2] every five years, which leads to attestation proving that the teachers fit into a position held[3]. The process of training does not allow any differentiation; teachers do not have a choice of content, only the choice of training organisation; it is a top-down, one-way, mandatory TPD provided by the state. Some essential elements of professional learning, such as collaborative interaction (Vygotsky, 1986 in

[2] In total, 110 hours of training to get 9-11 credits. Training includes some critical topics such as inclusive education, digital literacy, classroom research, etc.
[3] Article 26, RA Law on General Education.

Hargreaves and ElHawary, 2018) and self-guided learning based on individual needs and interests, are missing from teachers' experiences. Teacher professional development practices that facilitate peer-to-peer knowledge sharing, advocate a differentiated approach to teacher learning (Macias, 2017), and give an opportunity to exercise teacher agency through contribution to colleagues' professional development are the main components of bottom-up/teacher-led TPD approach. The usual practice of TPD is based on the model of trainers transmitting knowledge within the standard programme and reported by Armenian teachers as not useful; they want other opportunities for professional development, which can be challenging but worthwhile (Kyureghyan, 2023). The underlying traditional pedagogical teaching mode is a transmission of knowledge rather than a co-construction of knowledge; thus, both the TPD and pre-service teacher education are organised around that strand of educational philosophy. This, however, does not mean or cannot be generalised that all traditional approaches to TPD are not useful, this means that there were a lot of factors (e.g., poor quality of content, resources and trainers/educators) for why teachers in Armenia considered those TPDs not useful for them (Kyureghyan, 2023; UNICEF, 2022a).

In Armenia, the teaching profession is situated within the political and social contexts in the following ways:

- Teachers are not likely to be described as highly accountable as their performance is not officially measured by the students' outcomes (UNICEF, 2022a).
- There are no officially stated requirements and regulations for teachers' performance reviews. There is an Education Inspectorate which randomly does external class observations, with the primary purpose of checking the alignment of taught content with the school curriculum and subject syllabus[4].

In Armenia, school principals, aside from their responsibility for hiring teachers, which process is state regulated, are also monitoring teachers' work through classroom observations and student performance, but such tasks are stated mainly within the school's internal

[4] RA Prime Minister's Decree N729-Լ, 2018 on Approving the Charter of Education Inspectorate.

mechanisms and are quite different from school to school. Nevertheless, the standardised testing system, poor quality of pre-service teacher education (Belyavina et al., 2010)[5] and the state mandatory TPD, the vast amount of paperwork, regular grading and testing, absence of career growth opportunities, and low salaries[6] led to a decrease in a status of a teaching profession causing recruitment (university and school level) and teacher shortage issues (UNICEF, 2022, a,b).

Teachers increasingly take the role of knowledge consumers in their professional development. A recent study on Armenia's teacher management policies showed that teachers with full-time workloads (22 teaching hours) feel overwhelmed and reported not having time for professional development or creativity (UNICEF, 2022a). Since its independence in 1991, Armenia has had two school curriculum reforms (2004 and 2010)[7], and both were prescriptive in nature, as teachers did not have the opportunity to influence their content. Theoretically, schools were allowed to choose from a range of authorised textbooks. In practice, schools used textbooks that were easily available so as not to complicate the process for teachers and parents.

In a changing educational landscape[8], since 2020, Armenia has embarked many education reforms, including curriculum reform, reconsidering old and introducing new teacher policies (e.g., introducing a new model of TPD, and voluntary subject testing). In 2021 a new curriculum was written and piloted, which, compared to the previous ones, is based on a competency-based framework. It includes new pedagogical approaches for teachers to adopt, including the greater use of formative assessment, project-based learning, and written feedback and feed-forward. How much these new developments are reflected in pre-service teacher education still needs to be determined.

[5] Testing system has not been changed since 2010, and there have been no reforms in pre-service teacher education. Thus, this 2010-year reference is valid even now.
[6] The average teacher salary is 57% less than the average salary in Armenia (UNICEF, 2022a).
[7] The third school curriculum reform has been already piloted in one of the regions in Armenia and in 2023-2024 academic year will be introduced to all schools across the country.
[8] After the political changes (revolution) in 2018 significant changes in the educational landscape have been taking place.

Recent policy reforms in education also include the area of teacher professional development. Although teaching workforce development is key to education system improvement (Education Strategy Plan 2030, 2022), more investment is still needed in it. For instance, along with low quality of pre-service education (Belyavina et al., 2010), there are no teacher career growth mechanisms within the schools, the qualification ranking system though has been refined still not popular among teachers, no needs-based TPD opportunities (UNICEF, 2022a), which signal that those steps taken (e.g., voluntary attestation, decentralised TPD and its refined content) are not enough for improvement. Against this backdrop, teacher agency is not seen anywhere, at least explicitly. The term itself cannot be found in any regulation. Meanwhile, it is there implicitly and is mainly seen within the curriculum reform context where teachers are expected to act as implementors of those changes. Agency is a complex phenomenon, and to understand it, there is a need to look at its conceptualisations and perspectives in the literature. According to a more traditional conception, agency is seen as an innate capacity of an individual (Giddens, 1984, Bandura, 2001), while based on an ecological approach, agency is a quality of engagement rather than a quality, a capacity of the actor (Biesta, Priestley and Robinson, 2015). In this study I refer to the ecological approach to teacher agency, forming my working conceptualise of it, stating that any individual can act agentively at a certain level and in a specific context, depending on individual factors (individuals' past experiences, present engagement and future orientations, Emirbayer and Mische, 1998), contextual factors and resources (Emirbayer and Mische, 1998; Bridwell-Mitchell, 2015).

Along with government-funded and mandatory training and attestation, there is professional development provision by various local and international organisations and NGOs. The Law on General Education (2009) encourages teachers to participate in various professional development activities for learning and development, but there is no formal obligation or requirement to do so (UNICEF, 2022a). Stakeholders from both the public and private sectors assume diverse roles concerning teacher professional development, endeavouring to bridge the existing gaps.

Within this education landscape, in 2018, I co-founded a non-profit educational foundation (Paradigma Educational Foundation) and, in 2019, the Foundation introduced a bottom-up TPD conference aiming to create an environment for the teachers to come together as a professional community, take ownership of their professional development, contribute to their peers' professional development and exercise their agency, to fulfil the gap of relevant policy regulations. Not having financial or any other connections with the state and school authorities, it is solely driven by the voluntary, need-based principle with the driving idea of supporting the common good. These types of TPD activities promote a return to the bottom-up approach that puts teachers at the centre of the educational process (Priestley et al., 2015), where classroom teachers make decisions and design workshops voluntarily, outside of their authorities' pressure (Macias, 2017). I am not promoting the narrative of the bottom-up TPD approach being unquestionably always good. There might be some risks of impacting the content and imposing its agenda, for example, if the conference is funded by the state authorities. This initiative of bottom-up TPD conferences can be seen as an alternative and complementary approach to teachers' top-down professional development. Moreover, there might be a successful balance, a mixture of bottom-up and top-down approaches to teacher professional development, as suggested by Kings' research (2012).

The Paradigma Educational Foundation successfully organised conferences by sourcing funds from diverse non-governmental organisations; however, these entities did not influence the content or process. Notably, the Foundation exercises caution when selecting potential donors, ensuring that none of them seeks to impose their own agendas. These supporting organisations share a collective objective of promoting the common good and recognising the significance of fostering teacher professional development. Such initiatives align with the prevailing trends and characteristics of educational transformations in developing societies.

1.3 CONTEXT OF BOTTOM-UP TPD CONFERENCE

Current trends in education reflect growth in bottom-up/teacher-led professional development. This approach has been utilised by various sources, including schools and non-profit organisations (Macias, 2017). A bottom-up TPD conference approach or unconference is a general concept that has been around for over two decades (Boule, 2011), including BarCamp, Birds of a Feather, EdCamp, etc. Unlike traditional conferences, unconferences are participant-driven events where the participants are usually responsible for setting the agenda and deciding on the topics of discussion. This bottom-up approach to conferences allows teachers from different disciplines to collaborate and prioritise conversation and knowledge sharing over formal presentations.

In 2019, in Armenia, a bottom-up type of TPD conference was organised by Paradigma Educational Foundation that included most of the characteristics of an unconference. Particularly a schedule planned in advance but entirely emergent from the teachers' suggested topics. Moreover, although the format follows the idea of 'teachers for teachers,' a few expert-led sessions, for example, Eleanore Hargreaves, Dylan William, Jacek Brant, Michael Young, Norbert Pachler, Pasi Salberg, were included taking into account the sociocultural specifics of the country and the system. Moreover, referring to Korthagen's (2017) model of teacher learning and professional development, which, in his ideas, takes place in the connection of theory, practice and person, this approach to bottom-up TPD offering expert-sessions as exposure to theory, teacher-led sessions as more practice-oriented approach, as well as putting teacher-person in the core of the approach, was seen promising.

A free-of-charge public event grew from 450 participants in 2019 to 5,000 participants in 2020. The conference allowed participants to collaboratively determine topics and attend sessions that best meet their needs. In the 2020 conference, there were policy representatives (request from 2019 conference teachers), and teachers had a chance to discuss upcoming reforms, ask questions and make recommendations actively. Since 2021, the foundation has not been organising the TPD conferences by reaching its goal of encouraging schools or teacher/educator communities to organise them by themselves as a fully bottom-up TPD conference.

For this study's purposes, three conferences, which are referred to as bottom-up, held in 2019, 2020, and 2021 are explored with a focus on teacher agency.

The immediate context and subject of this research is a bottom-up TPD conference organised in Armenia that includes practices such as:

- Free and voluntary participation.
- Autonomy in decision making.
- Knowledge and experience sharing (contribution to the colleagues' professional development).
- Self-directed professional learning and growth. The differentiated and personalised approach to teachers' professional development and learning.
- Initiation-taking and risk-taking (making a decision to act as speakers, asking questions, arguing).
- Opportunity for professional networking and collaborative interaction with colleagues. Engagement with the professional community.
- Consuming and producing teacher research (e.g., practitioner inquiry)

Within this approach, teachers have an opportunity to act as speakers contributing to their peers' development and learning, choose the topics they are interested in and enhance their skills and knowledge by taking ownership of their development. It is important when the learning needs are identified by the teachers as of importance to themselves as individual professionals, which is often an overlooked aspect of professional development activities (Hargreaves and ElHawary, 2018, Hargreaves et al., 2013). Particularly in countries like Armenia, where teacher professional development is done through a traditional approach 'one size fits all' standardised approach, teachers' knowledge, experience and needs, which are very important (Hustler et al. 2003), are not considered (UNICEF, 2022a). Hargreaves et al.'s (2013) research identifies choice in professional development as being important to members of the teacher community. Meanwhile, top-down TPD activities are sessions led by external experts teaching teachers about their professional needs to improve their teaching.

As Timperley (2011) states, it is driven by the expert's 'desire to tell' rather than the teacher's 'need to know' (p.14). This view of teacher professional development and learning requires a certain shift in perspective, particularly for many policymakers and teacher educators (Korthagen, 2017). According to Biesta (2010), effective TPD is value-based; that is to say, it starts from what practitioners themselves value in their own work. The proposed approach in this study is also more open-ended and, to a certain degree, more unforeseeable than traditional approaches. The bottom-up approaches touch the teachers, and they become enthusiastic and experience more autonomy and self-efficacy (Attema-Noordewier et al., 2011), enhancing their learning (Korthagen, 2017).

The research on the Armenian TPD context showed that teachers benefit when they have an opportunity to share challenges and successes, discuss ideas, argue, and learn from each other (Kyureghyan, 2023). Teachers want more opportunities to be connected, engaged in professional discussions, and able to share and lead. Thus, there is a need for an environment that incorporates those elements. Teachers need spaces and formats to share their knowledge and practice (Lieberman and Pointer Mace, 2010), where the opportunity for teachers to play a role and take action in determining and sharing instructional strategies to improve their teaching is important.

1.4 MY PROFESSIONAL CONTEXT

This section describes how my professional experience and interest in teacher professional development have led to my research interest.

Having held different positions in the field of education (e.g., teacher, research and development, teacher PD lead), I co-founded an educational foundation that initiated a bottom-up type of TPD conference with and for teachers in 2019. Since then, my interest has been in understanding if the bottom-up approach has the potential to meet teachers' PD needs and whether it provides an opportunity for the manifestation of teachers' agentic roles based on the diverse teacher-centred features (autonomy in decision-making, an opportunity for knowledge building, acting as a presenter, etc.) that the conference provided. The

continuing initiative led me and my colleagues to host an online conference in 2020 and help local communities organise their conferences since 2021. This type of approach was even more needed as, due to the restructuring of the state TPD system, the teachers were out of mandatory training for almost two years; thus, these TPD conferences gave teachers opportunities for learning and development as well as professional networking.

Prior to this, I was leading a top-down TPD programme within a pilot reform project, and I noticed that teachers usually wait for training or PD activities from an authority, somebody who is in charge. Meanwhile, learning about the bottom-up approach to TPD, I got interested in it for its teacher-centric practices. The idea that teachers can drive their own and their colleagues' professional development as professionals who know a lot and experiment a lot in practice seemed an exciting and promising approach. Therefore, my professional experience and knowledge of context, as well as a review of the relevant literature, is the basis that provides me with the confidence to look at the potential of the bottom-up conference for teacher professional development and teacher agency. I look at the TPD environment from the teacher agency perspective.

1.5 RATIONALE FOR THIS RESEARCH AND RESEARCH QUESTIONS

Ongoing curriculum policy reforms[9] in many countries (e.g., many OECD countries, Armenia, New Zealand, Scotland, Brazil, Norway) advocating the centrality of the teacher's role in implementing the new curriculum (e.g., Gouëdard et al., 2020; Lennert da Silva and Mølstad, 2020; UNICEF, 2022a). This emphasis on teachers is often explicitly tied to change agendas, where teachers are described as change agents (e.g., Goodson, 2003; Priestley, 2011a). However, such teacher agency is often limited by the characteristics of the contexts, and if the contexts are prescribed and restricted, they leave few opportunities for agentic manifestations and result in the de-professionalisation of the profession (Priestley and Biesta, 2013). Parallel to this, education policies have started to strongly emphasise the need to improve the quality

[9] Review or update the "content" of knowledge, including its selection and organisation, and associated issues concerning student learning, are considered "curriculum reforms" (Gilbert, 2010).

of teachers through professional development programmes, the introduction of teacher standards and qualifications, and, for example, encouraging the development of teacher professional learning communities (Stoll et al., 2006; Daly et al., 2020). In an interesting context like Armenia, such discourses are strongly reflected in the Education Strategy 2030 policy paper[10] in which the main takeaways for the objective of this study are that the system will seek to ensure inclusive, outcome-based education at all levels, as well as implement mechanisms for ensuring the quality of the teaching force. The policy context (new curriculum[11], introduction of teacher standards, teacher subject testing) aims to standardise practice through the prescribed curriculum, teaching and teacher standards, and increased accountability. Looking at the bottom-up alternatives of TPD and teacher agency within these top-down changes becomes important. I have identified this emerging phenomenon and found it interesting to investigate, considering both my professional interest and experience within the field of teacher professional development as well as the lack of relevant literature on this emerging phenomenon. While being a former teacher myself, having experience working with teachers, co-designing and leading a TPD programme, I am now a co-founder of a non-profit educational foundation that identified a need to create a professional environment aiming to give teachers an opportunity to exercise their professional agency through self-directed learning, peer support and collaboration as well as professional networking. This professional environment represents a bottom-up approach to teachers' PD and has been developing in different jurisdictions (e.g., the USA, the UK, and Ukraine) with dominant top-down approaches to teacher education.

The research on bottom-up approaches to TPD, particularly on non-traditional conferences, is in its infancy; thus, there has not been much research on whether these bottom-up approaches contribute to teachers' learning, whether they promote collaboration and research and how they contribute to the fostering of the agentic role of the teachers in their

[10] RA Law Project of Adopting the Education Development 2030 Plan. Available https://www.e-draft.am/projects/4013/about

[11] It has been already piloted in Tavush region and will be introduced to all schools in Armenia for the 2023-2024 academic year.

own professional development. Also, very little is done regarding the potential risks (e.g., spreading self-confirming discourse) of the bottom-up TPD approaches. All these are questions that need investigation. Nevertheless, the available literature (Macias, 2017; Carpenter, 2016; Reiser et al., 2017) on bottom-up approaches to TPD or as they are also referred to as teacher-led PD, suggests that teachers want to be engaged in such activities and evidence of this is the growing interest among teachers in different countries.[12] Kennedy (2014) praises bottom-up TPD approaches for their transformative potential as they provide teachers with autonomy and agency. Along with the positive aspects of the bottom-up TPD approaches, there are also some concerns regarding them. For instance, a replication of various training content that the teachers participated in and/or risks of ethical issues such as self-confirming discourse on certain discriminative or non-inclusive ideas, which may become rooted in teacher communities. Moreover, there is a danger of being guided by government-sponsored education policy thinking if the organisation has close entanglement with the government (e.g., ResearchED in the UK). Nevertheless, I do not mean that bottom-up approaches cannot and are not valuable if carried out in accordance with its core principles. Following the core features of the proposed bottom-up conference approach, including the characteristics described by Korthagen (2017) could meaningfully be used to develop a genuine bottom-up approach. Emphasising teachers' enthusiasm and desire for development and self-improvement is important (Bubb and Earley, 2008), and a bottom-up approach to TPD can provide that opportunity to teachers.

Overall, research on bottom-up approaches to TPD is not widespread, particularly with the focus on teacher agency, given that the research questions addressed here are exploratory. As a teacher educator and researcher, I am interested in understanding the interplay of teacher agency in the context of the bottom-up TPD conference approach. The research questions that emerged from my professional experience and the literature, forming the foundation for investigating teacher agency within bottom-up teacher professional development (TPD), are as follows:

[12] For instance: Edcamp unconferences are being organised in 44+ countries, ResearchEd in Europe, Asia, Africa, etc.

1. *What is the interplay of teacher agency and bottom-up teacher professional development conferences in Armenia?*
2. *What types of teacher agency are identified in the context of 'bottom-up' TPD?*
3. *What potential does the bottom-up TPD conference have for practice?*

My study contributes to the understanding of teacher agency in the context of bottom-up teacher professional development, offering new insights and implications for future research. It has the potential to foster a broader understanding of teacher agency and the potential of a bottom-up TPD approach by exploring its affordances and constraints.

The precise overview in this chapter shows the possibility of exploring teacher agency through different lenses, for example, within the curriculum reform context and its correlation with educational change. It is also important to acknowledge the support, at least ideologically, from education stakeholders, such as the Ministry of Education, Science, Culture, and Sport (MoESCS), which may encourage the organisation of similar events presenting another area of potential exploration.

1.6 THESIS OVERVIEW

The first chapter suggests some important dimensions of the context for teacher professional development in Armenia. Following that, I introduced the professional interest that led me to this research study and the research questions. Chapter Two draws on literature to better understand teacher professional development and teacher agency as well as its links to TPD, teacher professionalism, autonomy and identity.

The stance that I have taken to provide direction for my study is within interpretivist epistemology (Creswell and Poth, 2017), as I aimed to understand what counts as knowledge through the subjective, individual experiences of the participants. In particular, I aimed to identify the types of teacher professional agency by analysing teachers' subjective, individual experiences within the bottom-up TPD conference. Chapter Three introduces my research approach and the basis on which the survey, semi-structured interviews, and field notes were

undertaken and interpreted. Data from all three-year conference attendees participating in this study are presented and analysed in Chapter Four. Theoretical perspectives, including the ecological approach to teacher agency, the role of agency in teacher professionalism, and the impact of the top-down education system, were specifically helpful in analysing and discussing the participants' ideas. Chapter Five presents synoptic answers to my broader discussion in relation to each research question. In Chapter Six, as a researcher, I, reflect back on the whole piece from my perspective. I outline the conclusions of this study and suggest implications by presenting practical recommendations for policymakers and future organisers. The last chapter also presents limitations and suggests areas for further research to better understand the teacher agency, its types and the potential that the bottom-up TPD conferences can have for practice and for exercising teacher agency.

CHAPTER TWO LITERATURE REVIEW

2.1 INTRODUCTION: MAPPING THE CHAPTER

The main focus of this literature review chapter is teacher agency (TA) and the context (e.g., teacher professional development, teacher professionalism) within which teacher agency is discussed. To situate my study and understand teacher agency, it is important to understand teacher professionalism as a broader context for teacher agency and autonomy. I examine the literature on teacher professionalism first as an overarching phenomenon in Section 2.2. I argue that whilst there is some consensus on the characteristics of teacher professionalism, its manifestations differ in different countries. I refer to Andy Hargreave's conceptualisation (2000) of teacher professionalism and discuss how his ideas on teacher professionalism set a context to explore professionalism within the Armenian context. In Section 2.3, I explore perspectives in the literature on teacher professional development (TPD) and effective TPD to provide a wider context for looking at teacher agency in the specific bottom-up TPD context. First, I discuss the conceptualisation of TPD, the debate over the consensus of the components

of effective TPD and what the recent meta-analysis presents about that consensus. What follows in Section 2.4 is a discussion about the top-down and bottom-up approaches to teacher professional development. I discuss the affordances and constraints of both approaches with reference to teacher agency. In the next 2.5 Section, I explore the literature on teacher agency and bring to light its differing conceptualisations: traditional and emerging ecological ones. I show the link between TA and teacher professionalism, teacher agency in the context of teacher professional development (Section 2.6), TA types identified in the relevant literature (Section 2.7), and possible implications of the bottom-up approach for practice. The final Section, 2.8 of this chapter, shows the link between literature and my study and presents how my discussion and the gaps I found in the literature have led me to my research questions.

2.2 TEACHER PROFESSIONALISM

Professionalism is a socially constructed phenomenon (Eraut, 1994; Whitty, 2000, 2008; Evetts, 2011; Crook, 2008). Professionalism can be referred to as the level of autonomy and regulation within the organisation that the member of an occupation has (Evans, 2008). While there is a long history of theoretical frameworks and definitions, professionalism is not static (Whitty, 2000; Crook, cited in Cunningham, 2008). The concept of professionalism, which was originally limited to certain fields such as law, medicine, and religion, has since expanded to include teaching (Whitty, 2008; Crook, cited in Cunningham). The application of different theories of professionalism to teaching is not straightforward, as teaching is a complex profession that is closely linked to the goals and role of education in society, the role of teachers in shaping the future of society, and a variety of other aspects such as trust in teachers' knowledge and code of conduct. The conception of teacher professionalism is contested, evolving over decades and depending on countries' specific contexts (Hargreaves, 2000, Whitty 2000; Goepel, 2012; Sachs, 2016), resulting in the existence of 'competing versions of teacher professionalism' (Whitty, 2000, p. 282). Against the backdrop of existing framings of teacher professionalism, for this study, I present Andy Hargreaves's (2000) four historical conceptions of teacher professionalism, which are not universal but are relatively

common across Anglo-American systems. Later in this section, I use those four conceptions (Hargreaves, 2000) to discuss teacher professionalism within the Armenian context, considering that these phases are not necessarily travelled to Armenia in the same chronological order as every system goes through those phases depending on their specific developmental stages.

The key conceptions can be described as follows:

- The pre-professional age when teaching was demanding but technically simple. Teachers were responsible for their teaching, their learning and development. Teachers were considered basically amateurs.
- The age of autonomous professionals when autonomy was an essential feature of the teaching profession. Teachers were allowed to choose the teaching methods they thought would be best for their students.
- The age of collegial profession when professionalism is considered collegial rather than autonomous and isolated with a strong desire for collaborative cultures.
- The post-professional age when teacher professionalism is yet 'floating', struggling to situate itself between the narratives of the de-professionalisation of teaching and those that try to redefine teacher professionalism in more positive postmodern ways.

As it is seen from Hargreaves's (2000) four conceptions of teacher professionalism, teaching is associated with different levels of autonomy and decision-making in relation to methods, practice, and ways of working.

There is an ongoing struggle for control over teachers' work and purpose, as external factors, such as social, political, or cultural influences, continually shape and redefine concepts like teacher knowledge, autonomy and responsibility (Goodwin, 2020). In environments where neo-liberalism[13] and managerialism are dominant (Pachler, 2007), in the contexts where teachers' autonomy is limited, the trust towards teachers as professionals is eroded (Mitchell

[13] Most literature on neo-liberalism places learners as consumers (e.g., Apple, 2005; Connell, 2009) and teachers as producers who work to reach the government's goals. In this context, teachers become unable to embrace teacher agency (Connell et al., 2009).

and Lambert, 2015). These descriptions resonate with Hargreaves's post-professional age, where there is a tendency (e.g., in Anglo-American systems as Hargreaves refers to those) to create the model of a 'good teacher' as a skilled technician rather than a professional with deep subject knowledge and curriculum thinking (Hargreaves, 2000).

This tendency to create skilled technicians has led to a decrease in trust in teachers' ability to exercise their own professionalism (Goepel, 2012) and to make their own decisions on what and how to teach (curriculum thinking, as Mitchell and Lambert state, 2015). The 'fixing' of subject content through prescribed curriculum[14] resulted in a decline of teacher autonomy: teachers' capacity to think was diminished (Mitchell and Lambert, 2015). The existing tension between the autonomous teacher as a 'curriculum maker' with the perceptions of 'traditional notions of professionality' (Pachler, 2007, p.245) and control over curriculum and teacher work has been a topic for many investigations (Mitchell, 2016). Evette (2011) states that there is 'a shift from notions of partnership, collegiality, discretion and trust to increasing levels of managerialism, bureaucracy, standardisation, assessment and performance review' (p. 407).

Within the described situations, the questions are how these tensions influence teacher professional development (Pachler, 2007) and how teachers overcome challenges when being introduced to new national curricula, assessment methods, and digital tools (Day et al., 2007). Day et al. (2007) list five consequences of what they call 'performativity agendas'[15], which are as follows:

i) Teachers are encouraged to follow curricula and instructions uncritically (e.g., teach to the test, leading the teaching to become a technical activity without creativity and reflective judgment, thus controllable).

ii) Teachers' identities as professionals are challenged by being told what and how to teach.

[14] The curriculum defines the educational foundations and contents, their sequencing in relation to the amount of time available for the learning experiences, the characteristics of the teaching institutions, the characteristics of the learning experiences, in particular from the point of view of methods to be used, the resources for learning and teaching (e.g., textbooks and new technologies), evaluation and teachers' profiles." (Braslavsky, 2003).

[15] Continued monitoring of the efficiency with which teachers are expected to implement externally generated initiatives.

iii) Teachers have less time to connect with and care for their students through building trusted relationships.

iv) Teachers' sense of agency and resilience become vulnerable.

v) Teachers' capacities to sustain motivation, efficacy and, hence, commitment are challenged.

The standardisation of pedagogy and curriculum in the chaise of outcome-oriented objectives for teachers and students makes teachers subject to accountability measures and hinders them from experimenting and questioning (Daly et al., 2020). The authors rightly advocate for the importance of teacher research, stating that the neo-liberal approach to education made teaching a 'directed profession'. The notion of teacher research, or teacher as a researcher, is supported by researchers (e.g., Daly et al., 2020; Mills et al., 2020) and proposed by Stenhouse (1975), who believed that teachers should engage in systematic inquiry to improve their teaching practice. Stenhouse argued that teachers should not simply follow prescribed methods and curricula but should actively investigate and develop their own approaches to teaching and learning. Within this discussion of 'teacher as a researcher', a study conducted by Mills et al. (2020) among teachers from England and Australia states that teachers feel comfortable with reading and using research. Still, they are less confident in designing and leading research. However, advocating for engagement, the authors do not call for putting more pressure on teachers. Instead, they advocate for rethinking teacher professionalism by involving teachers in its conception and development. This will provide ground to developing a 'mature' profession (teachers should be research literate) envisioned by Sachs (2016). According to Sachs (2016), producing research is also essential to being research literate. Teachers need opportunities to undertake research and develop their research capacity. They also need an environment where unexpected consequences, contradictory findings and, at times, 'unwelcome truths' (Mockler and Groundwater-Smith, 2015) can be accepted constructively.

It is my argument that teachers can respond to the tensions of limited autonomy, high accountability and performativity agendas by 'banding together' (Mitchel, 2016) at the school level and in wider communities, and this is where the bottom-up teacher professional

development approach can be of value. Within my argument, understanding teacher professionalism becomes important from the perspective of teacher agency (Biesta, Priestley, and Robinson, 2015, p. 625), which is a phenomenon closely linked to autonomy. Teacher autonomy can be defined as a capacity to make decisions about their work (e.g., content, methods) within the scope of state regulations and resources available (Wermke and Höstfält, 2014; Frostenson, 2015; Mausethagen and Mølstad, 2015; Wermke and Forsberg, 2017). However, autonomy does not necessarily equate to agency. While teachers may have autonomy, they might fail to achieve agency because they may habitually reproduce past behaviour patterns or lack cognitive and relational resources. Teachers are the product of the educational discourse, the context where they live and work, and even having agency discourses they draw on may limit their power to activate it (Burr, 1995, p.146). Referring to Giddens' theory of structuration (structure and agency tension) (1984), societal structures constrain roles and identities, which leads individuals to act in ways that align with the structures rather than following their best interests. For instance, teachers may adapt their instructional practices to meet the accountability demands of the education system by neglecting their creativity (Buchanan, 2015, p. 712).

The autonomous agent must have the capacity, in other words, agency, to be autonomous, which means having a certain environment and context that enables it (Wermke and Höstfält, 2014). Accordingly, autonomy conditions agency but also needs particular prerequisites of agency to exist. Since teachers are presented as professionals in this study, teacher agency as a professionalism phenomenon is in focus. Teacher agency is an essential element of meaningful education (Biesta et al., 2015); it is at the core of professionalism (Molla and Nolan, 2020), and it is essential to understand the conceptions and developments of teacher agency and the aspects contributing to its advancement.

Teacher agency may be shaped and enhanced by the policy that specifies goals and processes, enhancing the capability of teachers to make decisions and frame future actions (Priestley, Biesta, and Robinson, 2015). Moreover, teacher agency seems to depend on teachers' perceptions of their scope of action (Erss, 2018). Agency also represents teachers' power and influence in all aspects of their profession because it is among the most crucial components of

professional identity (Moore, 2007). The professional identity of teachers is a complex and multidimensional concept. It is not a static construct; it is a product of negotiation based on individual experiences and interpretations that can be influenced by personal and professional experiences and result in changes (Cordingley et al., 2019; Sachs, 2005). According to Sachs (2005), the foundation of the teaching profession lies in the professional identity of the teacher. This identity serves as a basis for teachers to develop their own perspectives of their being, their actions and their understandings of their job and role in society. Developing a solid understanding of a teacher professional identity can empower teacher practice by aligning "who I am" with "what I do" (Mockler, 2020). This provides a mechanism and agency for teachers to shape their ongoing professional work (Suarez and McGrath, 2022).

Agency and identity are intertwined; both discourses and historical forces can shape them, yet teachers can construct themselves through the interplay of those phenomena (Buchanan, 2015). Identity is constructed of past experiences and mediated by a complex interplay of personal, professional and political dimensions of teachers' lives (Mockler, 2011; Buchanan, 2015). It is continuously in motion as teachers engage in their daily practices and reflect on their work (Buchanan, 2015). Therefore, teachers do not passively accept the policies and professional discourses but actively use their own identities to interpret, learn from, evaluate, and adapt to the new conditions of their work. In this process, teachers' identities are reformed, and remade, and professional agency is devised. Buchanan (2015) argues that teacher agency is manifested through each teacher's unique identity. The construction of any individual is possible based on the available resources, which are situated inside the complex contexts in which they live, which results in the formation of a dynamic, complex identity with a particular agency.

To sum up, different education systems emphasise different aspects of teacher professionalism. Each country conceptualises teacher professionalism according to its education policy goals (Connell, 2009; Whitty, 2008).

2.2.1 PROFESSIONALISM IN THE ARMENIAN CONTEXT

Professionalism is a tacit concept within the current Armenian context; the exact word itself is missing even from the Law on General Education (2009). The Law is the main document that regulates the field of general education and defines the entry requirements for teachers, their duties and rights. In the literature on teacher professionalism, I talk about some powerful aspects of it, choosing Hargreaves' (2000) four conceptions of professionalism. I use those conceptions to show the state of teacher professionalism in Armenia. What happened in Armenia is a rapid transition from the Soviet system, creating a chaotic transition, which does not necessarily apply Hargreaves's (2000) stages of teacher professionalism in its chronological order or any phase as a distinctive phase itself.

Teaching in Armenia has been under state control, imposing the content, assessment and way of working. Armenia presents an interesting context; as such, it is a post-soviet developing country which, regarding teacher professionalism, bears the legacy of the Soviet Union[16] and the realities created after independence. During the hard economic situation, the system, being in transition, lost its qualified specialists and trust in the teaching profession.

When Armenia came under Soviet rule (1920-1921), mixed aspects of different stages of teacher professionalism (referring to Hargreaves's conceptions) could be observed. During the Soviet period, the attitude towards professionalism in the public discourse and the sociological context changed, and in the early stages, the autonomy of professionals was denied: a mix of aspects from Hargreaves's third and fourth phases. The State controlled all the professions, mainly through Unions that also controlled the ideology over their members' activities (Abramov, 2016).

> Soviet professionalism, as a special type of social organisation and culture, was created at the time of the USSR's entry into the Second World War in 1941. Professional communities lost their autonomy; old professionals of the pre-revolutionary period were massively replaced by Soviet experts, socialised in Soviet educational institutions; and all professionals were at the service of the State, ensuring control over the population,

[16] The USSR had a strong education system, especially in STEM education with teaching considered a respected occupation.

> ideological support to the regime and modernisation of industry and the military. As such, the Soviet model of professionalism was the result of the union of socialist bio-policy, militaristic technocracy and ideological control in the sphere of culture (Abramov, 2016, p. 86).

Judging from the above description of Soviet professionalism, it can be assumed that this conception does not fully resonate with any stage of Hargreaves's conceptions, supporting the argument that teacher professionalism is a dynamic concept and depends on each country's specific context (Witty, 2000; Goepel, 2012; Sachs 2016). The Armenian Soviet Republic shared the same model of teacher professionalism as all the other USSR countries, with a strong emphasis on Russian schools (all subjects except the national language were taught in Russian), which were considered to be more prestigious across the whole Soviet Union.

The collapse of the USSR (1991) created a severe economic situation in Armenia[17] (World Bank, 2007). Professionalised occupations, such as engineers, teachers and scientists, lost their prestige, with a significant drop in income levels and a crisis of social status and professional identity (Abramov, 2016). These processes signalled the end of the Soviet model of professionalism (Abramov, 2016), which can be conceptualised as follows: teachers were educated and highly respected and had high social status, but the teaching content was controlled with only some degree of autonomy over teaching methods. This conception does not fully fit with any of Hargreaves's stages; instead, it presents a mix of different aspects from different stages.

Throughout the years of independence, Armenia has been embarking on various reforms trying to develop and modernise its education system (e.g., curriculum, TPD) and depoliticise/de-Sovietise the content of education through the circulation of transitional programmes and textbooks, redefining the content and scope of humanities education in alienation from the STEM subjects entitled as parts of "technocratic" Soviet education, etc. (Terzian, 2015, Manukyan, 2019). Armenia has been extensively engaged in the utilisation of

[17] In the stage of transition, factors such as earthquake in 1988, which destroyed 40% of the country, war with neighbouring country, refugees, and fuel and energy shortages impacted negatively on the education system (World Data on Education, 2006/2007).

international consultancy and policy borrowing since 1991 as the lack of capacity could not ensure a democratising transitional state to meet the challenges of restructuration and created growing public discontent with the state of education and policy-making (Manukyan, 2019). As Manukyan (2019) describes in his analysis, "borrowing acted as compensation for limited institutional capacity and progressed to address the ambitious reforms agenda" (p. 79). The lack of capacity enabled a voluntary introduction of neo-liberal approaches, a highly contested ideology for education reforms. Most of the reforms in Armenia related to teacher education and, specifically, professional development that has been part of the World Bank Loan projects, e.g., Education Financing and Management focusing on structural aspects of schools and textbooks (1998-2002), Educational Quality and Relevance Project (Phase 1, 2004-2009 and Phase 2, 2009-2015) assisting with the implementation of curriculum, training teachers in updated instructional practices, etc. The Education Quality and Relevance Project aimed to support government reforms in general education. The project had the dual aim of raising the quality of education and ensuring its relevance to the new economy and knowledge society needs, along with carrying forward reforms to improve the efficiency of the education system (World Bank, 2010, p. 23).

The economic crisis and low salaries in Armenia resulted in a loss of knowledgeable human resources. They migrated from Armenia, which resulted in less educated and knowledgeable resources to enter the teaching field (UNESCO, 1994), thus eroding the image of the knowledgeable teacher. The trust towards teachers as professionals decreased. The transition period lasted for around nine years until the adoption of the Law on Education in 1999, which defined the principles and structure of the new education system and served as a foundation for future policies (Manukyan, 2019). Only after ten years, in 2009, was the Law on General Education adopted. The Law regulates all aspects of the field of general education and sets entry requirements (e.g., university degree and pedagogical qualification) for individuals who work as teachers.

On the one hand, strict entry requirements show that the state acknowledges teaching as an important profession and, like other respected professions, requires a relevant university degree and teaching qualification (pedagogy course credits). On the other hand, by failing to

ensure a high-quality university education and adequate salary, the entry requirements might not serve their purpose. Although a recent study by the World Bank (2021) states that teachers are educated, collaborative and self-confident in implementing new curricula, a study done by UNICEF (2022a) revealed that despite in-service teachers must have at least a bachelor's degree, the low quality of pre-service teacher education and unavailability of good quality TPDs undermine the status of the profession and diminishes opportunities for continuous improvement respectively. The teaching profession is not attractive for the younger generation for reasons such as low salary, low social status, poor quality pre-service teacher education, lack of career growth opportunities, etc. (UNICEF, 2022 a; World Bank, 2021). Teacher shortage has become an issue in Armenia (UNICEF, 2022 a, b). Moreover, Armenia has an older teacher force (only two per cent of the teacher population are novice teachers), and less than half of the teachers reported receiving professional development after 2016 (World Bank, 2021). There is a lack of relevant and timely professional development for teachers and support in accessing professional development opportunities (World Bank, 2021).

The recent wave of reforms started in 2019 with the following major directions: introducing teacher standards, improving the teacher qualification ranking system, introducing an additional mechanism for a salary rise and introducing new mechanisms for state-mandatory TPD. Regarding teacher professional development, efforts have been made to develop a new mechanism by moving from a centralised (one governmental institution) to a decentralised (external, accredited TPD providers) approach and introducing new critical topics for mandatory TPD (UNICEF, 2022a).

The Prime Minister of the Republic of Armenia at the government session (September 29, 2022) announced that the increase in the prestige and status of teachers and their role in society is the priority for the Government (MoESCS news database, 2022). The Government acknowledges that teaching should become a prestigious and valued profession. However, there are certain discrepancies when observing the public discourse on teacher professionalism. For instance, making a university degree requirement for teacher entry can show that the state treats teaching as a profession that should have a knowledge base,

teaching qualification (pedagogy credits) and status. Against the backdrop, the Armenian State Pedagogical University (ASPU) struggles with enrolment decline even when its entry requirements are the lowest for university applicants (RA Statistical Committee, 2022).

Moreover, in 2022, to address the teacher shortage, a new amendment[18] in the Law on General Education was introduced, stating that if the vacant position is not filled twice, a person with a higher education degree can get 30 credits of pedagogical training and apply for that position. The organisations that are eligible to provide those 30 credits are ASPU and Teach for Armenia. There are several issues here; firstly, one of the credit providers is the ASPU, which has been criticised over the years for not producing qualified specialists (Belyavina et al., 2010); moreover, the state tests in-service teachers' subject knowledge (called voluntary attestation) showing mistrust toward pre-service teacher education quality[19]. Secondly, 'Teach for Armenia' is a non-governmental organisation which is given the right to provide a teaching qualification that is equivalent to the others' university training. Thirdly, it is not even clear if the programmes of those two organisations are aligned or to what extent.

Getting acquainted with the current education policy environment and the discourse about teaching and teachers in Armenia, I can state that there is no explicit definition of what teacher professionalism means in the Armenian context within the public discourse. It becomes harder to understand whether a highly prescribed curriculum (prescribed content and outcomes, with some opportunity to select teaching methods), the rigorous subject testing of in-service teachers, or the education officials' belief that predominantly experienced teachers can ensure good quality teaching can fit into the Government's strategy of raising the prestige of teaching profession. Therefore, relying on the discussion of teacher professionalism literature and teacher professionalism within the studied context, I state that the current conception of teacher professionalism in Armenia is about teachers' subject-content knowledge (evidence is voluntary attestation), curriculum implementation (teachers do not participate in any stage of curriculum making) and accountability. Accountability is both explicit (required by the relevant

[18] See RA Law on Making Amendments in the Law on General Education June 4, 2021, ՀՕ-263-Ն.

[19] This argument is presented as a justification for implementing voluntary attestation mechanism.

policy documents, e.g., timely grading, testing) and implicit (not officially stated but expected from teachers, e.g., organisation of events, performances) with the belief that teaching is a mission, and even with negligible salary high picks should be achieved. The idea of equating a 'good teacher' to a skilled technician led to a lack of trust in teachers. Narrowing teachers' work to 'teaching to tests' distracts them from thinking deeply about their subject and how their subject knowledge relates to educational aims, which impoverishes teachers' curriculum thinking (Mitchell and Lambert, 2015). In Armenia, the prescribed teaching content is directly linked to the content of the test. Thus, teachers are left with little opportunity to experiment with content. The existence of a prescribed state curriculum in Armenia can be seen as a control over the teacher's curriculum thinking, and although teachers are considered to be important for implementing curriculum, the control over the content and professional development points to the idea that teachers are not trusted to design and develop educational content and instructional materials, and considered controlled professionals resonating with some aspects of Hargreaves's post-professional phase of teacher professionalism. The lack of trust in teachers' professional judgment and limited autonomy may be due to various factors, but the evident ones are the low quality of pre-service teacher education and the lack of high-quality TPD.

The notion of teacher professionalism in Armenia is moving toward a version that is measured against standards, focused on accountability, and based on behaviours rather than attitudes and values. It is driven by diminishing trust toward teachers and affects their professionalism. The acknowledgement of teacher agency and trust in their professionalism and capacity to innovate is largely missing in many discussions around teacher professional development, state curriculum, and its implementation process. Hence, my research, in which I am also professionally involved, makes this study more valuable from the perspective that, as an EdD candidate and a professional in my context, I bring my own professional experience and expert knowledge of the context.

2.3 PERSPECTIVES ON TEACHER PROFESSIONAL DEVELOPMENT

In this section, I present literature on teacher professional development and effective TPD to provide a wider context for looking at teacher agency in the specific bottom-up TPD context, as the literature on the latter phenomenon is scarce.

Teaching is a knowledge profession, and it is important to value and improve teachers' existing knowledge to provide them with opportunities to renew, expand and develop it (Campbell, 2017). Teacher professional development is an essential mechanism for school and education systems to improve teaching quality.

Teaching is a complex profession requiring a wide range of knowledge and skills, including subject content, pedagogy, and knowledge of learners. Rather than just covering the curriculum, teaching should focus on meeting students' diverse social, emotional, and academic needs (Darling-Hammond 2021). The professional conception of teaching quality differs from country to country. Still, one main commonality can be seen (Darling-Hammond, 2021), such as a deep knowledge base: knowledge and understanding of content, pedagogy and learners. To ensure high-quality teaching for all students, teachers must have opportunities to advance their practice continuously, critically reflect on the impact their practice has on student learning, and, through ongoing improvement, address challenges in their day-to-day work (Wei, Darling-Hammond and Adamson, 2010).

Therefore, teacher professional development is viewed as the most important mechanism for developing teachers and advancing teaching in many countries (UNICEF, 2022a; Darling-Hammond et al., 2009; Cohen and Hill, 2000; Day and Sachs, 2005; Fernandez, 2002; Guskey, 2002; Timperley et al., 2007), it is of key importance to the enactment of good teaching and learning (Guskey 2009; Opfer and Pedder; 2011), no matter how good their pre-service teacher education was. A recent study by Fletcher-Wood and Zuccollo (2020) concluded that high-quality professional development for teachers significantly affects students' learning. Evidence suggests (Fryer, 2016) that quality TPD has a greater effect on school students' attainment than other interventions schools may consider, such as implementing performance-based pay for teachers or lengthening the school day.

The teacher professional development concept is contested. The term is used to refer to at least three things: individual learning and growth (Fraser et al., 2007), something that is

provided to teachers (Porritt et al., 2017) or a collective element of school improvement (Fullan, 2001). Authors use different terms when discussing teachers' continuous learning and professional development. The most frequently used terms that I encountered in the literature were 'teacher professional development' (Darling-Hammond et al., 2017, OECD, 2009, 2014), 'continuous professional development' (Pedder et al., 2008), 'continuing teacher professional development and learning' (CPDL) (Cordingley et al., 2015) and 'teacher professional learning (Opfer and Pedder, 2011, McLaughlin, 2015, Timperley, 2011,). In this study, the term teacher professional development is used to refer to activities designed to enhance the professional knowledge, skills and attitudes of in-service teachers through continuous learning to improve the learning of students (Guskey, 2002). For my thesis, I embrace Day's definition of professional development, which adopts a developmental, learning-focused conception of teacher professional development, a comprehensive definition for the purposes of my study.

> *Professional development consists of all-natural learning experiences and those conscious and planned activities which are intended to be of direct or indirect benefit to the individual, group or school and which contribute through these to the quality of education in the classroom. It is the process by which, alone and with others, teachers review, renew and extend their commitment as change agents to the moral purposes of teaching; and by which they acquire and develop critically the knowledge, skills and emotional intelligence essential to good professional thinking, planning and practice with children, young people and colleagues through each phase of their teaching lives. (1999, p. 4)*

Many authors distinguish between teacher learning, an individual process focusing on student learning (Timperley, 2011) and teacher development, which is viewed as a social process involving the acquisition of new knowledge. Various authors describe individual development differently. They refer to it as teacher development (Bell and Gilbert, 1994), teacher change (Simon and Campbell, 2012) or professional learning (Fraser et al., 2007). Fraser et al. (2007) define professional learning as a gain of new professional knowledge, skills, attitudes, beliefs or actions as a result of deliberate, intuitive, individual or social processes. In their conceptualisation, professional development refers to wider changes over time by proposing

that teacher development shifts teacher professionalism. Evans (2002) also, for example, attempted to define TPD, stating that TPD is more than a mechanism to enhance teachers' knowledge, skills and practices. It is the process which can enhance teachers' professionality and/or professionalism. She further unpacks that development incorporates change that would generally be categorised as learning. In Evans's interpretation, professional development is "a tri-partite entity" (Evans, 2011, p. 865) consisting of behavioural, attitudinal and intellectual aspects. For Timperley (2011), professional learning occurs when teachers move their thinking from professional development to professional learning, focusing on students, paying attention to essential knowledge and skills, engaging in a systematic inquiry into the effectiveness of practice, being explicit about underpinning theories of professionalism and engaging everyone in the system in learning. Nevertheless, exploring different researchers' perspectives on the TPD phenomenon helped me understand the existing perspectives and situate my study.

Within the context of teacher professional development, the notion of training prevails, which is mainly the attempts to comply with changes in education legislation or school needs rather than obtain a deep understanding of issues related to pedagogy and students' learning (Pachler, 2003). In-service teacher professional development has been seen as training events that were narrowly focused on frequently changing policy initiatives and externally imposed agendas, which were not based on teachers' professional needs. Consequently, frequent changes in the educational landscape leave insufficient time for teachers' learning and the opportunity to embed those learnings into practice (Pachler, 2007).

There are differing conceptualisations of effective TPD in the professional literature. Some suggest (e.g., Clarke and Hollingsworth, 2002) that collaborative enquiry approaches can help teachers restructure and advance their knowledge. Kennedy (2014) models a framework for exploring TPD in which nine PD models are based on their core features and are analysed regarding their potential for professional autonomy. A vast range of research on TPD suggests consensus about the features of professional development that can ensure its effectiveness (Desimone, 2009; Opfer and Pedder, 2011; Timperley et al., 2007; Stoll et al., 2012; Cordingley et al., 2015; 2018; Darling-Hammond et al., 2017). Those features vary on average from five to

seven elements, such as *active learning*, *collective participation, duration*, *content focus*, *links to curriculum*, etc.

Researchers (e.g., Desimone, 2009; Cordingley et al., 2015; Darling-Hammond et al., 2017) claimed to have a consensus on the above-mentioned features, although according to the review done by Opfer and Pedder (2011), researchers still unable to predict teacher learning based on these characteristics. Sims and Fletcher-Wood (2020) suggest the importance of considering the relationships between certain elements of teacher professional development and teacher learning. They reassess the evidence underpinning the consensus upon the features of effective PD, arguing that the reviews employ inappropriate inclusion criteria and depend on an invalid inference method and thus have methodological gaps. Sims and Fletcher-Wood (2020) suggest that it would be more beneficial to identify features of effective professional development by exploring the alignment between evidence from basic research on human skill acquisition and features of rigorously evaluated TPD interventions. The authors also mention the challenges of comparing the impact of TPD programmes that utilise differing impact indicators. In their study of reviewing more than fifty professional development interventions, they conclude that TPD is an approach that has the potential to enhance teaching quality and improve student outcomes. Earlier research by Wayne et al. (2008) recognised that although the research on TPD features revealed positive effects on teachers' knowledge or practice, the lack of replication of these effects across studies and the lack of consistency in these findings across contexts make the evidence less impactful than the research consensus would imply.

In contrast to the discussions of teacher professional development and its effective features, some other existing evidence criticises traditional approaches to TPD for failing to ensure support and opportunities for teachers to make appropriate growth (Patton, Parker and Tannehill, 2015), failing to impact teachers' classroom practices and improve student achievement (Opfer, 2013). While teacher quality is important, TPD might not be the key policy lever because, despite some success, TPDs have been disappointing (Hanushek, 2005)[20].

[20] Eric Hanushek from the International Academy of Education and International Institute for Educational Planning in UNESCO.

Ingvarson (1998) describes this 'traditional system of professional development' as in-service training of teachers where they have little control over their learning, acting as passive recipients of knowledge, which is often detached from practical issues in the classroom. He summarises that even though the traditional system is essential, it is no longer sufficient. A classification offered by Cochran-Smith and Lytle (2001) describes three approaches to professional development: i) knowledge for practice (formal knowledge and theory are generated by university-based researchers), ii) knowledge in practice (knowledge that is embedded in practice) and iii) knowledge of practice (knowledge is gained by teachers via reflection and process of inquiry). These three types of teacher professional development systems co-exist in the education systems serving differently positioned stakeholders (e.g., policymakers, teachers) in order "to explain and justify quite different ideas and approaches to improving teaching and learning" (p. 47).

As professionals, teachers are required to make judgements about a range of issues related to students' development; thus, they need certain autonomy to be able to do that (Gale and Densmore, 2003). Teaching with highly prescribed curricula and losing classroom discretion makes teachers feel less satisfied, less professional, and less committed to their work (Hargreaves, 2003). The intensification of teaching (Apple 1986, Hargreaves and Fullan 2012 cited in Dodman, 2021) continues to lead to a loss of teacher autonomy in many areas of the profession including professional development. Concomitant tensions exist around accountability and performativity versus professional autonomy and TPD that is undertaken willingly or compelled (Patrick et al., 2003, cited in Pachler, 2007). With the rise of a culture of performativity in education, there is a question of whether systems measure what they value or whether they measure what is easily measurable and thus end up valuing what can be measured (Biesta, 2014). Treating teachers as leaders of learning is an opportunity to rewrite this narrative and doing so requires a shift in the roles of teachers. Referencing Scardamalia and Bereiter (2006, p. 276), Pachler (2007, p. 252) explains that key implications have been emerging regarding the shift of teachers' understanding of knowledge as "stuff in mind" to "knowledge as resource or knowledge as product" creating a new paradigm for teacher PD. Stein et al. (1999 p.263) opined that 'the new paradigm for professional development

represents a departure from the use of workshops to teach 'techniques' toward the use of multiple professional development strategies to build teacher capacity to understand the subject matter, pedagogy, and student thinking'.

In recent years, new types of professional development activities were observed, such as 'unconferences' led by peer professionals, e.g., Edcamp, MirandaMods, teacher 'research,' e.g., Close-to-practice research (Wyse, 2018), ResearchEd, teacher-led study groups, e.g., Learning Rounds (Philpott and Oates, 2015), Japanese Lesson Studies (Doig and Groves, 2011), teacher learning communities (Hargreaves and ElHawary, 2018). Teachers organise themselves through research, collaboration, joint projects, or other PD activities; they become leaders in their learning and development. In some cases, non-governmental organisations (e.g., Paradigma Educational Foundation in Armenia) help teachers organise those bottom-up conferences. It is worth mentioning, though, that although the above-mentioned organisations organise bottom-up types of TPD conferences/activities, they are highly diverse organisations with differing ideologies of teacher education and complexity. Some of them might for example be linked to government and consequently promote government policy discourse and sanctioned ideas, which contradict the core principles of the bottom-up approaches.

Bottom-up TPD approaches could be helpful in closing some of the aforementioned gaps that exist in traditional approaches to TPD (e.g., needs-based PD, own practice-based). In particular, within this approach, teachers can have control over their learning, learn collaboratively, network and act as leaders for their and their peers' learning, and create knowledge. Studies (e.g., Wenner and Campbell 2017, cited in Dodman, 2021) have found that teacher leadership can lead to positive feelings of empowerment and professionalism for teachers themselves, and teacher-led professional development is viewed as more frequent and more relevant. Over the past two decades, the role and idea of teacher leadership have increasingly grown. Teacher leadership is considered crucial to developing professional capital that can ensure effectiveness (Lieberman, 2013; Cheng and Szeto, 2016). Focusing on teacher leadership may increase education capacity by improving policy, practice and educational outcomes (Cordingley et al., 2019). Teachers could also direct their professional learning and

support their peers through collaboration and sharing (Bangs and Frost, 2015). Pedder and Opfer (2013) see the need to build collaborative exchanges among teachers and increase the capacity to learn. Teachers, however, can do that not by solely allowing them to do so but by enabling them and creating favourable conditions (policies, working conditions, culture) (Cordingley et al., 2019).

In environments where teachers' autonomy is limited, trust towards teachers as professionals is declined (Mitchell and Lambert, 2015). Prescriptive curricula, standardisation, state control, and the scarce opportunities for teachers to rethink their teaching and learning and make decisions have led to the de-professionalisation of the teaching profession (Biesta, 2010; Hargreaves, 2000; Evans, 2008). An important issue for teacher professionalism is the nature of, and the limits to, teacher autonomy. Helsby and McCulloch (1996) point out that teachers need to develop, negotiate, use and control their own knowledge, which is central to teacher professionalism' (p. 56). Therefore, bottom-up approaches to teacher professional development can be seen as a **response to regaining professionalism** along with autonomy and agency, as teacher agency is at the core of professionalism (Molla and Nolan, 2020).

Teacher professionalism remains a contested site, and the opportunity to develop teachers' practice and improve systems becomes narrow in scope if teachers are seen as technicians and implementers of merely technical knowledge (Sachs, 2016). Investigating teacher agency is important regarding maintaining teacher motivation and commitment to work, which might lead to regaining teacher professionalism and positively contributing to the issue of attracting teachers to the profession. Agentic teachers can identify and utilise affordances to enhance their professionalism and take action towards change (Anderson, 2010).

2.3.1 TEACHER PROFESSIONAL DEVELOPMENT IN THE ARMENIAN CONTEXT

The in-service teacher professional development in Armenia is a state-directed mechanism that operates within the dual modalities of 'training for attestation' and 'training for curriculum'. After adopting the Law on General Education in 2009, a centralised model for teacher PD was introduced. National Institute for Education (NIE) was carrying out the

countrywide TPD (one-fifth of the teacher cohort was trained yearly). This aimed to determine the compliance of the teacher's knowledge, working abilities, and skills with the position held - 'training for attestation'[21] (RA Law on General Education, Article, 3/14). Besides this mandatory training for attestation, in case of introducing a new curriculum, teachers were trained to teach with the new curriculum standards. National Institute of Education (NIE) was solely responsible for teacher training till 2019 when the post-revolutionary Government[22] dissolved it. The argument behind this decision was that over the years, NIE received criticism for the quality of services it provided and for the monopoly it was vested within the conditions of internal underfunding. In 2017, upon the government's request, the EU funded a functional review of the NIE (DADA6, 2017). The recommendations and the government's vision for reforms emphasised the need "to strengthen the capacity of NIE not in the delivery of teacher training services, but in carrying out its mandate as a regulator of the teaching profession (through teacher standards and monitoring), teacher training (through defining technical requirements to outsource and monitor delivery to different organisations) and teacher quality overall (World Bank, 2019, p. 6). The government planned to capacitate NIE to develop the framework for teacher professional development and outsource the provision of teacher training to eligible training providers (World Bank, 2019, p. 6). However, the NIE was dissolved, and since 2021 a newly established National Centre for Educational Development and Innovation (NCEDI) has been responsible for setting standards, monitoring and evaluating TPD programmes carried out by external accredited organisations[23]. Since 2021, the TPD process has been decentralised. Although, according to a new TPD system, teachers are exposed to some critical topics[24] during their state-mandatory professional development, it is still not needs-based (UNICEF, 2022a). The training programmes are with a 'one size fits all' principle,

[21] RA Decree N 1391-Ն On Teacher Attestation procedure and standards. Available at https://www.arlis.am/documentview.aspx?docid=69234

[22] The 2018 Armenian Revolution was a series of anti-government protests in Armenia from April to May 2018 staged by various political and civil groups led by a member of the Armenian parliament Nikol Pashinyan and who later became the new prime minister through a snap election.

[23] The MoESCS gives accreditation based on NCEDI recommendations.

[24] Since 2021, there have been major changes in the content and the process of PD. Based on the MoESCS Minister's decree (N 367 Ա/2, 2022), there are eight mandatory modules for teacher training that include critical topics, e.g., inclusive education and digital literacy.

and as it was reported in the most recent study (UNICEF, 2022a), decentralisation has a corruption risk (e.g., a school that gets accreditation for providing training can promise teachers smooth and easy training for attestation if they choose that school as a training site). Along with mandatory attestation, the government introduced a voluntary attestation mechanism, which is subject testing, and teachers who participate in it can get a pay rise if they score 70% and higher (RA Government Decree on N 596-Ն on approving the procedure of voluntary attestation, pay rise, and the committee formation). The aim of this voluntary attestation system is to improve the procedure of mandatory attestation, to reveal and motivate the high-quality teachers of the system and to ensure the entrance of motivated young individuals to school[25]. According to the procedure, teachers who score 70% and above receive a salary increase from 30-50%. If teachers' test scores range from 60-69%, then they do not get a salary rise and keep their jobs[26]. However, if a teacher's score is below 60, then they are given one year to retake the test, and if not, they lose the job. According to a recent comprehensive study (UNICEF, 2022a) of the teacher management system in Armenia, one-third of participating teachers expressed unwillingness to participate in this voluntary attestation because, from their perspective, this mechanism is disrespectful towards their job and experience. Testing teachers' subject knowledge only shows that a professional teacher within the state discourse is about knowledge base only, while relevant knowledge is just one aspect of teacher professionalism (Eraut, 1994, Whitty, 2000). Moreover, what marks teachers out as good or better than good is not only their content knowledge but also pedagogical skills and their commitment to their teaching, their students and their learning and achievement (Day et al., 2007), which the voluntary attestation reform system fails to look at, thus questioning the fulfilment of one of the main goals of the reform programme (revealing high-quality teachers).

Teaching and learning are influenced by various contextual factors; therefore, TPD activities should be designed based on teachers' existing knowledge, perceptions and beliefs, identified

[25] MoESCS Minister's Order N-21-Ն, On Approving the Pilot Programme for Teacher Voluntary Attestation https://www.arlis.am/documentview.aspx?docid=149769

[26] RA Government Decree on N 596-Ն on approving the procedure of voluntary attestation, pay rise, and the committee formation. Available at https://www.arlis.am/documentView.aspx?docid=162427

needs, and practices (Opfer and Pedder 2011; Moon et al., 2014). Apart from that, high-quality TPD activities can lead to improvements in teachers' practices (Garet et al., 2001); traditional TPD approaches are often criticised by both teachers and researchers (Opfer and Pedder, 2011); hence, it is required to have new forms of teacher professional development and learning (Pachler, 2007).

2.4 TOP-DOWN AND BOTTOM-UP APPROACHES TO PROFESSIONAL DEVELOPMENT

The researchers define top-down approaches as those in which 'teachers are mostly reduced to executors of top-down prescribed ideals' (Vangrieken, Meredith, Packer and Kyndt 2017, p. 5.2.1). Courses and workshops that are designed by experts and are delivered within the top-down model are considered a traditional in-service perspective (Villegas-Reimers, 2003). In top-down approaches, participants usually have little time to engage in discussions of topics specific to their own needs and interests or experience networking and connecting with other participants that prove to be beneficial (Bernstein, 2019).

While top-down approaches to teacher education are dominant within different jurisdictions, there is an emerging type of TPD, the bottom-up approach, as an alternative approach to teachers' traditional, top-down TPD. Some authors (e.g., Patton, Parker and Tannehill, 2015) advocate for teacher-led/bottom-up TPD because it can promote professional capital for teachers. Several core features were listed that would make bottom-up PD effective (Patton, Parker and Tannehill, 2015) such as they should:

- be driven by teachers' needs,
- acknowledge learning as a social process,
- include collaborative opportunities,
- ensure sustainability,
- treat teachers as active learners,
- improve teachers' pedagogical skills and content knowledge,
- offer facilitation that reflects objectivity and care,
- focus on learning outcomes for students.

The authors argue that these core features provide criteria for constructing quality bottom-up/teacher-led professional development.

In bottom-up TPD, teachers take ownership of their learning and development by contributing to each other's professional learning and development. One of the emerging trends of a bottom-up approach to TPD is unconferences (e.g., Edcamp, MirandaMods, TeachMeet), a non-traditional form of professional activity, a democratic knowledge exchange (Preston and Cuthell, 2012), where all peer professionals are considered to have the expertise. They come together to learn from each other. The key components of these non-formal conferences are collaboration, professional knowledge sharing, self-directed learning, networking, engagement with the professional community and much more (Carpenter, 2016; Bernstein, 2019; Cuthell, 2009). Bottom-up TPD conferences (also called unconferences) provide an underserved need, teachers-for-teachers professional development covering the most important topics to teachers. Bottom-up TPD conferences also boost high levels of participant engagement with minimal burdens on organisers. Their biggest advantages are flexibility, the ability to address timely topics, and networking opportunities (Kassner, 2014). Researchers assert that a bottom-up TPD conference is an "effective and surprisingly professional way of transferring knowledge and creating networks" (Greenhill and Wiebrands, 2008, p.1 in Kassner, 2014). The bottom-up conferences can be organised on a broader regional or national level and a school level. Schools are sites of both novice and experienced teachers' learning and development, although they are complex, dynamic, and relational environments (Daly, Milton and Langdon, 2020) where all the stakeholders should 'recognise and value the importance of 'emergence' in professional learning' (p.1). The research does not specify what type of TPD (bottom-up or top-down) should be in place while using formal and informal terms for teachers' learning; however, it does suggest that seeing schools as sites of teachers learning and development is important and that an ecological conceptualisation suggests a grounded understanding of the conditions that form schools as such (Daly et al., 2020). The authors also argue for the schools to have the capacity to collectively question the existing norms and work, as it may result in changes in teachers' thinking and actions (Kemmis, 2006, cited in Daly et al., 2020) if the participatory and inquiry-focused professional learning is to be

embedded at a national scale (Bowe and Gore 2017, cited in Daly et al., 2020). Considering conditions, school leaders should create enabling environments that promote experimentation and risk-taking and provide grounds and adequate support for innovation by facilitating change that emerges from teachers' ideas, feelings and practices (Daly et al., 2020). Therefore, whether the bottom-up TPD conferences are organised within or outside the school hugely depends on how enabling the particular school environment is, how supportive the leadership is, whether the teachers have a voice in their PD and so on.

Apart from bottom-up conferences, another movement is ResearchEd, the grassroots, teacher-led organisation aiming to bring people together, promote collaboration, raise research literacy among teachers and explore what works. Although being promoted as a teacher-led initiative, some organisations may be connected with the government (e.g., ResearchEd in the UK got some criticism[27]), which means there is a risk of promoting officially sanctioned discourses, e.g., around the science of learning. It is worth mentioning that although the activities organised by the Teacher Development Trust and ResearchED were accepted with enthusiasm, it is still hard to claim a considerable improvement in the quality of professional development on a national scale (England) (Fletcher-Wood and Zuccollo, 2020). This statement by Fletcher-Wood and Zuccollo (2020) raises some questions as to how the impact/improvement was measured, taking the fact that the last substantial review of professional development in England was conducted over a decade ago, revealing concerns about the quality, access, and impact of professional development (Pedder, Storey and Opfer, 2008).

Focusing on my study's objectives, I restrain myself from going deep into the 'what works' agenda, as it is a data-driven approach with a positivistic view to teaching which is rooted in the understanding that 'best practices exist in teaching: practices that can be effective in every context (Mills et al., 2020). I am concerned with understanding subjective realities through the interpretivist paradigm rather than the positivistic one.

[27] Price, J. A behaviour tsar for schools gets an F by every measure. The Sunday Morning Herald. September, 27. 2022. https://www.smh.com.au/politics/nsw/a-behaviour-tsar-for-schools-gets-an-f-by-every-measure-20220926-p5bl69.html

One more example of bottom-up TPD is the Teacher-led Learning Cycles project which involves seven countries (Brazil, Malaysia, Switzerland, Ghana, South Korea and Cote d'Ivoire and Columbia) and focuses on engagement in professional development to develop teachers' classroom practices for formative assessment (Campbell, DeLuca and LaPointe-McEwan, 2022). Community approaches for teacher development are also seen as increasingly important (Wardrip, Gomez and Gomez, 2015) because teaching has been characterised as taking place, behind closed doors, in isolation (e.g., Lortie 2002; Moir et al., 2010). Maintaining teacher isolation in professional development was considered insufficient thus, professional learning communities have been promoted as an additional approach to teacher development and learning (Lumpe, 2007; Hargreaves, 2013) because collaborative practices to teacher development can contribute to this isolation. Moreover, links are found between professional learning communities and teacher agency, where a professional learning community is viewed as an affordance for the exercise of teacher agency (Philpott and Oates, 2016) both in terms of learning and responding to or driving reform (Lipponen and Kumpalainen 2011; Riveros et al. 2012) as well as position teachers as agents (Brodie, 2019). In addition, Brodie's (2019) study shows how agency is important in sustaining PLCs and needs to be considered part of the construct. Brodie's idea is supported by research reviews (e.g., Philpott and Oates, 2016; Tannehill and MacPhail, 2017 in Hargreaves and Elhawary, 2019) that in order for the TPD to be viewed as effective teachers should act as their own agents and proactively take initiatives. More specifically, it is more impactful when the participants identify their learning and act accordingly. Teacher professional development process is complex and can be shaped by a vast range of past, present and future factors (Taylor, 2020). Taylor contends that the 'contexts for professional growth are shaped by relationships, leadership, capacity and ethos, nested within external conditions of policy, culture, society and values' (p. 3). These perspectives recognise the likelihood that the pre-determined goals of the leadership and the environment might not support teachers' development. The capacity of teachers to self-direct and collaborate with peers has been viewed as a precondition for effective professional learning (MacBeath 2007, Cordingley et al. 2005). Meanwhile, creating collaborative learning

communities and cultures where teachers are agentive is challenging (Opfer and Pedder 2010, OECD 2018, Milton et al. 2020).

Research has shown that there are links between teachers' learning and professional development, and their cognitive abilities, their knowledge and perceptions of their students, professional attitude and identity, content knowledge, and pedagogical knowledge and skills (De Vries et al., 2013; Kyndt et al., 2016). Kyndt et al. (2016) present a holistic view of teachers' different learning activities in their daily work. These can be divided into individual learning activities (e.g., information gathering, reflection, facing and overcoming difficulties) and collegial learning activities (e.g., collaboration, sharing, and interdisciplinary activities) (Vangrieken et al. 2017). Proposed approaches in this regard are collaborative and self-directed, as they seem to have the potential for the aspect of teacher PD, wherein traditional forms of professional development have fallen short. For instance, taking into account teachers' own experiences and needs in their professional development (Boone, 2010; Westheimer, 2008) and promoting teachers' active contribution to shaping their work and its conditions are assumed to be crucial aspects of good and meaningful education (Biesta et al., 2015). Within the type of non-traditional conference described in this study, teachers come together as a bigger professional community, having the opportunity to share their knowledge, co-construct ideas, network, contribute to their colleagues' professional learning, and make choices based on their professional needs and interests**.**

In systems like Armenia, where schools are not seen as sites of teacher professional learning, where the leaders fail to create a collaborative and inclusive learning environment and 'fail to enable teachers to shape and lead their own learning' (Daly et al., 2020, p. 7) a bottom-up TPD conference or any other type of non-school embedded TPD can provide a potential environment for teacher development providing opportunities for the enactment of teacher agency. A similar environment is investigated in this paper from the perspective of teacher agency.

2.5. UNDERSTANDING TEACHER AGENCY

What is agency?

There is a long history of agency and structure debate, which provides differing positions on the ontology of agency: relating it either to social systems or individual capacities. Traditional agency, unlike the ecological or emergent agency, has been theorised, especially in sociological literature, known as the structure-agency debate (Giddens, 1984; Hollis, 1994). Within the traditional conceptualisation of agency, it is viewed as an *innate capacity,* something that people possess. While there is some literature that locates the concept of teacher agency in relation to wider theoretical discussions of agency (e.g. Priestley, Edwards, Priestley, and Miller, 2012; Pyhältö, Pietarinen, and Soini, 2014), existing change models tend to both underplay and misinterpret the role of teacher agency in educational change (Leander and Osborne, 2008), albeit that a more interesting body of work has been emerging (e.g., Eteläpelto, Vähäsantanen, Hökkä, and Paloniemi, 2013; Priestley, Biesta, and Robinson, 2015) in particular concerning the factors that relate to social action which main aim is the explanation of social action.

In much of the literature, agency remains vague and poorly conceptualised. It is still unclear if the phenomenon refers to an individual capacity of teachers to act as agents or to an emergent 'ecological' phenomenon contingent on the quality of individuals' engagement with their environments (Biesta and Tedder, 2007). For example, the approach taken by Eteläpelto, Vähäsantanen and Hökkä (2013) suggests that professional agency refers to individuals who can influence their work and professional identity. The authors refer to agency as a notion that can be 'practiced'. For Pyhältö, Pietarinen and Soini (2014, 2015), it is an ongoingly constructed 'capacity', something teachers can recognise and use to self-regulate. For Priestley, Biesta and Robinson (2015), it is 'an emergent phenomenon' of an 'actor-situation transaction' where agency is something that can be 'achieved'. Others, particularly Buchanan (2015) and Stillman and Anderson (2015) refer to the phenomenon of identity to support in the discussion of agency, viewing them as intertwined. Van der Heijden, Geldens, Beijaard and Popeijus (2015) from the Netherlands and Quinn and Mittenfelner Carl (2015) from the USA look at agency from a differing perspective, focusing on teachers as agents of change, suggesting the exercise of strong agency that is linked a broader educational aspect.

Broadly speaking, there are two main approaches to agency that can be distinguished in the literature (Goller and Paloniemi, 2017). In one approach, agency is understood as an **individual characteristic ('capacity') (**Bandura, 2001, Pyhältö, Pietarinen and Soini, 2014)**.** Agency is defined as '*the capacity to exercise control over the nature and quality of one's life'* (Bandura, 2001), *a capacity that prepares the way for the intentional and responsible management of new learning, both at an individual and community level* (Pyhältö, Pietarinen and Soini, 2012, 2014)**.** This concept includes using others intentionally as a resource for learning and, equally, serving as a support for them (this is a key feature of the bottom-up TPD approach). Another approach to agency is related to **action** (Vähäsantanen, 2013; Biesta and Tedder, 2007), that is, things that individuals or collectives actually do while affecting their work and professional identity.

For this study's purposes, I rely on interpreting agency as an emergent phenomenon while being aware of its methodological challenges (e.g., newly emerged and poorly researched approach). This concept differs from the sociological conception of agency as a variable in social action (for instance, in the longstanding structure and agency debate). Here, rather than seeing agency solely as a possession of an individual or an individual capacity, it is seen as an emergent phenomenon that emerges from the interplay of an actor and an environment.

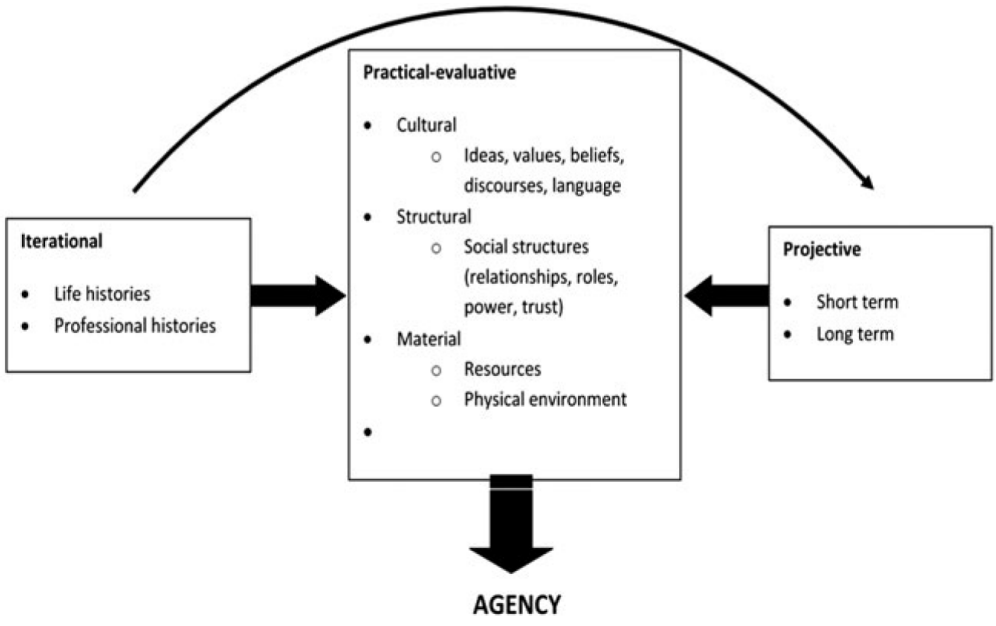
> [T]his concept of agency highlights that the actors always act by means of their environment rather than simply in their environment [so that] the achievement of agency will always result from the interplay of individual efforts, available resources and contextual and structural factors as they come together in particular and, in a sense, always unique situations (Biesta and Tedder, 2007, p. 137).

Emirbayer and Mische's (1998) and Biesta, Priestley and Robinson's conceptualisations of agency have been most frequently referred to in this study. Emirbayer and Mische (1998) have theorised agency with the dual aim: i) to conceptualise agency and ii) to overcome the one-sided theoretical bias of existing theories of agency, which, in their understanding, tend to focus either on routine, on purpose, or judgement. They suggest that the achievement of the

agency should be seen as something that is influenced by past experiences, orientated towards the future and engaged with the present. They refer to these three dimensions as the *iterational*, the *projective* and the *practical- evaluative* dimension. They argue for a theory of agency which is formed by a dynamic interplay of these three dimensions and which takes into account 'how this interplay varies within different structural contexts of action' (Emirbayer and Mische, 1998p. 963). They define agency as 'the temporally constructed engagement by actors of different structural environments. Agency, therefore, appears as a 'temporally embedded process of social engagement, informed by the past (in its habitual aspect), oriented toward the future (as a capacity to imagine alternative possibilities) and 'acted out' in the present (as a capacity to contextualise past habits and future projects with the contingencies of the moment)' (ibid., p.962).

Biesta et al. (2015) combined their ecological conception of agency, considered an achievement, with ideas from Emirbayer and Mische (1998) and created the following model (Figure 2.1) for understanding the agency. This model was not the basis for my study design and analysis because although it helps explain teacher agency, it does not position teacher agency within the TPD context. The model (Figure 2.1), however, influenced the analytical and interpretation process of my study, which are discussed in the later chapters.

FIGURE 2. 1 A MODEL FOR UNDERSTANDING THE ACHIEVEMENT OF AGENCY (BIESTA, PRIESTLEY AND ROBINSON, 2015)



The framework highlights the individual's past experience (professional and personal), their orientation towards the future (short term and long term) and enactment in a specific situation to help achieve agency. Thus, agency is constrained and afforded by available cultural, structural and material resources. It is worth mentioning that each of these elements of agency could be personal or collective, including iterational, projective and practical-evaluative dimensions within a shared sociocultural context, which might differ based on individual(s) personal background and experience (Emirbayer and Mische, 1998, p. 971). A question that is worth asking regarding the most untheorised dimension, the practical-evaluative aspect of agency, is "What is it in the present situation that influences how much agency individuals, in the case of my study, teachers can exercise?" In trying to understand what characteristics of personal and sociocultural aspects of agency interact with each other that increase the possibility of agentic action, some researchers have focused on identifying personal characteristics (Van der Heijden et al. 2015), and others concentrated on contextual factors (Bridwell-Mitchell, 2015) that can be attributable to agency.

In much of the literature discussed above, the focus is on sociocultural models of agency, in which agency is theorised as an interplay of personal capacity and disposition as well as the affordances or resources for agency of the particular sociocultural context. There is a risk in thinking that if a conducive sociocultural context is created for exercising agency, teachers will utilise its resources and affordances, at least in ways consistent with their personal disposition and capacity. However, more focus should be put on whether and how teachers individually or collectively utilise resources available to them for exercising agency rather than looking at the form of a sociocultural context conducive to the exercise of teacher agency.

Agency is hindered and supported by social relations and structures, specifically power relations (Mercer, 2011; Eteläpelto et al. 2013; Buchanan, 2015). As Mercer (2011) describes, people can impact their environment instead of just passively reacting to them. They can actively shape their own context based on their actions, thoughts and decisions because the people and contexts are in continuous dynamic relationships. In the context of this study, Mercer's description can be translated as that the teachers can influence their PD context by

taking an active role in making the content, sharing knowledge, engaging in professional discussions and networking as a complex and dynamic process between peers, the context and themselves. By looking at the interplay of teacher agency and the bottom-up TPD conference approach, my thesis aims to explore and illustrate how a detailed understanding of teacher agency and the conditions under which it is exercised might offer substantial potential in enabling teachers to engage with change in their PD and practice.

Moreover, the study aims to identify the types of teacher agency in the context of the bottom-up TPD conference, where teachers can exercise their agency as opposed to the wider PD system. Here, the wider context is a social structure that 'dictates' certain actions and behaviour to teachers: how teachers' freedom to act or capacity for autonomous action within the constraints of social structure is enacted. As in this study, I refer to the agency as something that can be achieved rather than it being solely about the capacity; then, the context is very important. And while within this study, the agency is seen as more than a capacity, the capacity is important in enabling agency to emerge. The aspects contributing to teacher agency are personal capacity (knowledge and skills), beliefs (professional and personal) and values. The commonality of all those aspects is that they all are rooted in past experiences; that is to say, the agency is exercised within the contexts where teachers have opportunities and use them to negotiate or confront the limitations of policy and leadership.

My interest is in the phenomenon of teacher agency and its types in a specific context as within this research study; teacher agency refers to teachers' professional actions based on their perceptions and experiences and the capacity of their professional actions given the available resources and limitations (Erss, 2018). Teachers achieve agency through their judgments and actions regarding the social, cultural and material conditions in which they work (Priestley et al., 2012, 2015; Biesta et al., 2017) and practice agency when they impact and make choices influencing their work and 'professional identities' (Eteläpelto et al. 2013, p. 61) by the configuration of influences from the past, orientations towards the future and engagement with the present (Emirbayer and Mische, 1998). Thus, referring to both Erss's, Priestley et al., Biesta et al., and Emirbayer and Mische's descriptions of teacher agency, this study looks at

the interplay of teacher agency and bottom-up TPD conference and the types of teacher agency given the resources and limitations within the bottom-up TPD conference.

Agency is a complex phenomenon, and in this section, I explored competing perspectives (innate capacity: Giddens, 1984; Bandura, 2001, and the quality of engagement, an action: Biesta, Priestley and Robinson, 2015) around that phenomenon to better understand it. I apply the lens of teacher agency empirically to teacher professional development. Referring to the ecological approach to teacher agency, I conceptualise it as stating that any individual can act agentively at a certain level, which can be evident in a certain context. Agency can be developed based on individual factors (individuals' past experiences, present engagement and future orientations, Emirbayer and Mische, 1998), contextual factors and resources (Emirbayer and Mische, 1998, Bridwell-Mitchell, 2015). The level of development depends on the number of subjective, objective, as well as contextual factors. I present agency as an enabler of autonomy, as something that can be achieved and exercised if given the resources and space for that. Consequently, applying this conceptualisation of agency to teachers, teacher agency is about a capacity and an action (capacity to act responsibly and utilise autonomy). If the social structures constraining teachers (according to Gidden's theory of structuration) are more powerful than their individual capacities to resist, then we need to focus on individual and contextual factors to enable agentive action.

Against the backdrop of this discussion, this study looks at whether and/or how teachers utilise the resources and opportunities provided by the bottom-up TPD conference (particular context) and exercise their agency. Although none of the reviewed literature has provided specific evidence on the teacher agency within the bottom-up TPD context, the perspectives and understanding from those research studies guided my research.

2.6 TEACHER AGENCY IN THE CONTEXT OF PROFESSIONAL DEVELOPMENT

Imants and Van der Wal (2019), in their analysis of 36 research articles on professional development and school reform, indicate the growing focus on teacher agency because

teachers' role as change agents is essential in educational change. Their model (Imants and Van der Wal, 2019) of teacher agency in professional development and school reform is structured around five characteristics: (1) the teacher is seen as an actor, (2) dynamic relationships, (3) professional development and school reform are seen as inherently contextualised, (4) includes the professional development and school reform content as variable and (5) considers outcomes as part of a continuing cycle. The analysis indicates that research on teacher agency differs depending on the interaction and relation of these five characteristics. Drawing lines of these five features to my study context, I state that the bottom-up TPD conference approach can provide teachers with the opportunity to act as active agents in making decisions about their professional development, building trusted relationships with colleagues, and discussing and engaging in a multilevel context for PD, although still lacking the mechanisms of the establishment of collaborative practices.

Noonan (2016), in his dissertation on teacher agency in powerful TPD, states that different types of professional development approaches and activities can make teachers more or less agentive, supporting my view of the potential benefit of bottom-up TPD on the enactment of agency. Noonan proposes three dimensions of teacher agency in relation to TPD: 'agency over', 'agency during', and 'agency emerging from' (p. 109). The dimension of agency over relates to teachers' role and voice in choosing and designing the professional development content and process, which in the case of my study, can refer to the autonomy of decision-making in teachers' PD, one of the main features of bottom-up TPD conferences. The factor of 'agency during' is the teachers' freedom to lead the discussion and conversation based on the challenges they face. Noonan's described dimension of 'agency during' resembles the teachers' opportunity to start a discussion or lead a session on their challenges faced and opportunities envisaged during the bottom-up TPD. The third factor, which is 'agency emerging from' (teachers select and implement what they learn during PD activities, Noonan, 2016), is not evident in my study as teachers' learning and implementation aspects are out of my study scope but suggest the valuable idea for future research. In particular, for my study, the most relevant point from here is that of the twenty-five powerful learning experiences Noonan (2016) studied, twenty-one involved some degree of teacher agency, which supports

my argument that teacher agency is important in the context of teacher professional development, either bottom-up or top-down. However, within the top-down systems, teachers mainly do not have many opportunities to exercise agency; hence the bottom-up TPD approach can help address that gap. It is necessary to illuminate the teachers' agentic role in professional development because agency (and autonomy) is at the core of teacher professionalism (Priestley et al., 2015), despite emphasising teachers' social and structural constraints and relatively narrow scope for autonomous actions (Erss, 2018).

In the context of teacher professional development (and school reform), agency, apart from contributing to an increase in creativity, motivation and autonomy (Eteläpelto et al., 2013; Goller and Paloniemi, 2017; Bandura, 2001), it can also lead to change and resistance to change (Vähäsantanen and Eteläpelto, 2011). Agency, in this case, can be considered a 'negative' factor from the perspective of an external evaluator for reform and development. Hence, agency is a significant factor in professional development and reform. Still, its impact and scope depend on teachers' utilisation of structural affordances and constraints and teachers' interpretations of the outcomes of these actions (Hoekstra et al., 2009, cited in Imants and Van der Wal, 2019).

2.7 TYPES OF TEACHER AGENCY

While the research on teacher agency and its types in the context of TPD is scarce and has yet to receive sufficient empirical or policy attention, especially in the context of bottom-up TPD, I present literature that has valuable implications for my study context. I present the literature that explored types of agency within different contexts, e.g. professional learning communities (Brodie, 2019), in relation to teachers' professional functioning (Molla and Nolan, 2020) and within the Finnish Content and Language Integrated Learning (CLIL) context (Pappa et al., 2017).

All three studies gathered their data through interviews and analysed the data in relation to the features of the phenomenon that teacher agency is explored within. Certainly, the agency types presented in these studies differ because the contexts differ as well. For instance, when

looking at teacher agency from the perspectives of professional learning communities (PLC), three forms of teacher agency emerged in relation to the PLC features and contextual factors: i) engaging with communities (teachers found their work of the communities inspiring, they enjoyed learning and PD), ii) abstaining from communities (some aspects were useful while others were challenging for teachers) and ii) rejecting communities (teachers saw little positive in work and left the community) (Brodie, 2019).

Pappa et al. (2017) look at how teacher agency is experienced by CLIL teachers working in Finnish primary schools from the perspective of three agency types, namely: pedagogical (highlights the relationship between teachers and students), relational (reflects collegial relationships) and sociocultural (refers to other stakeholders beyond the school). Their findings showed that language, classroom-related tensions and temporal, material and developmental resources were perceived as tensions limiting teacher agency. In contrast, autonomy, openness to change, teacher versatility, and collegial community were found to support teacher agency. The factors supporting teacher agency found in this study (Pappa et al., 2017) share common characteristics with another study explored here (Molla and Nolan, 2020), although within a different context, which can mean that whatever the context is, the affordances for TA are somewhat similar.

In their study, Molla and Nolan (2020) explore the interplay of teacher agency and professional practice, drawing on the capability approach to human development. They revealed five types (facets as they call them) of teacher agency: inquisitive (e.g., seeking learning opportunities, reading professional literature, voluntarily participating in PD activities), deliberative (e.g., reflecting on teaching and beliefs), recognitive (e.g., demanding to be valued and respected, valuing profession), responsive (e.g., committed to students' success, treating students equally) and moral (e.g., respectful to all colleagues, acting as responsible agents). The findings show that the teachers in Molla and Nolan's study (2020) had limited agency in some areas of professional functioning, such as expertise, recognition and responsiveness. The authors signalled that the lack of agency regarding these critical characteristics of teacher professionalism negatively impacts practice (Nolan and Molla, 2017b). In their later study, Molla and Nolan (2020) created a triangular model (professional practices, objective context,

and subjective conditions) for building agency through transformative professional learning. This model resonates with the analytical frame of my study as agency is revealed through the complex interplay of certain aspects, which in my study are personal and professional characteristics, motives of participation in TPD and changes in professional practice. Below, I present the table of teacher agency types with their main descriptors.

TABLE 2.1 TEACHER AGENCY TYPES

Agency types in Molla and Nolan's (2020)	
Types	**Descriptors**
Inquisitive agency	Voluntarily seeking learning opportunities and engages in professional learning communities
Deliberative agency	Think about their beliefs and practices, as well as reflect on their teaching and overall practice
Recognitive agency	Demand to be valued and respected for their professional work Value teaching profession
Responsive agency	Committed to each student's success and treats them equally
Moral Agency	Act ethically and make morally justifiable decisions
Agency types in Brodie (2019)	
Engaged	Engagement with the focus of the project and with each other
Abstained	Developed some trust in the PLCs and enjoyed collaborating with their colleagues, however lacking time to stay with the project
Rejected	Rejected the project and the PLCs because of some tension between the school leadership and the teachers in these schools.
Agency types in Pappa et al., (2017)	
Pedagogical	Is enacted within the classroom domain (e.g. material selection and usage, selection and execution of instructional strategies)
Relational	Is reflected in collegial relationships in light of sharing experiences and knowledge with colleagues.
Sociocultural	Is related to a wider sociocultural environment, including stakeholders like parents, policy-makers and other authorities.

As it is seen, all the types of teacher agency presented above are closely related to the phenomenon in relation to which they were explored (e.g., school reform, professional functioning) thus, they can be different from each other meanwhile sharing certain common characteristics. For instance, definite common features that are evident in different types of

teacher agency are learning, decision-making, and responsiveness. Professional experience, in this respect, seems less significant than personal experience in shaping teacher agency.

2.8 SUMMARISING ARGUMENTS AND LINKING LITERATURE TO MY RESEARCH

I presented the literature that looked at teacher agency in relation to contexts such as professional functioning (Molla and Nolan, 2020), teacher powerful learning (Noonan, 2016), or teacher professional development and school reform (Imants and Van der Wal's study (2019), to be able to situate my study as it looked at teacher agency within another specific context-bottom-up TPD through the lens of the ecological approach to teacher agency. Other literature that explored teacher agency in relation to, for instance, curriculum reforms through a traditional conceptualisation of teacher agency, were informative but did not become part of my literature as they were out of the scope of my study.

I started my literature analysis by discussing teacher professionalism as a phenomenon that includes teacher agency as one of its important aspects. After, the review on teacher professional development has mapped out broad areas of the TPD literature in general and specifically on top-down and bottom-up approaches linked to my study. Much research into teacher professional development explores traditional, top-down approaches that are concerned with specific interventions in an attempt to identify and standardise the features that make TPD activities effective. However, those attempts to reach a consensus have been questioned, although governments have been widely using them to guide their TPD policies (Sims and Fletcher-Wood, 2020). While my study is not about a top-down approach to TPD, I explored certain essential aspects of it, namely the importance of teacher professional development, its proposed models and effective features, to provide a wider context where my study is situated. Top-down approaches to TPD are dominant and can be useful for teachers, as most relevant literature suggests; however, there is space and need to explore bottom-up approaches, which are advocated to meet some of the gaps of top-down TPDs.

In my literature review, I present conceptions of teacher agency both from the traditional agency and structure debate perspective (Giddens, 1984) in which agency is seen as a capacity and from an emerging, ecological perspective (Emirbayer and Mitsche,1998; Biesta et al.,

2015) in which agency is viewed as an achievement (given the favourable resources and context supported by teachers individual factors e.g. past experiences, present engagement and orientations toward future). The most available literature situates teacher agency in the reform context referring to the traditional conceptualisation of teacher agency, whereas I view teacher agency as a key component of teacher professionalism (Molla and Nolan, 2020) and an important aspect of powerful teacher professional development (Noonan, 2016), referring to the ecological approach to agency. From the ecological perspective, teacher agency is exercised through individual teacher factors, available resources, and specific features of the context, and the bottom-up TPD conference creates a favourable environment for it, hinting that they can be interwoven and leading to my interest in exploring their interplay and potential for practice. Moreover, referring to Noonan's (2016) study in which he found that twenty-one out of twenty-five successful learning experiences involved some degree of teacher agency, I contend that teacher agency is important in the context of teacher professional development.

The identified research on teacher agency provides an understanding of the types of agency, and while none of them explored teacher agency in the context of a bottom-up TPD, the literature developed my understanding of the topic, revealing the gaps and opportunities within the field. Hence, rather than exploring the teacher agency through the lens of the specific theoretical model, I took a more holistic approach and drew on the experiences and ideas of teachers who directly had experience in participating in bottom-up TPD conferences to be able to answer the following research questions:

- *What is the interplay of teacher agency and bottom-up teacher professional development approach?*
- *What types of teacher agency are identified in the context of bottom-up TPD?*
- *What potential does the bottom-up TPD conference approach have for practice?*

Recent policy developments and reforms in teacher professional development in Armenia indicate a government's commitment to improving the TPD system, which is still a top-down approach in which teacher agency is limited, to say the least. Reflecting on another reform of in-service teachers taking a subject test for a pay rise and revealing 'good teachers' points to

a limited understanding of teacher professionalism by education policymakers. I acknowledge that teacher professionalism is a construct and can vary across countries but considering subject content knowledge as the only determinant for 'good teachers' and pay rise is problematic. The reforms suggest that teacher-related policies, including TPD, are possibly aligned with neoliberal agendas in which teachers' autonomy is restricted, and agency is seen solely for new curriculum implementation rather than as an important aspect of teacher professional development and improvement. Teacher agency is shaped by the policy specifying goals and processes (Priestley, Biesta, and Robinson, 2015) and depends on teachers' perceptions of their scope of action (Erss, 2018). Agency also is among the most essential aspects of professional identity (Moore, 2007). Hence, if the policy is directed toward diminishing agency and autonomy, it will decrease teachers' capability to make decisions and frame future actions. Against this backdrop, investigating the possibility of teacher agency enactment in the context of bottom-up TPD by revealing agency types and understanding its potential for practice is important in the current waves of educational reforms in Armenia. More specifically, this research makes a contribution in six important ways: i) understanding the interplay between bottom-up professional development and teacher's agency considering what factors might affect the utilisation of affordances for that, ii) understanding teachers' views on a bottom-up conference approach to TPD, iii) Identifying the types of teacher agency in the bottom-up TPD context, iv) Identifying certain characteristics (personal capacity, beliefs and values) that contribute to the enactment of teacher agency in the context of bottom-up TPD, v) drawing initial understanding of the potential of bottom-up TPD conference for practice, and vi) providing insights about possible design to investigate teacher agency in the TPD context.

As research progressed, a rich picture of experiences in bottom-up TPD emerged from participants' perspectives. The emerging theoretical perspectives of teacher agency became more useful than the traditional ones in interpreting data. Thus, the ecological approach to teacher agency, along with the bottom-up TPD conference model that was introduced in this chapter, is referred to in chapters four and five, where they are applied to present and discuss data.

CHAPTER THREE METHODOLOGY

3.1 INTRODUCTION: MAPPING OF METHODOLOGY AND THE CHAPTER

In the previous chapter on literature review, I take some compelling aspects of the literature relevant to my study context and discuss them in relation to my context. I presented and discussed the gaps I found in the literature, showing how investigating my research questions enabled me to contribute to the body of knowledge.

In this chapter, I explain the methodology that underpins my research study. I present my research methodology to show how it is best done in the relevant literature by presenting and justifying my deliberately chosen way of doing my study.

The research questions – *What is the interplay of teacher agency and bottom-up teacher professional development approach? What types of teacher agency are identified in the context of bottom-up TPD?, What potential does the bottom-up TPD conference have for practice?* – are addressed in this qualitative exploratory study.

In Section 3.2, I show the set of paradigms that show my understanding of the world and then describe how my research approach matches my research questions and literature perspectives. By virtue of systematic engagement with the literature, I chose a complex combination of approaches that provided an opportunity for mapping, analysis, interpretation, and holistic understanding of the research area, which would not be possible if I relied on a single approach. In sections 3.3 and 3.4, I present the analytical approach and the analytical model, respectively, that I have chosen to make sense of the data. The data collection methods were chosen based on my view of the world (my epistemological view is interpretivist) and, consequently, my view of reality (the ontological view of reality is subjectivist); therefore, for the objectives of my study, the best way of getting at that reality

is through data collected via the survey, semi-structured interviews and field notes. After, in Section 3.5, I present the data collection methods and processes, which show what kinds of data I need for my study to answer my research questions. Research methods were selected by exploring the methodological aspects of relevant literature and based on the objectives of my study. In Section 3.6, I present ethical implications and discuss the insider researcher phenomenon as a strength of my study.

3.2 RESEARCH APPROACH

My research aims to contribute to the knowledge base of teacher agency in the context of bottom-up teacher professional development. To achieve this aim, this research employed a qualitative methodology (Crotty, 1998), which allowed me to include more than one approach to data analysis to examine my research questions. At the core of my conceptual framework is the idea that teachers' professional agency is not an inner capacity but rather a phenomenon that can be developed and exercised given the appropriate resources and context. Therefore, to gain an in-depth understanding of teachers' professional agency in the context of a bottom-up TPD conference approach[28], the methodological approach of this study takes the form of a qualitative exploratory study. A qualitative exploratory study is more suitable (Robson and McCartan, 2016) for the nature and objectives of this study as I am interested in contextual experience (teachers' experience of bottom-up TPD in relation to their agency) and emergent meaning-making (teacher agency types). The central characteristic of the exploratory methodology was that I sought depth of study, which I achieved through collecting and analysing the data using three different instruments for data collection from 2019, 2020, and 2021 year participants of the bottom-up TPD conference. The data sets gained from all data collection instruments were analysed through inductive coding and then compared and contrasted to the findings from the relevant literature to understand teachers' professional agency in the bottom-up TPD context by combining theoretical and empirical insights.

[28] The type of a bottom-up TPD conference is described in detail in Chapters 1 and 2 of this study.

Teachers were invited to reflect on their participation in the bottom-up TPD conferences and professional development experiences.

The underlying assumption was that if the context triggers a phenomenon, it needs to be investigated within that context. To better situate my choice of research approach, I drew on the model (Imants and Van der Wal, 2019), which presents teachers as actors, not factors and depicts dynamic relationships, not linear ones. It treats professional development (and school reform) as innately contextualised, includes the content of professional development and reform as variables and considers the outcomes as parts of a continuing cycle. The central tenant of this model is that there is a dynamic relationship between individual teacher's agentic practice and the structural aspects of teachers' work environment (work context). While this model could serve as an analytical tool for looking at teacher agency in TPD and school reform contexts, it was not appropriate to fully incorporate it in my study. While in my study, I refer to teachers as actors and treat the interaction or interplay of agency and structure as a dynamic process, I explore teacher agency in an emerging context (bottom-up TPD conferences). My study follows the idea that agency is an activity, an achievement, thus, the context in which it is utilised is important. Hence, in my study, teacher agency is investigated within a particular context which has specific attributes that can expose distinctive features of the studied phenomenon.

Examining the characteristics of teacher agency within various studies is helpful to better understand the search approach employed by each study as well as to better situate my study's approach by making meaningful references. In their study, Molla and Nolan (2020) focus on what accounts for teacher professional agency and how professional learning enhances teacher agency. Similar to mine, their study employed an interpretive methodological approach (Crotty, 1998). Molla and Nolan (2020) utilised data collection tools such as semi-structured and in-depth interviews to access a constructed reality. While two types of interviews could provide rich and in-depth data, I utilised only semi-structured interviews and two other data collection tools (a survey and field notes) to best fit my research scope and objective.

I envisaged the context and available resources as an important and socially constructed phenomenon characterised by different perspectives; thus, my research is predicated on the belief that the environment can be an 'enabler' for certain types of teacher agency.

After the first bottom-up TPD conference in 2019, I developed a professional interest in exploring this approach to teacher PD from the perspective of teacher agency. As a research study, I choose an interpretivist paradigm (Bryman, 2012) as it holds a subjective view of reality and takes a constructive perspective toward knowledge about reality (Crotty, 1998) as my study involved interpreting data about peoples' different realities (Crotty, 1998) and generating perspectives and insights (Robson, 2011). Therefore, interpretivism is the epistemological stance of my research as I attempt to understand social reality; in the case of this study, teachers' professional agency, which is grounded in subjective interpretations of objective conditions. In line with the interpretive stance, peoples' experiences and perceptions about the bottom-up TPD are the data for my study. Analysing the meaning underpinning professional practices requires using data generation instruments that encourage teachers to reflect on their experiences, beliefs, values, and choices. Using one approach to measure or collect data is likely to have its drawbacks, which suggests the use of multiple methods of data collection (Robson and McCartan, 2016). To access rich data, a questionnaire, semi-structured interviews, and observations that took the form of field notes[29] were used as tools for gathering data from different years of conference participants. I acknowledge that multiple methods do not provide a solution for those methodological issues that could arise (Robson and McCartan, 2016); however, similar patterns of findings from very different methods of gathering data increase confidence in the validity of the findings.

The chosen research approach allowed me to iterate between inductive and abductive approaches to data analysis by looking at the data without pre-identified categories or themes on teacher agency while utilising my knowledge of literature and theory. I start with inductive logic and move to abductive logic. More specifically, for the second stage of analysis, abductive reasoning was utilised that 'invokes imaginative interpretations' (Charmaz, 2008, p.157) that

[29] Taking field notes is a common method of documenting observations (Patton, 2002), and the practice is well acknowledged within qualitative research (Tjora, 2006).

helped me interpret data by imagining all its possible theoretical accounts, which were influenced by my knowledge of the field and literature. This was particularly helpful because there were no direct questions about teacher agency in data collection instruments[30]; therefore, I had to use my knowledge of the literature and interpret the data, aiming to account for 'surprises or puzzles' (Charmaz, 2008, 157). The reasons why teachers were not asked about the phenomenon of agency directly are that firstly, teachers are not likely to be familiar with the concept of teacher agency, it is absent from the educational discourse in Armenia. Secondly, the word agency has been translated into Armenian only recently and within a general social context. Therefore, not to confuse the teachers, I decided to ask questions that would reveal the agentic manifestations of teachers' understanding of their role in their professional development and their beliefs and perceptions of the TPD through the bottom-up conference approach.

There is also the aspect that I analysed and interpreted the data, having deep knowledge of the field, and I did not put them aside while analysing it. Familiarity and knowledge of the studied context are valuable assets to researchers and can ensure checking face validity on the decisions made; however, it is not enough as even experienced researchers may get carried away by conceptions that make sense to them but, in reality, have little to do with the contexts they are analysing (Krippendorff, 2004). Therefore, before the final interpretation of data, I went back to the literature to contrast my inductive coding results and the findings from the relevant literature; in other words, I checked do they cover or how well they cover what is already known about agency in the literature. This allowed ensuring the construct validity of my findings as through my inductive coding process and familiarity with the studied context, I could 'spell out' (Krippendorff, 2004, p. 326) teachers' responses that agency concept entails (ensuring face validity), then compare and contrast these with the identified attribute and finally examine whether or not each correlation supports what a theory of agency predicts (Krippendorff, 2004). Therefore, my conclusions and reflections are based on more than just the coded qualitative data but also on the findings from the literature as I went back to the

[30] As the questions about agency were not asked to teachers directly, the data was coded also in relation to bottom-up TPD conference features which allowed validating the codes from the first level coding.

literature to compare how or to what extent my findings relate to the body of knowledge that I already had and made observations about them.

The opportunity to employ inductive logic and move to deductive reasoning appeals to and augments my study by giving me a firm basis for an analysis form and technique.

In this research study, the role of context is important as the teacher's professional agency is investigated within a specific context. I seek to understand the PD conference participants' perceptions and experiences, which promotes a constructivist approach that fits with the exploratory nature of my research questions. A constructivist approach presents a useful strategy to explore my supposition that some link does exist between environment and context and that they 'enable' teachers to exercise their agency. My study results, which are presented later, are compared to the major evidence from the literature thus, new discussions and ideas emerge.

3.3 ANALYTICAL APPROACH

The data of my study is mainly qualitative, with some quantitative representation (in the survey).

The qualitative data analysis taken for this study was a mix of inductive and abductive approaches, and both approaches support exploratory research as they are mostly qualitative and do not rely on prior theory (Bryman, 2012), as in the case of this study. I transcribed the interview data, which is an interpretative process as the oral discourse was translated into a written one. The transcripts were originally in Armenian because the interviews were in Armenian as well. I translated one interview transcript as an example of a coded transcript (See Appendix 4). I transcribed the data as holistically as possible with expressions of laughter, including pauses like 'hmms' to add an emotional background (Kvale and Brinkmann, 2009). Some ideas directly inform my research areas and some illuminate interesting aspects of teachers' work. No matter how tentative they were, I was recording them. Some of them were out of my study context, but most helped me in paying attention to important aspects of the data.

I started the data analysis from a 'blank page', following principles of inductive thematic coding. Inductive coding is an iterative process of going back and forth between data collection and analysis to make the codes and themes as accurate and inclusive as possible (Charmaz, 2008). The initial coding started while transcribing the qualitative data as I was making records, comments, or some reflections that helped me not lose ideas that came up while interacting with the raw data. I let the data 'speak to me' in opposition to trying to fit the ideas into predetermined theoretical accounts. The rationale behind my final decision was the fact that my study was exploring a relatively under-researched area, namely teacher agency in the context of a bottom-up TPD conference. Thus, I chose the inductive approach, to be able to identify any interesting ideas that would emerge from the data as I believe new, yet undiscovered things might come out. Although I was inclined to use deduction, a theory-driven method, in the early stages of choosing the analytical approach, I utilised an inductive, data-driven approach for data analysis as it was the best fit for the objectives of my study.

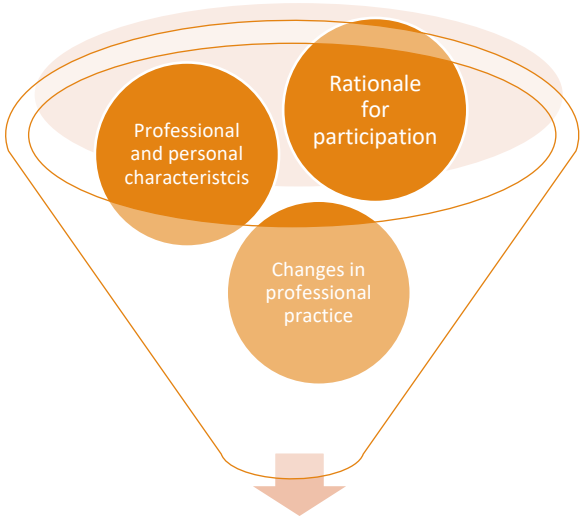
Nevertheless, as a researcher and professional in the field, I stand close to the data; thus, my knowledge of the field was not set aside but utilised to make more sense of the data. Moreover, I did the research with a deep understanding of the field and of a theoretical base, which means I included the elements of abductive reasoning in my data analysis approach. In my case, it meant comparing and contrasting what I identified from my inductive data analysis to what I found in the relevant literature. In this stage of referring to literature and available theory, I relied on the principles of abductive reasoning, which stands between induction (collection of available cases leading to examining their results) and deduction (starts with rule going via a case to get to the identified result) (Tavory and Timmermans, 2014). Hence, while studying my data, firstly, I looked at what emerges from the data through inductive coding and theme generation. Then, after my codes and themes were finalised, I implied them to understand the emerging types of teacher agency. Afterwards, I discussed my findings by iterating between what I knew from the theory/literature by comparison and drawing conclusions about the typology of teacher agency and the potential the bottom-up TPD conference approach has for practice referring to my research questions.

3.4 DATA ANALYSIS

My intention was to analyse teachers' perspectives on their professional agency in the context of bottom-up professional development through their responses across all data sets to understand the interplay of both phenomena. I also sought to find out teacher agency types exercised within that context and the potential the bottom-up TPD approach has for practice. Data analysis occurred within two stages. During the first stage of analysis, I let the data 'speak' and noted everything that emerged. I did not develop pre-defined themes for the analysis of any data set. The process was data-driven and theory-informed (Schreier, 2012). As I employed an inductive approach to data analysis, I read and reread the data to assign codes to the sections of texts, which are coding units. Those coding units could be words, phrases or whole paragraphs related to key concepts of this study, namely teacher agency and bottom-up professional development. I looked at data holistically, noting the roles of presenters and participants where necessary to show the difference between certain expressed ideas.

As my data analysis was data-driven, without pre-identified themes, my concern pertained to identifying ideas related to my research objectives. While rereading and doing the initial coding of the data, three distinct areas (Figure 3.1) emerged around which I started to organise my codes.

FIGURE 3.1 THE TRI-DIMENSIONAL ANALYTICAL FRAMEWORK



Therefore, three dimensions constitute my analytical framework: i) the rationale of teachers' participation in the bottom-up TPD, II) teachers' personal and professional characteristics and iii) changes in professional practice. Personal characteristics, own perspectives of their practice and changes, as well as the rationale for participation, were considered to be attributable to teacher agency (represent the context in which teacher agency is explored in the study) as there is tight interdependence and the interplay between the teachers' sense of self and professional agency (Buchanan, 2015; Pantić; Stillman and Anderson, 2015, Van der Heijden et al., 2015, Imants and Van der Wal, 2019). Meanwhile, the rationale for participation comes in the form of a different, additional dimension that can be attributable to teacher agency according to the aims of my study. In this study, the dimension of 'rationale for participation was dominant. This dimension was targeted, explicitly 'speaking out' about certain aspects of teacher agency, such as the desire to learn, develop and seek professional development opportunities, which are the features of the enquiring agency. By exploring the rationale for participation, it was possible to see the important descriptors of teacher agency (e.g., past experience, future orientation) as based on Emirbayer and Mische's ideas (1998, p.963).

Considering the dimension of characteristics, the explored literature (Van der Heijden et al., 2015) lists the following features: lifelong learning (e.g., eagerness to learn), mastery (e.g., committed, trustful and self-assured), entrepreneurship (being innovative and feeling responsible), and collaboration (being collegial)[31]. Most of these characteristics, such as continuous learning, the feeling of responsibility both for own professional development and students' learning and being proactive and innovative (e.g., establishing NGOs and FB groups), also were evident in the findings of this study. Although the characteristics described in the literature were not revealed within the same context as this study, they can be referenced as they are within the broader topic of teacher agency. This study considered looking at the teachers' characteristics as an attribute to teacher agency because teachers' sense of their professional selves influences how they practice agency (Vähäsantanen and Eteläpelto, 2011) and also explain the extent to which they enact professional agency to influence or change education (e.g., Bakkenes et al., 2010; Fullan, 2013).

Regarding the dimension of 'Changes in practice', Molla and Nolan (2020), in their study, paraphrase Crocker and Robeyn's (2010) interpretation of teacher agency, listing four identifiers (autonomous decision-making, decisions based on deliberation about purpose and value, actions based on those decisions, and making changes in their practice) one of which refers to changes in teachers practices, thus supporting my choice of it aiming to identify types of teacher agency.

These dimensions are connected but are not directly reflected in my research questions.

I used different colour coding for each dimension shown in Appendix 1. Some parts fell into more than one area. I added notes and questions as I was going through the qualitative data. The following questions guiding me while data coding: Why do teachers want to participate in bottom-up professional development?, What characteristics did teachers who participated in the bottom-up TPD show having?, What changes do teachers report having in their professional practice due to the participation?, What features of the bottom-up TPD

[31] In this study collaboration refers to any type of collaboration between teachers and teacher groups and as it is defined in a systematic review on teacher collaboration (Vangrieeken et al., 2015), collaboration is a joint interaction in the group in all activities that are needed to perform a shared task.

conference do teachers mention? I was also looking at any ideas related to TPD, teacher professionalism, teachers' work, system, etc.

Both during transcription and initial coding, I found it useful to make short comments to help me in the later stages of coding. I assigned codes and interpreted meaning; sometimes, multiple interpretations were possible (Cohen et al., 2011). To demonstrate my approach, Table 3.1 illustrates examples of codes and themes associated with the area of 'teachers' characteristics' and examples of teachers' responses. Within this area, most data were related to teachers' personal or professional characteristics that encouraged them to seek new learning opportunities and participate in professional development activities. Within this, common characteristics were revealed: autonomy, curiosity, courage, hard work, commitment to own and peers' development, and positive attitude toward teaching.

TABLE 3.1 EXAMPLES OF CODES AND THEMES FOR 'TEACHER CHARACTERISTICS' DIMENSION

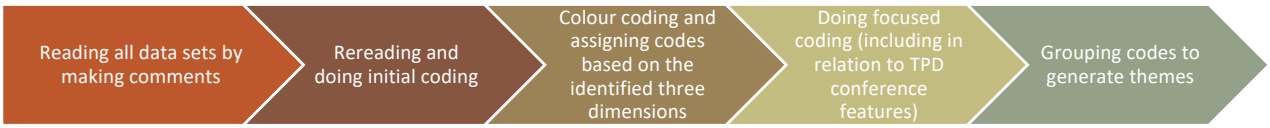
Teacher characteristics	TCh	Teachers' responses
Theme	Code	Excerpts
Autonomous (Auto)	Choice (Ch)	"*The guarantee of our success is our independence, autonomy if it is not there we have limitations".* *"I am responsible for my own learning, and it was great to feel that during the conference, there was no pressure, no mandatory topics. When something is decided for you, no matter how good it is, you do not value it much".* *"I feel trusted when given a choice and autonomy in my professional development and in this sense this conference gave that opportunity".*
	Own decision (OD)	
	Responsibility to self (RS)	
	Self-report (SR)	
	Triggering (trig)	

Curiosity (Cu) Professional interest (PI)	Interesting (Int)	*"Acting as a speaker requires to be brave, as teachers are more demanding and they are your peers, so everything should be carefully considered".*
Courage (Cour)	Taking the risk (TR)	*"I was very interested to participate as both the format and overall idea was so new', I was curious to see what's that".*

My analytical frame does not replicate an existing one; however, it does have certain relevance to Molla and Nolan's (2020) framework for building teacher agency. In particular, in their triangular model, the three categories that help in building teacher agency are professional practices, objective conditions and subjective context. 'Subjective context', which includes, for instance, professional dispositions, personal experiences and values, resonates, in some aspects, with the category 'Professional and personal characteristics' in my triangular frame. Molla and Nolan's framework, the ecological concept of agency, and the types of TA encompass the theoretical perspectives of this study and are discussed in detail in the literature review chapter (sections 2.5, 2.6 and 2.7). Moreover, the links between teacher professionalism, TPD and teacher agency are also presented and discussed in the respective sections (2.2, 2.3, 2.5) of the Literature review chapter.

The data coding process was not easy and precise. I was guided but not limited by the stages of thematic coding offered by Braun and Clarke (2013), and Creswell (2006, 2008). The process was iterative (going back and forth, revising and merging codes) and interpretive. I present an example of a manually coded interview transcript in Appendix 4. The stages of data coding are presented below in Figure 3.2.

FIGURE 3.2 THE STAGES OF DATA CODING



After colour coding and assigning codes based on the three dimensions, I did 'focused coding', also in relation to the features of the bottom-up TPD. I looked for patterns to group the codes into themes to interpret the data later and draw conclusions (Cohen et al., 2011; Miles and Huberman, 2014). After finalising the coding for the three areas and considering the data in relation to the core features of the bottom-up TPD (Appendix 3), the generated themes were grouped into categories, to derive agency types. I looked for agency types within those themes and codes (as identifiers) by making connections and contrasting them.

Firstly, I got acquainted with the questionnaire data, which had both quantitative and qualitative data, to get a preliminary understanding of the respondents' motives and triggers for participating in the conference and inform the questions of the semi-structured interview. The presenters' and participants' perspectives were viewed separately, relying on my assumption that different types of agency enactment pushed them to participate.

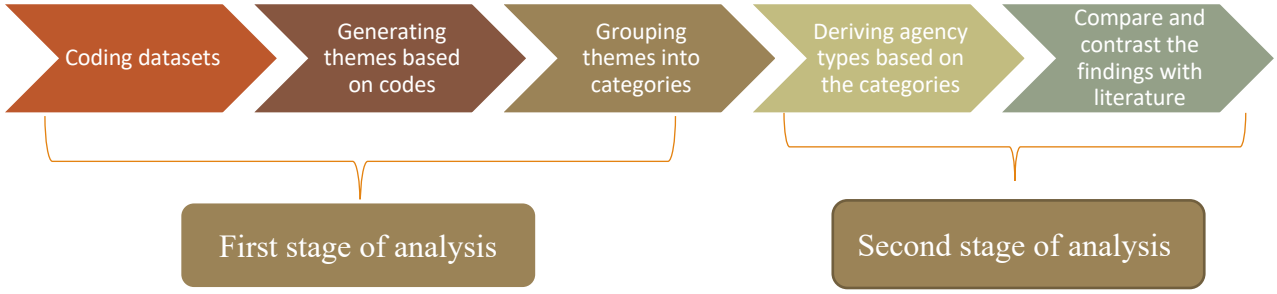
The semi-structured Interviews following the questionnaire were transcribed in full. The transcripts of interviews were read, re-read and analysed to identify teachers' agentic manifestations through the tri-dimensional analytical framework. During the analysis, I was particularly alert to the extent to which the key elements of teacher agency were evident. I was looking for keywords, ideas and themes related to the key concepts of this study, namely, agency in the context of bottom-up TPD. Substantive statements from the transcripts were identified and coded thematically. No data analysis software was used across all data sets as the data was in Armenian, and no software supported that language.

In the case of the field notes, I relied on my comments and reflections that I made while making the notes and when reading them the same day; therefore, in the course of the analysis, I reread the notes and my comments to see what emerged. It did not go through a standard

process of coding as the notes were already taken using certain keywords. Moreover, the field notes were collected during the 2021-year conference when I had already collected the data from the previous years' participants; hence, I had more theoretical knowledge and ideas to apply while taking notes. Thus, they were more focused on a lot of interesting ideas.

More specifically, the data analysis included these five major steps presented in Figure 3.3.

FIGURE 3.3 THE STAGES OF DATA ANALYSIS



While all the steps of data analysis from one to fourth were based on inductive logic, the fifth was guided by deductive logic. Based on the literature, I created a rubric with indicators of teacher agency. After doing an inductive thematic analysis, I once again looked at my data, and the indicators of agency within that rubric and agency types to compare and contrast with what I found in my data, mainly to ensure the construct validity. I relied on the characteristics of an abductive approach, particularly trying to construct an explanation of the findings of inductive analysis and contrasting them (checking tentative theoretical ideas) with the findings from the relevant literature. Therefore, this step in the second stage of analysis can be classified as data-driven and theory-driven.

The rationale behind my choice of the analytical approach is that starting with induction allowed me to embrace the richness of my data without being limited to the pre-identified themes and categories identified in the literature. I was aware that if I had a certain outline or a list of themes to guide the analysis, it would bear a risk of missing other important and emergent ideas from the data. As I studied a particular type of intervention (a bottom-up TPD

conference), I decided not to use a deductive approach. However, anticipating some puzzling outcomes from my inductive coding, and in order to devise an explanation of those findings and check the tentative theoretical categories constituting that explanation, I utilised an abductive approach, which is a creative form of reasoning (Denzin and Lincoln, 2017, p. 721). By utilising abductive reasoning, I examined my knowledge of theoretical codes and the field in general and compared them with my codes (Glaser, 1978, p. 72).

While working with the data, a rich and complex picture of teacher agency emerged. Though discussions on agency as a theoretical concept have remained relatively abstract, there are quite contrasting views on how scholars distinguish agency (Goller and Paloniemi, 2017). For some scholars, agency is an individualistic characteristic (e.g., Bandura, 2001; Pyhältö, Pietarinen and Soini, 2014; Harteis and Goller, 2014), others; nevertheless, believe that agency is something that individuals do (Biesta and Tedder, 2007; Vähäsantanen, 2013). Yet, some authors do not conceptualise agency as falling within either of these categories (e.g., Billett 2011 cited in Goller and Paloniemi, 2017), emphasising the interrelational nature of agency - that is, its manner of connecting individuals to their contexts. By these lights, I assume that agency is not solely an inner capacity but an achievement, an action, that can be activated and revealed in an appropriate environment. Therefore, certain characteristics can trigger and activate teacher agency. I refer to teacher agency as it is about teachers who interact with and within specific contexts. In this research study, the specific context that is explored is bottom-up TPD conferences from the perspective of exercising teacher agency. Next, I explored the data in relation to the six features of the bottom-up TPD conference researched in this study, namely:

- voluntary participation,
- autonomy in decision-making,
- learning from peers,
- sharing own classroom experience,

- the law of two feet[32],
- knowledge creation by teachers,
- collaboration and networking.

These features mostly resonate with the characteristics of teacher-led professional development promoted by Patton, Parker and Tannehill (2015), presented in detail in the literature review chapter of this study.

To summarise, I analysed the qualitative data to reveal the interplay of teacher agency and bottom-up TPD conferences and identify teacher agency by looking for (a) statements illustrating the existence of agency in professional development, (b) statements that show links between teacher agency and bottom-up TPD, (c) direct statements or words that are seen as elements of agency such as autonomy in decision making, willingness to share own 'knowledge' and 'courage' in the accounts, d) descriptors of agency, to reveal its type. Then, I highlighted the identified codes and created the themes. After the coding process and theme generation was final, I revised the literature to make sense of my final codes and themes as well as derived agency types to be able to compare/construct and interpret the interplay of studied two phenomena (teacher agency and bottom-up TPD), in other words, I synthesised the empirical data with the theoretical one.

3.5 DATA COLLECTION: METHODS AND PROCESS

3.5.1 RESEARCH POPULATION: SAMPLING

This research study has three samples: 1) a sample of 2019 and 2020 conference participants for the questionnaire, 2) a sample of 2019 and 2020 conference participants for semi-structured interviews, and 3) a sample of 2021 conference participants for field notes.

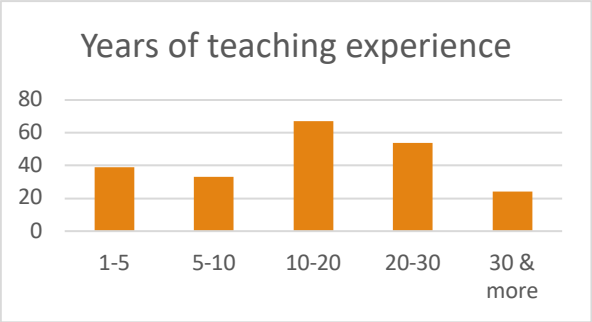
[32] Everyone at a bottom-up conference is encouraged to practice the law of two feet. The Law of two feet says that if you become uninterested at any point, you are encouraged to leave and join another session.

The sample size for the questionnaire was C. 300 for the year 2019 and C. 870 for 2020. The questionnaire was sent to all participants and was anonymous and voluntary. It provides essential data on the rationale for participation, the changes teachers mentioned happening in their practice, their understanding of the TPD and the characteristics of the bottom-up TPD conference. Overall, 217 teachers participated in the survey out of around 1000 conference participants to whom I sent the survey. Most survey respondents were conference participants (210), and only seven were speakers. In Appendix 9, I present demographic information about the survey participants to show the variety of participants' backgrounds (e.g., subject, age, experience, geography). The higher percentage of participation (see Appendix 9, Chart 1) is reported from the capital city, Yerevan, as there are around 250 schools out of 1400 all over Armenia, and because the face-to-face conference in 2019 was organised in Yerevan. Most of the survey respondents were in the age range between 41-50 and 32-40 (See Appendix 9, Chart 2). If we look at the conference participants' cohorts, most are within the same age range.

The two conference survey participants have a diverse subject distribution (see Appendix 9 chart 3), making it possible to learn about the perspectives of different subject teachers. The chart also shows that certain subject groups are more represented than others. As can be seen, this trend is also observed in the case of semi-structured interview participants. The elementary school teachers are usually very active in looking for learning opportunities, based on my knowledge of the context and my ten years of experience working with teacher communities. There is one of the most prominent Facebook groups of elementary school teachers in Armenia. The Armenian language and literature and History teachers' cohorts are the biggest in Armenia. Both subjects are compulsory until the end of high school, so this can explain their dominant representation.

The survey participants' years of teaching experience are quite diverse (see Figure 3.4), which would provide perspectives of both teachers in the early years of their teaching career and experienced ones. The experience factor is further discussed in relation to the professional development and agentive action in the discussion chapter.

FIGURE 3.4 SURVEY PARTICIPANTS' YEARS OF TEACHING EXPERIENCE.



As Figure 3.4 represents, most of the participants are in teaching for ten to twenty years. If referring to Day et al. (2007), during professional phases 8-15, teachers manage the changes in their roles and identities; thus, this can be the reason why they seek more opportunities for PD. It is a phase of growing tensions and transitions, as described in the book (Day et al., 2007). In Armenia, based on a WB report (2021), the greater experience of teachers (more than 30 years of experience) shows a *negative* relationship with the results of their students in comparison with the results among their less experienced peers. At a political level (also in the Armenian context), there seems to be a tendency to presume a straightforward linear relationship between teachers' years of experience and the quality of teaching (Brandenburg, McDonough, Bruke and White, 2016). Even if taking aside that the conceptualisations of teaching quality can be different from study to study[33] experience is just one of the factors[34] influencing the quality of teaching. There is very limited support for the claim that teachers with more years of experience are more competent than novice teachers (Graham et al., 2020).

For the semi-structured interview, self-selection/volunteer sampling was used. I invited all who agreed to be interviewed for a semi-structured interview. The number of teachers who wished to be interviewed was twice more than those actually interviewed because, in practice,

[33] In some studies quality is a substitute for teacher effectiveness, which is measured using student test scores. Other studies measure a specified range of quality teaching practices and then observe for them (Graham et al., 2020).
[34] For instance, teacher student interactions are also an important indicator of teaching quality (Graham et al., 2020).

some could not make themselves available during the time for interviews due to COVID-19 complications and the political situation in the country[35]. The number of those who agreed to be interviewed did not reach 10% of conference participants; thus, a sampling strategy needed to be revised. I interviewed all who agreed and replied to my inquiry about scheduling the interview. Seven semi-structured interviews were conducted with teachers participating in the 2019 and 2020 conferences. Six out of seven interviewees participated in both conferences. Three interviewees were speakers in one of the conferences (either in 2019 or 2020), and four were participants. The subject representation included English language, German language, elementary school teacher, Armenian language and literature, Chemistry and Biology. The teaching experience was in the range of 7 to 27 years.

I collected the field notes from four sessions in 2021 during the bottom-up TPD conference in Vanadzor, one of the cities of the Republic of Armenia. I observed four workshops which topics were Coaching in Education, Class observation, Designing Learning Materials, and Debate as an Alternative Teaching Method. Details on the number of participants in each session and the occupation of the presenter can be found in Appendix 10.

Table 3.2 below presents the general overview of the research participants groups.

TABLE 3.2 RESEARCH PARTICIPANTS' GROUPS

Year	Group	Size	Research study tools
2019 and 2020	Teacher presenters and participants	217 teachers	Survey
2019 and 2020	Teacher presenters and participants	Seven teachers	Semi-structured interviews
2021	Conference participants and presenters of the observed sessions	Four sessions	Field notes

[35] Armenia was involved in a war in South Caucasus.

The detailed demographics of the study participants across all data collection instruments are presented in Appendix 9 to show the diversity of the participants' backgrounds, e.g., subjects, years of experience, and geographic location.

3.5.2 METHOD

For this study, I used different data collection methods to gather rich data from all three years of conference participants. Three types of data were collected. The data were collected predominantly online (questionnaire, interview), excluding the field notes which were made offline during the bottom-up TPD conference in 2021. The COVID-19 protocols allowed in-person meetings at that time.

The first dataset was collected through a questionnaire sent to the participants in 2019 and 2020, with around 1000 teachers. The questionnaire aimed to look beyond the literature and my perspectives to understand teachers' motives for participating in the bottom-up TPD and their opinions concerning the bottom-up TPD conference. The questionnaire consisted of twelve questions (see an excerpt from the questionnaire in Appendix 8) with both quantitative and qualitative questions. The first six questions asked for some demographic information such as age, years of experience, and subject, and the rest were about teachers' rationale for participation, their gains, if so, the conference and its characteristics, what teachers valued in the conference with a concluding question of whether they would like to participate in a conference next year. The questionnaire was made via Google Forms and sent via email with a text clearly explaining the research, its aims and the voluntary basis of participation. Before the start of the survey, participants signed (ticked) a consent form.

The questionnaire asked the teachers to answer the questions voluntarily and, in the end, provide contact (email or phone number) if they would like to participate in a follow-up interview. 217 teachers filled in the questionnaire, out of which 24 expressed a desire to participate in the interview. I encountered a low response rate for the survey due to its online nature, the COVID-19 complication and the hard political and economic situation in Armenia.

The next data set was collected via semi-structured interviews with teacher participants and speakers. Seven teachers were interviewed (three presenters and four participants) as the

others could not make it for several reasons, e.g., heavy workload and health issues (mainly COVID-19).

Six out of seven participated in both the 2019 and 2020 conferences. Semi-structured interviews allowed me to guide the interview with predefined questions. The interview questions asked for teachers' perceptions of traditional TPD and bottom-up TPD conferences, teachers' role in their PD, the changes in practice due to their participation in TPDs and in the bottom-up TPD conferences in particular, the challenges they could encounter in their PD, etc. I present the guiding questions for semi-structured interviews in Appendix 6.

The questions, however, left space for questions influenced by the participants' responses, as understanding participants' perceptions and experiences was the key (Creswell and Poth, 2017). Before the remote interviews started and before the start of the audio recording, I thanked them for their time participating in the interview, talked about the research, and explained the research protocol. The participants were given an opportunity to ask questions about the research study. I indicated when the recording started and ended. To establish validity during interviews, I rephrased and summarised the participants' responses for clarification and for checking my understanding (Cohen et al., 2011).

To be flexible and be able to respond and react to the participants' comments and shared ideas by following the discussion and changing the order and, in some cases, the content of the questions, semi-structured interviews offered appropriate scope (Robson, 2011). The duration of the semi-structured interview is flexible in qualitative research as some interviewees might need more time, while others might be less forthcoming. Therefore, it is not recommended to enforce strict timing in the interview rather than let respondents' voices out and be heard (Charmaz, 2014).

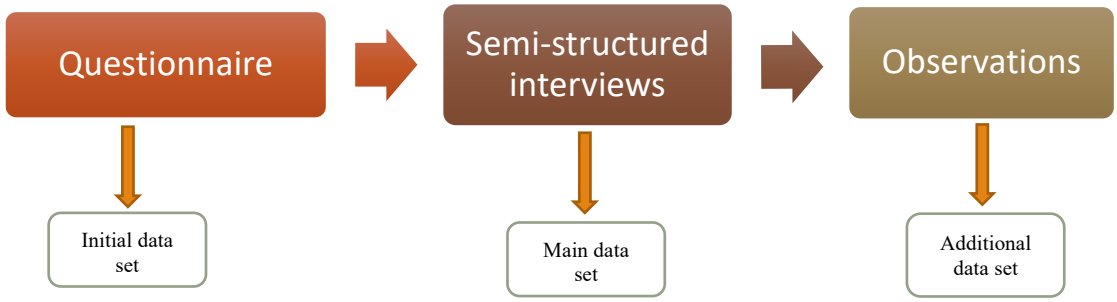
I collected the field notes, the third data set, during the offline 2021-year conference, where the organisers (a public school in Vanadzor City in Armenia) invited me. I did not use a prescriptive observation schedule. I was observing and making field notes by looking at the articulations teachers had in real-time, which allowed me to grasp the participants' overall perceptions of the sessions, their engagements, contributions to the discussions, behaviour, and questions. I was alert in looking at what kind of characteristics teachers demonstrated

during the session or post-session discussion and comments and in observing the possible interplay of those characteristics and the bottom-up TPD context.

Interviewing was a dominant data collection instrument because subjective meanings (e.g., feelings, insights) are better seen through the discussion process (Neuman, 2011). Questionnaires and semi-structured interviews were used for the 2019 and 2020 year conference participants. The questionnaire was used to elicit initial, background data, whereas the interview data and the field notes ensured the volume and depth of the study.

The survey data was collected first. This was done for three main reasons. The questionnaire allowed me to reach more people and have a wider data set, also it informed the semi-structured interview questions which followed the survey. Secondly, the semi-structured interviews were conducted, which in addition to the data gained from the survey, comprised the main data for answering the research questions. The field notes from observations were used as complementary data. Figure 3.5 below shows the chronological order of data collection.

FIGURE 3.5 THE CHRONOLOGICAL ORDER OF DATA COLLECTION



The qualitative data was analysed all together, in parallel, none of the datasets was specifically for any research questions. The datasets helped develop an understanding of teachers' rationale for participation, their characteristics, changes in practice to derive agency types and accumulate interpretation to answer the research questions of this study.

3.6 ETHICAL IMPLICATIONS

This study was guided by the Ethical Guidelines for Educational Research formulated by the British Educational Research Association (BERA 2018). As part of my doctoral studies, I processed the research proposal for approval by the ethics procedures at the IoE, UCL's Faculty of Education and Society.

I initially planned to investigate only the 2019-year conference and get insights from the participants. However, due to my maternity leave (from 2020-2021), I interrupted my study and resumed it in 2021. In the meantime, there were already three conferences, and I decided to collect data from all three to get rich accounts of data. While having rich and diverse data, I was sunk into it. I had to rethink my analytical approach and make relevant adjustments to manage a large amount of data.

In the course of the study, nothing that I consider problematic regarding ethics occurred. The participation was through voluntary informed consent; no incentives were provided. I provided an information brochure to research participants. I also presented and explained all the study-related information to teachers via phone or online platforms (Zoom, Microsoft Teams) at the commencement of interviews. I informed all the participants that they had the right to withdraw from the research for any or no reason and at any time (BERA, 2018). Participants were requested to sign a consent form (Appendix 7) to confirm this understanding. Participants' anonymity and confidentiality were respected, and their names were not reported. For data excerpts, I used numbers e.g. interview 1, 2019.

As a co-founder of the Foundation that organised the conferences in 2019 and 2020, I anticipated some power relations. Nevertheless, this risk was less in my study since the foundation itself does not directly influence the teachers and their work, or teachers do not depend on the foundation as its projects are open to everyone free of charge. Moreover, the data from the questionnaire and interviews were collected post-conference, which could have minimal or no danger of any kind of ethical issues. In addition, the 2021 conference was not organised by the Foundation[36], which means my person, as a co-founder and a researcher, has no connection to any teacher or their participation in the conference. My foundation did not

[36] It was organised by a public school in Vanadzor, a city in Armenia.

have any connection with the organising school, nor did I. The foundation supported the organising team of teachers and the principal during the initial organisational stage. Thus, there is no potential conflict of interest of any kind. I obtained permission from the organising team to make notes during the sessions, and I explained that the purpose of the research was to explore teacher agency.

I made sure that the participants were anonymised to avoid any ethical issues. I also minimised risks of identification by storing the data, e.g. interview recordings and transcripts, securely and not using participants' names when labelling them as described in the ethics approval form (Appendix 5).

Finally, it is in the interest of my Foundation to conduct the research in the most objective way to investigate the potential of bottom-up TPD conferences.

3.6.1 INSIDER RESEARCH

During the data collection process, I followed the recommended steps and ethical protocols for this kind of qualitative research (Cohen et al., 2011; Robson, 2011). This study can be considered an insider as I am the co-founder of the Foundation that organised those conferences, but I am also part of a broad education community and have credibility, access to potential participants, and could bring information to the interviews based on professional experience (Robson, 2011).

Although I am aware of the possible challenges of insider research, it played out as a strength for the case of my study. My professional expertise as an insider and my knowledge of my context allowed analytical depth, thus making my role as an insider researcher a positive side of the study. My reflections on the data collection stage revealed some opportunities and challenges of insider research. I noted some power relations when, for example, a teacher responded like ‘Glad to help you out’ or ‘Certainly, no problem at all’, suggesting the advantage that my role in the Foundation and insider position afforded.

I am aware that the influence of my role in the foundation created favourable conditions for me as a researcher, firstly because I had access to the teachers and secondly because the teachers might want to please me and agree to participate. I could feel that when participants

told me how great the conference was and thanked me for that, although my questions during interviews did not intend to evaluate the conference, its organisation or our efforts as organisers. The questions invited them to reflect on their participation, motives and perspectives. As I anticipated such attitudes, I made sure that those kinds of data were filtered from the dataset.

This chapter presents the rationale for fieldwork and approaches and tools for data collection and analysis. In the following chapters, I present and analyse data thematically and holistically, grouping the themes rather than presenting the data chronologically. Following the interpretive position of my research, my aim is to capture and interpret different perspectives and realities.

CHAPTER FOUR RESEARCH FINDINGS AND ANALYSIS

4.1. INTRODUCTION

This chapter presents the opinions of committed teachers who participated in the bottom-up TPD conferences, seeking to develop their professional standing. It reports on the insightful experiences of teachers participating in the conferences. I recognise that my sample consists of people who are already positively pre-disposed toward their professional development and the bottom-up conferences and that the findings represent a selective view of a selected group of people. Hence, the ideas presented in this study cannot be generalised even if the data represents a wide range of participants' backgrounds and a wide range of perspectives. Moreover, what I say about the broader community of teaching professionals in the country comes from my reflections as a knowledgeable professional in the field of education with deep knowledge of the Armenian context and the main perspectives that I draw from the findings of this study.

I structured this chapter as follows. Firstly, I present the themes that emerged through data analysis based on the tri-dimensional analytical framework developed and presented in the methodology chapter in detail. The aim of doing it is to show the themes and detailed insights that led to the identification of teacher agency types. Next, the new typology of teacher agency types that I derived from those themes is presented. Then, the Chapter proceeds to the section on 'Additional Findings', which illustrates results that did not fit into any research questions but are essential for a broader perspective, offering exciting insights into teachers' work and professional development.

After presenting the empirical findings and analysis, I reflectively summarise key insights at the end of this chapter.

4.2. PRESENTATION OF THE DIMENSION 'RATIONALE OF TEACHERS' PARTICIPATION IN THE BOTTOM-UP TPD.'

The dimension of the rationale of teachers' participation acts as an informative indicator for exploring certain agentic manifestations of teachers' actions. In this study, teachers reported reasons for participating in the bottom-up TPD conference are oriented towards the future, such as gaining new learning, meeting colleagues (which can be a short-term goal) or being recognised as good teachers or learning teachers (long-term objective).

The participating teachers' perspectives on motives for participation across all datasets were almost similar, with slight differences in the frequency of each motive. The most frequent one was 1) *opportunity for professional development and learning*, then 2) *networking*, 3) *being valued by the teacher community*, 4) *meeting field professionals, 5) curiosity* and 6*) commitment to colleagues' developmen*t (only in speakers' responses). It is worth noting, though, that there is not much difference in the responses of conference speakers and participants as both cohorts' motives were the same, excluding the one "desire to contribute to peers' development" that was present only in speakers' responses. The examples of the coding process are provided in Chapter Three, and more detailed versions can be seen in Appendices 1, 2 and 3.

Opportunity for professional development and learning

This theme was the most common one with the codes such as 'the opportunity to learn new things', 'improve professional practice', and 'explore *new methods'.* The overwhelming majority of participants who participated in both the 2019 and 2020 conferences noted that it was a 'unique and really interesting experience' for them.

> *The conference was a unique chance for learning and development, why unique because, as you know, due to the state system reforms, there was no mandatory training for almost two years. Interviewee 4*

> *In the past 30 years, there was no such professional gathering, and the fact that teachers could be presenters added more value to it. Survey respondent 47*

Meeting colleagues, *getting to know new people*, and *meeting new speakers* were the codes for the *Networking theme*. Networking was the second most popular theme. This theme triggers my professional interest as I see communication and collaboration as areas that require development within the whole teacher community in Armenia. It is interesting to observe that teachers who mentioned the importance of networking and meeting people were referring to the 2019 conference, which was face-to-face. The conference in 2020 was online for a whole week, and though teachers were highly positive about it, noting certain definite benefits of the online mode (e.g., the opportunity for participation from remote areas, the opportunity to engage with expert people who would not manage to visit the country in person), they appreciated the face-to-face opportunities more, as 'face to face communication is different, more personal, emotional' as teachers noted.

Very little, if any, joint projects or collaboration can be observed between the schools or even within a particular school. Therefore, this code shows that teachers possibly, either consciously or unconsciously, recognise that gap and seek to address it. Interviewee 2 supports my assumption by directly pointing out the lack of collaboration culture among teachers.

We are usually very reserved and do not communicate much, even within the same school, and here there is the opportunity to meet teachers from all over the country; how could I miss that chance [laughs]?. Interviewee 2

This teacher's idea regarding collaboration is interesting as she sees it 'as an important means of learning' (van der Heijden et al., 2015). The participating teachers who believe that collaboration is important in their job do not specify what kind of collaboration it is. It can be diverse and can show different depths, ranging from superficial to deep-level collaboration (Vangrieken et al., 2015). The long-standing culture of teacher isolation and individualism and teachers' preference to preserve their individual autonomy may hinder deep-level collaboration. While my data does not directly show the reasons why collaboration is missing from the system, most teachers point to its absence.

Meeting new people was a common theme; there is not much evidence on whether a teacher with that desire could do that. There are two contrasting pieces of evidence on this matter. Interviewee 1 from the semi-structured interviews indicated that she really *"wanted to meet new people but honestly, did not make contact with anybody; I do not know why maybe we were busy with other stuff and did not have time for communication*". In contrast, a teacher from a semi-structured interview reported making contact with teachers from other regions as she mentioned, "*Because I was alone, no one of my colleagues or people that I knew attended the conference, so I networked a lot. Till now we communicate with a few whom I met, discuss ideas and just keep in touch".* Another interviewee excitedly told me how she met a colleague from the same region and that they became friends and even visited each other's schools.

You know it is so strange, sometimes you can live in the same city and possibly go to the same shops but never meet. This is what happened to me. In one of the sessions, I met a colleague who later appeared to work and live very close to where I live. We became friends and now, from time to time, discuss work-related issues; luckily, we teach subjects from the same subject group; otherwise, it would be hard to understand each other.

From this quote, I can infer that this teacher sat around the same table during a session or just approached a colleague. The observational data (field notes) shows that the teachers sitting around the same table during the sessions usually knew each other before the conference. Only one case was observed when a session participant approached a speaker and introduced herself after the session to ask additional questions. Therefore, based on the available data, the assumption is that although teachers wanted to network, it was the case only for a limited number of teachers. The reasons for that can be rooted in cultural, social, and individual aspects.

Being valued by the teacher community and colleagues was another interesting code. All three interviewees (who were speakers at one of the conferences) from semi-structured interviewee mentioned the desire to stand out from others and that the community learned about them as being a good teacher and a professional who care for others by sharing their own knowledge; this theme was also evident in the two responses of interviewees who were participants. From their perspective, a teacher attending PD events is "*more respected in their schools*".

> *Participation in a conference or any PD is seen as something more, it tells about your desire to learn, and this makes you, hmm, how to say, positively differ from others. Interviewee 2*

Two teachers from interviews mentioned that they wanted to contribute to their colleagues' development because if they could share their knowledge and be of help, they must do it.

> *I learned about this app during the previous conference; a teacher showed me how to use it. Last year, I was experimenting with it, trying to use new tools, and creating learning materials. When I learned to use it properly, I decided to present that tool and show teachers what they could do with it. It is kind of giving back; last year, another teacher helped me find this tool, and now I want to help others to explore it. Isn't that the way it should be, [laughs], well you know how it works.*

A distinct feature of being or feeling valued appeared in the majority of all teacher-speakers' responses. This might point to the idea that they lack the feeling of being valued in their work. The desire to be recognised signals substantive opportunities for teachers to feel appreciated and respected for their work (Molla and Nolan, 2020), and teachers in this study mostly explicitly expressed that.

> *Being a speaker and sharing my knowledge made me feel valued. Working with students is a usual thing but acting as a speaker for teachers is different. The community gets to know you as a good teacher. Interviewee 6*

These insights from the data resonate with what is described in Day et al.'s book (2007), teachers need to feel wanted and important and require affirmation of it by those they live and work with.

As a sequel to 'valued teacher, the idea of a 'good teacher' was entering into the conversations periodically (in three semi-structured interviewees), and as a follow-up question, when I asked what it meant for teachers, the common replies were that the "*teacher has good subject knowledge*", "*could teach their students well"* and "*want to learn for their students*".

> *I wanted to share what I knew and why not people would get to know you, not only as just a teacher but somebody more. Interviewee 1*

> *My colleagues usually joke that I participate in every PD activity, and I like that; they think positively about me and know that I want to learn. Interviewee 4*

These quotes are interesting and point to the idea that being 'just a teacher' is not that good, and if one aspires for more, such as a trainer or a mentor, that is more valued and respected. In this sense, teachers want to feel psychologically and emotionally 'comfortable' (Day et al., 2007), which can lead to some sense of self-efficacy. When teachers' work brings positive

change in their students' learning and they make a difference in the lives of people they engage with (e.g., students and colleagues), makes teachers feel satisfied at some level. This reflection is aligned with the 'change maker' agency type, discussed in detail in the latter section on agency types.

Meeting field professionals was another theme for the dimension 'rationale for participation'. Around 90% of the two conference speakers were teachers, but a few presenters were education field professionals. This slight change in the classical bottom-up conference format was made due to several realities of the context, such as Armenia is a small country; thus, the professional education community mainly know each other, and if there is a whole country event, some of the vivid representatives need to be invited. Another key factor was that this new idea of bottom-up culture was new within the studied educational context, and the organising team wanted to test the possible adjustments in the classical format. In addition, there are no professional teacher communities or a knowledge-sharing culture and established mechanisms within the schools and outside within broader communities; thus, introducing a purely bottom-up PD culture might have been challenging. The organising team was right as though teachers reported that they "*loved the idea of teachers for teachers*"; they found the presence of some of the field professionals valuable.

> *It was great to see teachers and my colleagues presenting, but of course, meeting those field professionals that we usually cannot meet at any other place was valuable. Interviewee 3*

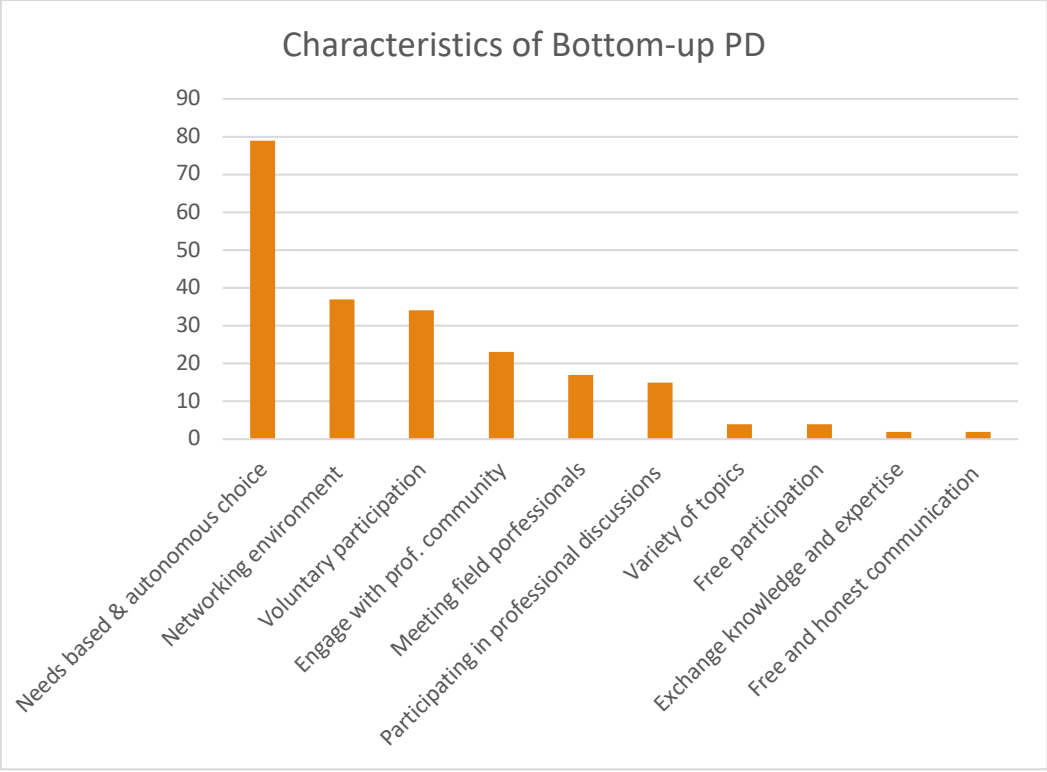
A surprising theme '*Curiosity*' emerged as a rationale for participation. Teachers' curiosity was another trigger of participation, maybe not the only one, as it is hard to imagine teachers committing time just for curiosity to see what is new there. As interviewee 5 stated directly *"I was really curious to know what it is like; it seemed to be a very new thing, and I did not want to miss the chance".*

At first, I got very interested to see the format and the overall ideas, but of course, day by day, as the date [of the conference] was approaching, I was looking forward to the actual event to be able to learn and develop. Interviewee 7

The participants across all datasets mentioned that they would participate in such a conference again. This trend is also evident from the growing number of participants each year. For instance, almost 52% of the survey respondents participated in both the 2019 and 2020 conferences, and 48% were new participants in 2020. It is worth noting that most of the 2020 speakers participated in the 2019-year conference as participants.

It is worth noting also that there are certain links between teacher rationale for participation and the bottom-up TPD conference features that teachers reported being valuable in the survey responses. Figure 4.1 presents the characteristics and the frequency of their appearance in teachers' responses.

FIGURE 4.1 THE CHARACTERISTICS OF BOTTOM-UP TPD CONFERENCES THAT TEACHERS REPORTED BEING VALUABLE



As it can be observed from the chart, the most dominant characteristic that the teachers reported being valuable is the opportunity for autonomy of choice and the opportunity for a needs-tailored PD. While this could sound important, it bears an interesting yet contradictory idea. Although provided with the autonomy to choose the desired session to participate in and given a wide variety of available topics, teachers mostly reported on attending the sessions with speakers they either knew in person or somebody advised them to. Teachers were more inclined to choose expert-led sessions with more theoretical topics. For instance, that is why the Coaching in Education session was overcrowded. One of the participants in the session on "Coaching" said to the presenter that the concept of coaching in the educational discourse is new, thus, bringing a natural interest towards that topic. This means that although the needs-based approach was mentioned as highly important, it did not work for some as the actual guiding principles differed from the reported ones. Therefore, when teachers make autonomous choices about professional development, 'wrong' choices can be an inevitable by-product. Simultaneously, in contexts where autonomy over PD is valued and available, teachers may face the consequences of their 'wrong' choices and not blame the system. Rather teachers can reflect and be cautious about choosing the next PD differently.

4.3 PRESENTATION OF THE DIMENSION 'TEACHERS' PERSONAL AND PROFESSIONAL CHARACTERISTICS

The data coding revealed nine themes for the 'Teacher Characteristics' dimension, namely 1) *autonomous*, 2) *curious*, 3) *hardworking*, 4) *lifelong learner*, 5) *changemaker*, 6) *risk-taker* (courageous), 7) *responsible for own PD (requiring from self)*, 8) *responsible for others PD (adding value)* (in speakers' answers), and 9) *positive attitude toward the job*. This dimension of a triangular analytical frame is important, as exploring teacher characteristics provides an understanding of how different teachers can enact professional agency to influence or change education within the same school (e.g., Bakkenes et al., 2010; Fullan, 2013, cited in van der Heijden et al., 2015).

Autonomous

Another vivid characteristic was 'autonomous', which was seen as "*a guarantee of teachers' success*", and its absence is seen as "*limitations, restrictions in our job*" (Interviewee 1). Autonomy in decision-making and the responsibility for own professional development are seen as quite related and undivided features as one comes from the other. The opportunity to make autonomous decisions and choices and being able to self-report are important factors contributing to teachers' positive feelings toward their job and PD.

> *I am responsible for my own learning, and it was great to feel that there was no pressure and no mandatory topics during the conference. When something is decided for you, no matter how good it is, you do not value it much. Interviewee 3*

> *I think everyone is responsible firstly towards self; thus, that self should be either blamed or rewarded as a main responsible person. Interviewee 1*

As it is seen in Figure 4.1 above, one of the most valued features of the bottom-up TPD was voluntary participation. While teachers reported that their own willingness drove their decision to participate, most of them informed their headteachers about it. For instance, one of the teachers noted, "*It is important to let the headteacher know what you want to do; they should know you are a teacher in their school".* This can lead to two contradicting ideas; on the one hand, teachers feel belonging to the community and respect the headteacher; on the other hand, power relations play their role by 'forcing' teachers to be accountable for their own developmental activities. Although all the participants of this study believe that teachers are responsible for their own development, they mention the important role of state and school leadership in teachers' PD.

> *There are no obstacles if you want to learn; for example, I do not blame anybody for being unable to do anything; it is everybody's responsibility. Of course, I think that the state must*

provide good teacher trainings, but it is not the only way that we can develop. Interviewee 7

The point that this teacher (interviewee 7) is making is that teachers should aspire for learning and seek learning opportunities, but the state also should "*care for their teachers*" as they always "*require more and more from teachers*".

Curious, hardworking and lifelong learner

The most common themes were curiosity, hard work and lifelong learning, which are complementary. Curiosity, the desire to learn more, and hard work bring aspiration toward learning.

Teachers should always learn; for example, besides participating in different PD activities, I also applied for a master's degree in education administration. Interviewee 3

No matter how talented a person is, hard work brings success; as a teacher, I need to aspire for the best. Interviewee 1

I may confess that I am a workaholic; whenever I find a training, I participate. I think one can learn at least something from anything. Interviewee 3

Changemaker

The characteristic of a 'Changemaker' opts out from some interviews and comes within different contexts but mainly through the idea of contributing to students' learning and own development. The teacher-speakers especially mentioned the big difference when teaching students and teachers. As Interviewee 1 stated:

If you can bring change into somebody's life, in this case, learning, then it should be done even if it is scary at first. Presenting in front of other teachers requires risk-taking".

She also talked about the energy one can get when contributing to others' learning.

When you learn for yourself, it is one thing, but when you share your knowledge with your colleagues, it is completely another feeling; you feel more energy by developing others. Interviewee 1

The teachers' awareness of their active and agentic role as change agents in students learning and own professional development was evident in most responses, while being a change agent in school reform and school improvement in general, which are referred to in Imants and Van der Wal's research (2019), was not a case in my study. The relevant literature states that agentic action is linked to professional identity and the change capacity of the schools (Eteläpelto et al., 2013; Priestly et al., 2012), which can address the concrete issue of sustained change in professional and school development. This conviction requires revealing teachers' agentic role in their professional development. The idea of an agentic action in TPD and its impact on change and improvement resonates with the findings of my study. In addition, an agentic action in colleagues' TPD was a special insight revealed in this study. All the interviewed teacher-speakers noted that their willingness to be a presenter at the conference was driven by the desire to share their knowledge with their colleagues and help them develop. The contribution to colleagues learning is an important attribute of the agency that benefits the community. Hargreaves and Fullan (2012) called for a system that promoted such collective autonomy, individual teachers exercising discretion and then sharing their learning with the profession. The teacher-speakers reported participating in previous conferences as participants, which gave them the confidence to take risks and act as presenters at the 2020 and 2021 conferences. From how one of the teachers formulated her desire to present, it can be assumed that she gradually built the confidence to present.

I participated in the previous conference and observed others, including my colleagues. Then

I finally decided, hmm, better to say got the courage to take the risk and present a topic. You know, it is not easy to present in front of other teachers, it is a huge responsibility, and the idea of possible failure puts you under pressure. Interviewee 6

Risk-Taking

This characteristic was observed in speakers' responses only. One of the speakers' motivations for participation was bringing change in colleagues' development, which resonates with Le Fevre's (2014) idea that taking a risk is associated with bringing educational change in schools. All three interviewees who were speakers at the bottom-up conference were talking about taking a risk and being courageous to present in front of their colleagues.

To be a speaker was very risky for me because we usually work with students, but teachers are more demanding than students and are more impatient than students. Thus, I was very worried about what I should say, but my colleague persuaded me, and I agreed to be a speaker. Interviewee 2

In the case of Interviewee 2, a colleague 'pushed' her to take the risk of sharing knowledge and helping others to develop. For many teachers, the fear of taking risks might be a barrier to innovation and educational change. There might be varied factors in not taking risks, for example, mistrust in own knowledge, but taking risks and not being appreciated by school leadership and the community is one of the main challenges (Day et al., 2005; Le Fevre, 2014).

Responsibility toward own PD

This is an interesting characteristic that emerged via data analysis, although most of the responses also carried the idea that the existence of the teacher trainings provided by the state is important. The excerpts below show that some teachers' main goal for professional development is their students' learning and that teachers themselves should constantly be seeking learning opportunities. "*Feeling highly responsible for the students*" drives me to "*participate in PD for giving my students the best".* Interviewee 3

Students usually ask questions not related to your immediate subject taught, and if they felt you are not confident in your knowledge, it would be difficult to restore their trust in you as a professional thus, you should be ready to answer. Interviewee 1

However, not all teachers mentioned the benefit of their professional development for their students' learning. Most teachers' responses were focused on themselves.

Positive attitude toward job

All the interviewed teachers showed a positive attitude toward their job, despite the challenges there are in it (e.g., low salary, workload, social status). Particularly, the usual words and expressions used in the conversations were "*there are no obstacles*", "*every problem can be solved, being the desire*", or "*the kids are not guilty that teachers are paid low or undervalued*".

All is good, I do not have any obstacles in my PD and my work, I love my work and want to do everything for my students. Also, that drives my motivation to seek PD opportunities, as learning is not only for the sake of learning it is about contributing to my students' development. Interviewee 1

4.4 PRESENTATION OF CODES UNDER THE DIMENSION 'CHANGES IN PROFESSIONAL PRACTICE'

Four major themes emerged from the qualitative data coding related to the dimension 'Changes in professional practice'. Those are as follows: 1) *raised self-esteem (gaining confidence),* 2) *gaining experience*, 3) *establishing new initiatives*, and 4) *rethinking the teaching profession.* The themes '*raised self-esteem'* and '*gaining experience'* were evident mainly in the interview data set with interviewees who were speakers during one of the conferences (either in 2019 or 2020), whereas the other two were observed in survey data

and across all interview data sets. More than half of the participating teachers (around 63% of study participants) mentioned at least one thing that their participation brought to their teaching or overall professional practice. They mentioned some broad areas (e.g., formative assessment, group work strategies) where they either gained knowledge or rethought their teaching methods and practices.

Establishing new initiative

Two survey respondents indicated that after their participation, they considered organising similar professional gatherings at a school level. Interestingly, in 2021, three small conferences[37] were organised by some 2019 and 2020 conference participants. I cannot know if those were the same teachers or not, as the survey was anonymous. Another survey respondent mentioned that she opened a Facebook group to encourage colleagues to engage in professional discussions and share educational content. Another teacher from semi-structured interviews shared her spirited idea of creating a space for professional discussions.

> *I was so excited by the idea that we as teachers can also initiate different projects and decided to open a FB group for sharing resources, exchanging experiences and in general asking questions and answering them. Interviewee 5*

Overall, teachers reported "*feeling ready for those kinds of experiences" Interviewee 6, "gaining experience as a speaker" Interviewee 2, and "feeling more confident to talk in front of the audience" Interviewee 1.*

Rethinking teacher profession

Rare but quite vivid ideas were identified related to changes in teachers' thinking about their role as teachers and their capabilities.

[37] One conference was organised in Vanadzor, a city in Armenia, and two conferences were thematic ones: one in Yerevan on Inclusive education and the other one was online on pre-school education.

I believe teachers should create something new, but on a daily basis, it is not possible as we are overloaded with so many tasks. But with this conference, we have a chance to create and share. Interviewee 7

Having said this, the same teacher noted the quality of the presentations and knowledge shared by teachers. In particular:

We are supposed to be knowledge creators, but we are not. Let me tell you honestly, it is great that teachers have a chance to act as speakers, but what are the topics? They are not creating or recreating them; they replicate [them]. For example, my colleague participated in a training, and then she presented the same topic at the conference without any changes; let's say she could put something new, something personal in it, but no. Interviewee 7

We do not know how; we do not believe that we can, and to be honest, I cannot imagine any teacher with a full-time workload having time for experimenting and creating something new. Interviewee 7

This teacher spoke out about the system and its imperfectness by pointing out the quality of teachers (including herself "*Yes, and myself as well, we are not equipped with necessary knowledge and skills for teaching our students*") and the overall system (e.g., curriculum, books).

Knowledge is created through experimenting with new ideas and methods, reflecting on own practice and by researching own teaching and students' learning. It can be situated within the notion of 'teacher as a researcher' discussed widely by Stenhouse (1975). Teacher research (e.g., action research, lesson study) has a long history of advocacy internationally as a pathway for professional knowledge building (Cochran-Smith and Lytle, 1993), teacher professional learning and development (Zeichner, 2003; Groundwater-Smith and Mockler, 2009), etc. There is a great body of evidence that action research (Caro-Bruce et al., 2007), lesson study (Lewis and Lee, 2018), and PLCs (McLaughlin and Talbert, 2006) enable teacher agency and

expertise. While teacher research is not considered the main aspect of teachers' work, the lack of agency that teachers seem to feel regarding research may negatively affect teacher professionalism (Mills et al., 2020).

4.5 PRESENTATION OF A NEW TYPOLOGY (TAXONOMY) OF TEACHER AGENCY

Based on the data analysis, by contrasting the themes derived from the first stage of data analysis (coding according to three dimensions[38]: triangular analytical frame) and in relation to five features of bottom-up TPD conference), and then grouping those themes into categories (second stage of analysis), I derived four types of teacher agency: i) *enquiring agency, ii) autonomous agency*, iii) *change-maker agency and iv) acknowledging agency*. The codes acted as indicators for agency types. For example, codes such as 'desire for learning', 'doing something new', 'looking for PD opportunities', 'initiating professional learning platforms' (FB groups, NGOs), etc., were attributed to the *enquiring agency*. The detailed process of data analysis can be seen in Chapter Three and coding examples in Appendices 2 and 3.

Table 4.1 below shows the typology of teacher agency, which was derived based on my data analysis and is presented based on their prominence across datasets. Each type of agency is presented separately with teachers' quotes in the narrative following Table 4.1.

[38] The tri-dimensional analytical framework: i) rationale for participation, ii) teacher characteristics and iii) changes in practice.

TABLE 4.1 THE TYPOLOGY OF TEACHER AGENCY

Type	Categories of themes	Indicators
Enquiring agency	Opportunity for PD and learning Curiosity Meeting field professionals Networking Life-long learning Hardworking	Seeking learning opportunities Doing something new Desire for learning Curious about learning and new opportunities Committed to professional growth Committed to experimenting Initiating professional learning platforms Committed to innovation Life-long learner
Autonomous agency	Responsible for own PD Autonomous Establishing new initiatives	Making autonomous decisions Making responsible choices Acting in light of their decisions Make choices of teaching methods Make choices for own PD
Change-maker agency	Committed to colleagues' development Responsible for own PD Rethinking teacher profession Responsible for colleagues' PD Raised self-esteem Establishing new initiatives	Self-determination Committed to innovation Reason orientation and deliberation Oriented toward action Bring about changed in their practice Committed to change own learning Committed to change in enhancing students' achievement
Acknowledging agency	Being valued by teacher community Positive attituded towards job	Value and respect their work. Wants to be recognised and valued by professional community

In my data, the *enquiring* agency is seen in an active search for professional development activities and their desire to learn and develop continuously. It entails themes from all three dimensions that were explored above in the corresponding sections. The notion of learning and development was the most apparent idea across all data sets; therefore, this agency is the most frequent one. The *enquiring agency* is related to Emirbayer and Mische (1998) notion of 'projective agency', which comprises 'the imaginative generation by actors of possible future trajectories of action, in which received structures of thought and action may be creatively reconfigured in relation to actors' hopes, fears, and desires for the future' (p. 971). Teachers with enquiring agency look for learning opportunities to change and reshape the contexts that impact their teaching and their own understanding of their jobs. Teachers with a strong sense of enquiring agency (called inquisitive in Molla and Nolan's study, 2020) can also identify areas where they need further knowledge and expertise and take the initiative for their learning (Molla and Nolan, 2020).

Teachers build confidence in their work by constantly learning and improving their knowledge and skills*. Interviewee 1 stated:*

> *Sometimes I question my knowledge, which motivates me to keep learning and look at what I know and do to understand what I need.*

Teachers' participation in the bottom-up TPD was driven by their own understanding that they need to learn and improve some aspects of their practice and keep 'up-to-date' due to the rapid pace of the reform agenda in the country. As one teacher noted:

> *We have to keep learning because so many changes are taking place, and most of them are being piloted in our region. Interviewee 2*

Another gripping idea is that none of the interviewees mentioned finance as a challenge for their work, learning and development, though when talking about this bottom-up TPD conference teachers appreciated it being free of charge with food and drinks available. When asked why they chose the teaching profession, the first answer was that '*it is a mission'*, although teachers are among the lowest paid workers in the country (their average salary is only 55% of the average salary in Armenia)[39] and, it is a big challenge for the system[40]. The fact that they do not mention money is because if they do so it might 'downgrade their belief in teaching being a mission'.

> *Nothing can hinder me from teaching my students and learning; I can always find time for learning, I do it for my students, and they should not doubt their teachers' knowledge. Interviewee 3*

While this quote talks about the teacher's strong desire to improve, and one can feel the teacher's absolute devotion to her students' learning, I see several hidden points. One is the notion that the teacher should know everything and always. *"Can you imagine a situation when a student asks a question, and the teacher does not know the answer*"? Another point is that learning is for others rather than for yourself first because one needs to 'digest' it first and then use it for improving students' learning which is the main goal of all the TPD activities.

Initiating something new (innovating) as a distinct indicator of enquiring agency appears twice in survey responses. Those two teachers mentioned that they opened a Facebook group for teachers to share teaching and learning materials/activities that they design and adapt. The other teacher, with two other colleagues, started an NGO to provide teacher training activities in their region.

[39] UNICEF report (2022b). Education Sector Analysis of Armenia.

[40] According to a recent comprehensive study (UNICEF, 2022a), teachers' salary is one of the reasons why teaching is not an attractive career for young generation.

I thought I could do something more than just teach. Sharing with my colleagues seemed a great idea, so I opened a FB group and invited my colleagues from my school and beyond. Survey respondent 76.

Being innovative seems to be a distinguishing feature of teachers as change agents (Van der Heijden et al., 2015). Their study indicates that teachers as change agents use their agency in an entrepreneurial manner by taking creative initiatives accompanied by some risks. While risk-taking and being innovative appear to be distinct attributes of teacher agency, there were reported only rare cases, at least, regarding the development of new initiatives.
Although my study did not look at teachers learning per se, some teachers indirectly reported the impact of their participation in the bottom-up TPD conference on their teaching and practice.

When the new curriculum was piloted in our region, there was a formative assessment about which I learned during the conference for the first time. And it was so fulfilling that the concept was familiar to me. I went and re-watched the video[41] to reinforce my knowledge of it. Interviewee 2

AUTONOMOUS AGENCY

As a distinct and important feature of the bottom-up TPD, *autonomy* is concerned with free decision-making (participating or not), choosing the desired topic or attending the speaker's session you know or would like to meet. This is the second most frequent type of agency identified during data analysis. Autonomy is seen as an important feature of an environment supportive of teacher agency (Pantic, 2017). Teachers in this study reported that when given an opportunity to choose, they feel more responsible for their learning than if required or forced to participate in PD activities.

[41] All the sessions from the conferences are videotaped, with speakers' permission, and published online on YouTube as an open resource for teacher professional learning and development.

The feeling of autonomy was important for me, I am the one who decides what to do and when, do I want to go to this session, I go, and I choose; this feels great, especially when you work in an environment where there is mandatory state curriculum that you need to follow strictly. Interviewee 1

This quote from the interviewee points to the existing policy regulations that structure teachers' work and put them into 'limits'. Here is a contrast between the structure that the teachers work in and their agency that wants freedom. For example, two of the interviewees were talking about the national curriculum and its requirements, and I first thought that it was not related to this study of agency; but, when I reread and relistened the recordings again, I clearly identified the idea that they were making by "*being limited with the system requirements*" (Interviewee 1), but teachers want freedom at least at a certain level. Thus, this bottom-up conference gave them the desired freedom, at least over PD.

There is a national curriculum, programmes, some other mandatory things, and, yes, you got your daily routine following them, umm, and. Still, we need some freedom and autonomy as well; this is why I think teachers loved the opportunities given by this conference. Interviewee 1

Regarding autonomy in TPD, the teachers in Armenia are not restricted from participating in PDs, and there are no state mandatory required hours of PD; it is left to the teacher's individual decision (UNICEF, 2022a). The only mandatory PD is within the teacher attestation system once every five years (Law on General Education, 2009). Meanwhile, when discussing teachers' challenges in their PD, all interviewees surprisingly shared the same opinion about not having them.

If there is a desire, one can do everything. For example, my school leadership supports me in everything and does not create any obstacles for me; thus, I do not have any challenges. Interviewee 3

This quote is interesting in terms of the fact that I did not ask anything related to the school leadership's role, but from this answer, I can infer (relying on my knowledge of the context) that there might be a case when the school puts restrictions on teachers PD as the teacher should be substituted, etc.

When given a chance to choose the areas and topics of PD, teachers were given the opportunity to locate PD activities that are driven by their self-needs assessment and their understanding of their own practice that requires further improvements. What the participants valued most in this conference was voluntary participation, the opportunity to choose the desired topic, and the opportunity to share their own knowledge; no specific expertise is needed. The teacher is valued for what he/she does and is now given the platform to share, discuss, argue, and learn.

The best part of this conference was that it was not mandatory; even the school leadership did not know about it, no education authority was responsible, and it was the teachers' own choice to participate or not. Interviewee 5

Usually, during traditional conferences and workshops, if you are in a session, you cannot leave it even if you find it uninteresting and irrelevant, and as a result, you have a feeling of dissatisfaction and a waste of time. Meanwhile, within the format of this bottom-up conference, one can leave the session anytime, and both the participants and speakers are aware of that.

Some teachers reported benefiting from it, though others noted feeling discomfort to leave the session as it might be seen as *"disrespect toward the speaker".*

It is not that the speaker was not prepared; I found the content not relevant to my professional needs but could not force myself to leave. Interviewee 3

CHANGE-MAKER AGENCY

Another type of agency appears to be a *change-maker agency* which is identified in all three dimensions of data analysis that constitute the agency, while not as common as the other two types that were presented above. Change-maker agency of teachers is manifested, for instance:

- in the dimension of Rationale, it is the 'learning new things to bring changes in their own classroom',
- in Changes in Practice, it is 'rethinking about own teaching methods and experimenting with new, learnt ones, to make positive changes in the classroom.'
- in Characteristics, it is 'love making changes in own learning and other' PD.'

The conference presenters' views on the desire to impact their colleagues' development support the idea of a *change maker*. Moreover, "the energy" and the efforts put into colleagues' development support this agency type. Commitment to professional growth and the ability to make responsible decisions requires agency. Agentic teachers are empowered and have autonomy and voice (Edwards, 2015) to identify and use opportunities to advance their professionalism and act towards bringing change into their practice (Anderson, 2010). For instance, being 'self-organising, self-reflective, self-regulating and proactive' (Bray-Clark and Bates, 2003, p. 14) is the behaviour of agentic teachers who seek changes. Teachers' responses also showed that they feel responsible for their PD, which drives their desire to seek new learning opportunities regardless of any challenges they might face, such as time concerns. As *Interviewee 3 stated, "I feel highly responsible towards my students thus, I participate in PD to give them the best I can".* Teachers were able to make responsible choices for their PD; thus, they "enjoyed" the opportunity given by the conference.

I must learn and develop for my kids (eds. refers to students). I should know about their interests and even the musical groups that they like to be on the same page with them. Interviewee 1

Not all but most teachers participating in this study believe that their learning makes a difference in their students' learning. The change-maker agency is linked to the autonomous agency as agency freedom is a key aspect of teacher professional practices and is evident in teachers' ability to act to impact change autonomously (Molla and Nolan, 2020). Referring to Sen (1999), an agent is one 'who acts and brings about change' where their action can be judged in respect of their 'own value and objectives' (p. 18). Linking Sen's idea to the findings of my study, the change-maker agency of teachers is about being responsible toward their colleagues and their students' learning in accordance with their own beliefs and values.

ACKNOWLEDGING AGENCY

Acknowledging agency was revealed mostly through the teacher speakers' responses but not only as teachers generally wanted to be more valued and recognised as 'good teachers'. Regarding the wider community, teachers mainly mentioned that they generally felt unappreciated and sought different opportunities to prove their professionalism.

You know, it seems that the public perception of the teaching profession is not high, so people think, ah, you teach those 45 minutes from the book, and you are done, and it is also because of the low salary. For example, my students think that a good professional will not work at school, and they might be partially correct; most of the teachers are like that, but there are also those, like me, [laughs] that love teaching and you know it is a mission for me. Interviewee 6

The ideas of this teacher resonate with the findings of the recently done study (UNICEF, 2022a), where the majority of the surveyed teachers (N=1187) mention that they feel undervalued and that their work is appreciated neither by the policymakers nor by the larger community/public.

Therefore, teachers seek opportunities to show and prove their 'worth', even when one of the interviewing teachers said that she learns for herself; in her words, one can see an explicit desire for recognition and being valued.

> *I like participating in PD activities; I like learning, and I enjoy learning for myself, I do not have to show something to anybody; it is just for me. I feel great when I learn something new and your colleagues can come and ask you about that. Interviewee 5*

The data shows that agentic teachers demand professional recognition; though demand is a strong word, it is that they seek opportunities to do something; in the case of this study, they seek PD opportunities to gain that recognition. Meanwhile, because of the unfavourable conditions of the system (e.g., low salary), agency and recognition of teachers, as is evident in this study, can also be constrained, which causes negative public perceptions of the teaching profession.

> *The government, with its various reforms and continuous demands from teachers, undervalues teachers' work. Also, the low quality of teachers' initial education creates a notion that teachers are not well educated; thus, their work is not appreciated. Interviewee 5*

This was a common perception across all interviews. Two teachers mentioned that although there might be certain negative or unappreciative sentiments, they did not feel it.

> *I live in a region; thus, I think we are more respected here than teachers in the capital city. Interviewee 3*

Being a speaker and sharing my knowledge made me feel valued. Working with students is a usual thing but acting as a speaker for teachers is different. The community gets to know you as a good teacher. Interviewee 1

This type of agency was mostly associated with the teachers' motivation for participation to be recognised more as a mentor than a teacher.

When you participate in a PD, you kind of stand out from the whole crowd; people know that you seek learning opportunities and start to treat you differently, I think, with more respect. Interviewee 5.

Interestingly, these kinds of responses were recorded in five out of seven interviews which may be because there are not clearly established and regulated in-school mechanisms for praising 'good' teachers. The state provides certain incentives for the teachers to stand out from others, such as voluntary attestation or qualification ranking[42], but having the role of a speaker or a trainer gives them more "confidence" and pride.

I feel proud because I can share my knowledge, help others learn, and be known as a speaker. Interviewee 1

I was the only person from my school that participated in this conference. My colleagues approached me and asked questions, they were interested in how it was, and I kind of felt, hmm, you know, I felt special. Interviewee 2

[42] A type of professional qualification incentive. Teachers voluntarily apply for these qualification grades (i) teaching teacher, ii) lead teacher, iii) teacher trainer and iv) teacher-researcher) through which a salary increase from 10-50% becomes possible.

4.6 ADDITIONAL FINDINGS

During the data coding and analysis, interesting insights were revealed about teachers' work and their perspectives on the educational system in general. I coded such data under the category 'Other' (Appendix 1). Based on the analysis, three themes emerged:

i) constraints of the system,

ii) lack of collaborative culture within the teacher community,

iii) the downside of unregulated TPD.

Constraints of the system

Concerning the first theme, 'Constraints of the system', teachers mentioned the system's restrictions affecting their work. Although I asked no questions about teachers' daily work, the government and the leadership role, the teachers talked about their struggles, e.g., workload, mistrust toward their work and knowledge, limited opportunities for career growth and prescribed curriculum. The teachers both explicitly and implicitly mentioned the limits and boundaries that the government and schools put on them in terms of what to teach, how to teach, how many hours to spend on this or that topic, what to test and how many times, etc. '*Teachers' job is a creative one*' (Interviewee 1), but it is restricted in a number of ways, for instance, standardised curriculum and testing. This restriction can refer to the social structures that constrain teachers and may be more powerful than their individual capacities to resist. However, as my study findings show, some teachers could enact their agentive role, which can have the potential to alter the context (this can be an implication for further research).

Although the educational system is structured and prescribed, it is worth mentioning that even when there were opportunities within the system for autonomous choice, teachers mainly would not utilise it for several possible reasons, e.g., it is easy to do what is already there rather than experimenting with something new, no incentives for more efforts, lack of professional knowledge and experience, fear of failure, etc. Moreover, looking at the seemingly overlapping concepts of teacher autonomy and agency, one can have autonomy but, without agency, cannot utilise it.

There is an interesting point related to workload as an obstacle to professional development. According to statistics, 62 per cent of teachers have less than a full-time workload (22 hours per week)[43]. Thus, based on the teachers' words, I can infer that those teachers participating in this study represent the cohort that has full-time employment (22 hours per week), and it is a lot[44].

Lack of collaborative culture within the teacher community

This theme provides interesting insights into teachers' collaboration (knowledge sharing, discussion, and asking for help). Teachers (mainly in the interview samples) stated that they believe in collaborative and group efforts to ensure progress and improvement. "*One cannot lead the progress alone*", as Interviewee 1 noted. The contradiction here is that although teachers value collaborative learning and practices, in reality, these practices are rare in the teacher community and, overall, in the education system in Armenia. The reason for that can be the belief that teaching is an isolated profession and that what is happening in the classroom is under the responsibility of a single teacher. Another reason that I can present, based on my professional expertise and knowledge of the context, is that failure or uncertainty about any work-related topic is seen as a weakness or shame. This culture hinders teachers from engaging in collaborative practices. As for the school, they do not collaborate because headteachers want to keep everything within the school, both success and failure. One of the teachers (presenter during the 2020 conference) confessed that her headteacher was against her participation in the conference so that her knowledge and good practice stay within the school.

Along with possible subjective reasons for that attitude of not sharing, there is also an objective one. Schools compete with each other as their budget depends on the number of students. They want to keep good practices within the school to attract more students. This is due to the neoliberal or managerialist view of education, which started to gain weight in

[43] National Centre for Educational Technologies (NaCET) database.

[44] According to the new curriculum (to be implemented in all schools across the country from 2023-2024 academic year) the full-time teacher workload is reduced to 18 for elementary school teachers and 20 hours for middle and high school teachers.

Armenia since its independence (1991) with all different kinds of reforms that were influenced by the policy borrowing approach (Manukyan, 2019). Neoliberal policies during the twenty-first century (for example, in England, Bottery and Wright, 2000; Apple, 2005; Brant and Panjwani, 2015) have impacted schools, teachers' work (accountability, standardisation of curriculum and TPD) and economic realisation and privatisation of schooling (e.g., private schools are considered to be better than the public ones) have led to the competition between schools and teachers which resulted in that students perceived as consumers and parents got big authority in intertwining into teachers' work.

The downside of unregulated TPD

This theme that presents the downside of unregulated TPD is that the Law on General Education (2009) simply encourages teachers to participate in professional development but does not declare precisely the need for it, for instance, by defining the minimum hours for non-mandatory TPD. Teachers in this study believed that participation in any TPD is beneficial in one way or another and can be useful if not now but in an unpredictable way and time. Most teachers also noted that their attitude towards PD is rare for the teacher community in general. A common perspective of the teacher community is that teachers do not participate in PD activities as they have no motivation and desire to put efforts into learning and development because there are limited, if any, career growth opportunities, low status of the profession, the ambiguous perception towards teacher work and mistrust for the whole system of education (UNICEF, 2022a). The reality is that most teachers participate in PD activities if it is mandatory, when somebody (e.g., the headteacher) demands or if they have any tangible benefit (e.g., they need a certificate). Despite that, the participating teachers believe that they are the only ones responsible for their PD and that there are no obstacles to it; the '*huge workload leaves no time for much PD*'. '*The school shouldn't be a place for average people; only the best should teach*'; participating teachers generally stated that teachers, despite any challenges, should develop and learn continuously by self-learning and participating in PD activities.

4.7 SUMMARY

The participants of this study were both speakers and participants in either or sometimes in all three conferences; however, their motives for participation were almost similar. Opportunity for new learning, being recognised (as a speaker or a participant), and autonomy of choice were strongly linked to the features of the bottom-up TPD conference as well as descriptors of teacher agency available in the literature (e.g., Molla and Nolan, 2020). The individual characteristics that teachers' accounts showed were associated with continuous learning, hard work, self-responsibility, curiosity, etc. These characteristics widely appear in the literature on teacher agency, though within different contexts (e.g., Imants and Van der Wal, 2019, Molla and Nolan, 2020, Van der Heijden et al., 2015).

Although the participants had positive pre-dispositions toward me as a researcher and what I do, and they voluntarily, without any incentives, agreed to participate, the wide range of subjects, age range, and years of experience provide rich data from different perspectives and offer interesting insights. For instance, the participants' age distribution shows most of the participants are in their middle age, and most are experienced teachers. This might make us think that experienced teachers appreciated and took the chance to participate in a TPD. However, whether there is a link between being experienced and being agentive cannot be claimed.

It is worth mentioning that while looking at teachers' responses and the findings of this study, one can assume that teaching is a mature profession in Armenia, which is not based on the teachers' reflections on the system and teachers' PD in general as well as relevant studies (e.g., UNICEF, 2022a).

The teachers' accounts suggest great value in bottom-up TPD conferences, particularly regarding teacher agency. Participating teachers' perspectives about the bottom-up TPD were generally the same, positively emphasising the idea of knowledge sharing amongst teachers, voluntary participation and autonomy in decision-making in their own PD, and networking and collaboration opportunities. According to Priestly et al. (2012), the interactive concept of teacher agency is vulnerable for two reasons: 1) the opportunities for agentic action are

overemphasised in relation to the voluntary individual approach, and 2) these opportunities are disregarded or perceived as restricted due to a highly structured systems approach. Therefore, there is a need for a model that balances individual and systems approaches of teacher agency in professional development (Imants and van der Wal, 2019). As my study shows, teachers had the opportunity for agentic action by making an autonomous decision for voluntary participation within the restricted education system. Hence, my study findings provide insights into understanding the possible characteristics of a model that has the potential to balance individual and system approaches for teacher agency within a different TPD approach.

The bottom-up TPD conference approach focuses more on teachers' empowerment and learning as it relates to their own concerns, needs and interests. Different forms of bottom-up TPD may exist in between these ends, showing varying degrees of teacher involvement. National policies and school-level constraints may hamper the realisation of powerful and empowering forms of PD activities. In Armenia, the educational and governmental bodies ideologically support the idea of bottom-up TPD conferences, but they do not fund or are involved in any way other than attending the conferences if invited. In some of the teachers' reports, they valued that education officials were at the conference and that they had a chance to communicate and talk freely about their concerns and expectations.

In relation to the continuum ranging from top-down to bottom-up TPD activities, the first two conferences explored in this study can be situated somewhere in between. Still, the one in 2021 was purely bottom-up as it was initiated and organised by a school and its teachers. Although the government is not involved in this process, in some cases, governmental support (presence of some officials) and respect are perceived as crucial to accomplishing its goals as the government's supportive attitude encourages teachers and schools.

Through the data analysis, I identified four types of teacher agency, namely enquiring, autonomous, change-maker and acknowledging, which resonate with most attributes found in other relevant studies. Although the enquiring agency shows that teachers' participation in a bottom-up TPD was driven by their own understanding that they need to learn and improve,

the acknowledging agency shows that participating might also be driven by the desire 'to be seen' at the conference rather than actual learning.

Additional findings suggest that despite teachers' positive attitude towards their job and PD, the standardised national curriculum, the textbook, and the boundaries that come with them, the workload and constant demands create tensions and limit teachers' agency as well as motivation for learning and development. Meanwhile, there were responses that implicitly pointed to the idea that teachers' limited autonomy and agency are justified due to the low quality of pre-service teacher education and low efforts for their own PD.

By creating opportunities for teachers to interact with their colleagues, share knowledge, and talk about their teaching and learning freely, teachers are exercising their agency. This is what happened due to bottom-up TPD conferences where teachers could achieve agency because they were given choices and alternatives to judge what would be the most appropriate for their PD purposes. As Priestley et al. (2015) present, 'Agency is not present if there are no options for action or if the teacher follows routinised patterns of habitual behaviour with no consideration of alternatives'. (ibid., p. 141).

The findings presented in this chapter are the basis for the Discussion chapter, which brings synoptic answers to my research questions.

CHAPTER FIVE DISCUSSION

5.1 INTRODUCTION

In this chapter, I offer synoptic summaries of my broader discussion in relation to my research questions. My study has three research questions, and though they are linked, they are examined separately. I provide answers to my research questions by reflecting on my findings and referring to the relevant literature that provided the conceptual and theoretical basis for this study.

There are some critical areas within the TPD context, such as teacher professionalism and autonomy, but I look at teacher agency predominantly [45]. My study gives a deeper understanding of the bottom-up aspect of professional development than many other studies in the field. I acknowledge that my data is perceptual, but I contend that the vast perceptual data is a strength rather than a weakness because only that allows me to get into this whole teacher agency dimension from participants' perspectives in some depth.

My findings suggest that teacher agency and bottom-up TPD conference approach are interwoven dimensions and that evidence can provide promising opportunities for general TPD practices with an emphasis on promoting teacher agency.

5.2 WHAT IS THE INTERPLAY OF TEACHER AGENCY AND BOTTOM-UP TPD CONFERENCES?

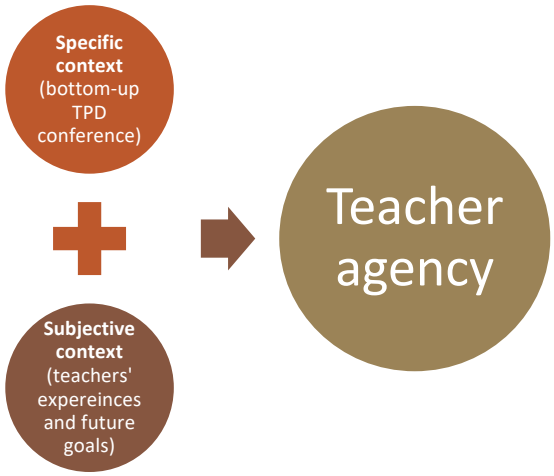
I answered this overarching research question by examining the teachers' perceptions and understandings of their role in their PD and the specific context of the bottom-up TPD and their opportunities within that context, such as voluntary participation, autonomy in choosing the desired topic, learning from peers and sharing own experience, the way teachers described their experience of participation either as a presenter or a participant and the possible challenges related to their PD and this specific context.

My research findings show a positive interplay between teacher agency and bottom-up TPD conferences. The analysis shows how the interplay is evident and which agency types suggest that interplay. For instance, teachers' free will of participation and autonomy in choosing the desired topic or making responsible decisions related to their own PD is linked to the main features of the bottom-up TPD conferences, for example, voluntary participation or autonomy in decision-making. Those features create a favourable environment for teachers to exercise their agency, consequently ensuring the researched interplay. The agency is achieved through the interplay of individual efforts and mainly unique situations when the available resources and contextual factors come together (Biesta and Tedder, 2007, p. 137). Such kinds of factors come together in a bottom-up TPD conference approach.

[45] Generally, I did not triangulate my data because I had dominantly perceptual data from a self-selected group of people, but I compared and contrasted to the extent possible.

In general understanding, the interplay necessitates taking into account also subjective conditions or contexts of teachers, as in the case of this study; those subjective conditions might be rooted in past experiences or future goals (Emirbayer and Mische, 1998) that influence teachers' agentic manifestations. Subjective conditions of teachers were explored only through their subjective understanding of a PD as a wider context within their work. A closer look at other subjective contexts of teachers might provide a better understanding of their interplay and influence on agency, which can be a subject for further investigation. For the purposes of my study, based on the scope of data that I collected, I created a figure (Figure 5.1 below) to show the interplay of bottom-up TPD and teacher agency where a specific part is dedicated to subjective conditions.

FIGURE 5.1 THE INTERPLAY OF A SPECIFIC CONTEXT, TEACHERS' SUBJECTIVE CONTEXT AND TEACHER AGENCY



This model for fostering agency through bottom-up TPD conferences resonates to some extent with Biesta et al.'s (2017) 'ecological' conception of agency, stating that: 'the achievement of agency emanates from the complex interplay of individual capacity and collective cultures and structures' (p. 52), by providing new insight of the teacher agency field.

5.3 WHAT TYPES OF TEACHER AGENCY ARE IDENTIFIED IN THE CONTEXT OF BOTTOM-UP TPD CONFERENCES?

My research findings revealed four teacher agency types, namely *enquiring agency*, *autonomous agency*, *change maker agency and acknowledging agency.*

The *enquiring agency* is reflected in teachers' desire to seek PD opportunities to improve their knowledge and practice and to keep up with the ongoing reforms. Similar to the characteristics of an enquiring agency, Molla and Nolan, in their paper (2020), identified a type of inquisitive agency. The basis of the enquiring agency is constantly questioning the nature and appropriateness of one's professional knowledge (Goodson, 2003), which is evident in my study within the context of bottom-up TPD conferences only. I am not rejecting that enquiring agency can be true also outside of the researched context; however, relying on the participants' implicit accounts about the education system and my professional knowledge and understanding of teacher education and professional development in the studied context, I can hardly state that.

Autonomous agency pertains to teachers' autonomous decision-making regarding their participation in the bottom-up TPD conferences, choice of the topic and willingness to share and learn freely. In the reviewed literature, teacher autonomy is seen as an integral part of teacher agency, pointing to its importance from the perspective of teacher professionalism (e.g., Hargreaves, 2000; Evans, 2008; Mitchell and Lambert, 2015). In my study, 'autonomy' emerged as a separate type of agency as all the dimensions explored through the analytical frame, as well as at least two features of the bottom-up TPD conference, contribute to the existence of it as a full-fledged type of teacher agency. While teachers in this study reported valuing and enjoying the opportunity for autonomous decision-making, when looking at the survey data, most of the teachers chose the sessions based on whether they knew the speakers or not and preferred an expert-led session over their professional needs and for most of the cases they did not coincide. This pattern leads to the idea that teachers' decisions are rooted in some sociocultural aspects where, for instance, it is believed that attending expert sessions is more prestigious or valuable or that not attending a friend's session can be seen as an assault, etc.

The *change-maker agency* relates to teachers' desire to make a change either in their colleagues' learning and development (evident in conference speakers' responses) or in their students. In the literature, teachers are usually called change agents as a role or quality to act within any school and curriculum reform. When examining the notion of 'teacher as a change agent' (e.g., van der Heijden, 2015), the characteristics of teachers who are change agents include a broad spectrum of characteristics (e.g., lifelong learning, which is a descriptor of enquiring agency or entrepreneurship: being innovative and feeling responsible) that can be attributed to various teacher agency types. Therefore, change-maker agency does not equate to the notion of change agents, as the latter is a generic descriptor for a teacher with the agentic capacity and who can exercise it.

The *acknowledging agency* pertains to the notion of being valued and recognised (Ingram, 2018; Molla and Nolan, 2020). Recognition itself boosts agency, as trust and appreciation toward teachers' expertise and professionalism mean there are favourable conditions for teachers' creativity and engagement with policies (Molla and Nolan, 2020). Acknowledging agency resonates with Ingram's (2018) description of agency (the social dimension) in which people's individuality is introduced through particular social statuses and roles and basic trust in themselves with character and identity. These social markers require recognition by others (p. 63). This agency was vivid and can be contrasted with the unappreciated feelings of teachers that drive their desire to participate in PD activities for the sake of being seen.

5.4 WHAT POTENTIAL DO THE BOTTOM-UP TPD CONFERENCES HAVE FOR PRACTICE?

Answering this research question required a deeper analysis of teachers' agentic manifestations as well as reliance on field literature (e.g., Hargreaves, 2000; Evans, 2008; Biesta et al., 2015; Molla and Nolan, 2020). I discuss this research question from the perspective of the phenomenon of teacher agency because TA is the main focus of my study. I also discuss teacher professionalism as an overarching phenomenon (Darling-Hammond, 2013; Biesta, Priestley, and Robinson, 2015) for teacher agency as well as autonomy as an irreplaceable aspect of teacher agency (e.g., Emirbayer and Mische, 1998) and teacher

professionalism (Darling-Hammond, 2013). In addition, I discuss the potential of the bottom-up TPD conference approach from the perspectives of two other notions: knowledge creation and collaboration. These two notions comprise two important features of the bottom-up TPD, which also came out from my data in an unpredictable and insightful way, which I consider worth discussing, taking the specifics of the education system in Armenia and the contribution this discussion might bring to the field of TPD.

By and large, I am mapping dominant aspects of my findings and literature from the field of professional development in terms of the potential the bottom-up TPD conference approach can offer for those notions. Two aspects (knowledge creation and collaboration) generally come from the bottom up, and by discussing them, I show their link to other dominant aspects of my study, which contributes to the field by bringing new insights into the TPD and teacher agency literature.

Teacher agency

Based on the findings of this study, four agency types are enacted through bottom-up TPD conferences, proving the potential of bottom-up TPD conferences for practice. The evidence holds a promise that the bottom-up TPD conferences can positively contribute to the general TPD context as an environment that promotes active participation and belonging as well as the construction of professional agency (Cohen and Hill, 1998; Wenger and Snyder, 1999).

Professional agency is significantly constructed (Biesta and Tedder, 2007; Robinson, 2012) in the middle of dilemmas and uncertainties of professional-pedagogical activities and practices (Munthe, 2001; Helsing, 2007), and this is where the bottom-up TPD conference approach provides affordances: teachers come together, talk about common challenges, discuss classroom practices, network and make newer sense of their work. Through the bottom-up TPD conference approach, teachers exercise certain types of agencies that are shaped by contextual factors (environment- opportunities and resources), personal factors (past and present experiences and future plans) (Emirbayer and Mische, 1998) as well as professional context (Toom et al., 2015). Hence, agency is manifested within an environment where teachers can criticise, challenge or resist dominant discourses, norms and practices, or

external demands and regulations and take actions in line with them (Ahern, 2001; Pyhältö et al., 2014).

Teacher professionalism

The bottom-up TPD conference approach can hold some potential for teacher professionalism as the bottom-up TPD approach promotes teacher autonomy and agency, as my study findings revealed. Autonomy is an important component of the teaching profession (Hargreaves, 2000) and an indispensable feature of teacher professionalism (Darling-Hammond, 2013). Teacher professionalism, in its turn, is seen as a reform approach and as a way of improving teacher quality (Darling-Hammond, 2013); thus, focusing on its important features (e.g., autonomy, agency) can positively contribute to its promotion and regain.

In the Armenian educational context, there is limited autonomy, if any, regarding the curriculum. The government's emphasis on standards and curriculum obedience does not value teacher autonomy or collaboration but rather appears to resemble the post-professional model that Hargreaves (2000) described in his four conceptions of teacher professionalism. While teachers in Armenia can enjoy autonomy regarding their non-mandatory PD activities, the obstacle is their workload, which leaves no time for professional development and a lack of incentives for improvement. The long history of limited autonomy and agency of teachers in Armenia diminishes trust towards teachers as professionals (Mitchell and Lambert, 2015), which teachers noted during the interviews. Based on this discussion, a TPD approach that can promote teacher autonomy and agency (they condition each other), at least in professional development, can hold potential for the system in general. As the top-down TPD in Armenia does not provide sufficient opportunity, if any, for agency and autonomy, this bottom-up approach could provide a space for teachers to act autonomously in their PD and exercise certain types of agencies (e.g., enquiring, autonomous), positively contributing to the notion of teacher professionalism.

My study looked at the teacher agency; thus, I can only contend about the opportunities that the bottom-up TPD can provide for teacher agency. I acknowledge that enhancement of

teacher professionalism in all its aspects (e.g., knowledge base, autonomy, agency) within a system requires multidimensional considerations and deals with education policy, structure and overall understanding of teacher professionalism within the society, but I contend that the bottom-up TPD can have a fruitful contribution to the improvement of at least certain aspects of that multifaceted phenomenon. Moreover, the additional findings of this study revealed that teachers consider subject knowledge first when asked about who a 'good teacher' is. This perception is in line with the general consensus on the aspects of teacher professionalism, where subject knowledge is a key characteristic (Eraut, 1994; OECD, 2016) but cannot be viewed as a sole characteristic for assessing teacher quality and ensuring a pay rise, as the new reform in Armenia is doing. Further research could inform the field on teacher professionalism from the perspective of subject development and teacher learning through a bottom-up approach.

Collaboration

In general, collaboration is viewed as a valuable aspect of teacher learning (MacBeath, 2007, Cordingley et al., 2005), and is also an important feature of bottom-up TPD approaches. Yet in this study, almost all participants reported not experiencing them in the bottom-up TPD conferences, although pointing to their importance. Creating collaborative learning communities and cultures where teachers are agentive is challenging (Opfer and Pedder 2010; OECD 2018; Milton et al. 2020); hence, a continuous utilisation of TPD approaches that create favourable conditions for teacher collaboration is needed. The bottom-up TPD conference approach could be one of them.

As an initial stage for collaboration and a general term for communication and interaction, networking is important for teacher development (Bill and Gilbert, 1994) and building trust, yet not exercised widely during the explored bottom-up conferences. The reasons could be hidden in collective participation. Teachers mainly attended the conferences in groups, and it was in their comfort zone to stay within the group. Another reason could be that the culture of networking is not developed and emphasised within the system, yet teachers feel its need, based on the reported answers. Therefore, as collaboration is important based on the

sociocultural specificities of the country and the teachers' expectations from the bottom-up TPD conference, planned networking activities might be beneficial at future events and can be considered by the organisers.

Knowledge creation/building

Knowledge creation is one of the important features of the bottom-up TPD conference that is reflected in the findings of this study from the perspective of its absence. I discuss the absence of this feature from the perspective of the wider educational system, where the teachers are limited and restricted (both by the system and their capacity) from innovating, experimenting and trying new things. Before 'blaming the system', it is also about the teachers' capabilities; however, it seems a closed circle where the system restricts, and the teachers do not have an opportunity for autonomy, thus no opportunity to show their capacity. Within such a system, even if teachers are provided with a favourable environment for sharing their thoughts, ideas, and experiments, they cannot because they lack relevant experience and capacity. Knowledge-building is a complex process (Scardamalia and Bereiter, 2003) which requires time and constant efforts to be processed, involving both personal characteristics (e.g., confidence) and professional knowledge (e.g., subject and pedagogical knowledge and skills). I believe knowledge creation might happen through continuous exposure to such opportunities, encouragement, and continuous learning and improvement.

Based on the recent reforms of teacher professional development in Armenia, a module of 'Introduction to Classroom Research[46]' became a mandatory module for all teachers[47]. Teachers' engagement in research can be seen as a pathway for professional knowledge building (Cochran-Smith and Lytle, 1993), thus including teacher research component into the TPD modules can contribute to knowledge building process (whether it does or how the reform goes is unclear, as there is no available research on that topic yet). The bottom-up TPD conferences can provide the needed environment to talk about teachers' classroom

[46] Teachers are required to do a research project.

[47] An amendment to the annex of the government decree N 367-A/2, 04.03.2022.

investigations and share with colleagues. While the data analysis showed no evidence of teachers sharing their own experiments/created knowledge during the bottom-up TPD conferences, the aforementioned reform and the enactment of a bottom-up TPD conference approach can have potential for the system to encourage knowledge creation through classroom research.

5.5 SUMMARY

The authors researching the topic of teacher agency (e.g., Emirbayer and Mische, 1998; Goodson, 2003; Biesta et al., 2015, 2017) consider that understanding teacher agency is an important part of educational research. In the meantime, the renewed focus on teacher agency leads to some questions. Some questions are about definition and theory, such as what is meant by agency and, more specifically, teacher agency. Other questions are empirical questions about the aspects that provide affordances and constraints for teacher agency.

In this research, I focused on the questions of what types of teacher agency are evident in a specific, bottom-up TPD context to understand the potential that the bottom-up context can have for practice. While exploring these questions, my study reassured my initial assumption that agency is about the action: the possibility of exercising agency and not solely about capacity. The specific context, the bottom-up conference approach to TPD, in which teacher agency is explored, can offer the potential for closing some of the gaps in a top-down teacher professional development, such as needs-based PD, an opportunity for exercising agency, opportunity for autonomous decision making, opportunity for self-organisation and self-directed learning, within or outer school collaboration. Reflecting on Day's (1999, p.4) definition of TPD, bottom-up TPD conferences can ensure a process where teachers as change agents contribute to the quality of education through *autonomous* and *conscious* activities. According to Evans (2002), TPD can enhance teachers' professionalism; thus, when the bottom-up TPD creates an environment to exercise agency and autonomy, it consequently increases professionality.

Meanwhile, the findings of this study showed that although the bottom-up TPD context provided affordances for exercising certain agency types, it did not lead teachers to move from consuming and reproducing knowledge toward more creation, experience-based practice sharing, justifying the belief that knowledge creation is a complex process that necessitates time and ongoing process (Scardamalia and Bereiter, 2003).

The teachers in this study expressed concerns about the teachers being valued and cared for by the state and the public; however, the participants themselves did not appear to feel undervalued by the community. For a broader picture, as a result of the overall educational environment, e.g., the quality of pre-service teacher education, teacher salary and, in general, national policies lead toward teachers thinking of being less appreciated than deserved. Notwithstanding the contested and theoretical basis of teacher professionalism (Whitty, 2008), the insights gained into the participating teachers' professional standing did not suggest that they felt without agency as individuals. Some teachers, both in the survey and interviews presented examples of being proactive in their TPD and teaching as well as principled and with agency, making a decision and initiating actions not popular within the structural dimensions of the environment. This description of some teachers' positions presented above can fall under the phenomenon of hybridised professionalism[48] (Noordegraaf, 2016).

The four agency types identified in this study (enquiring, autonomous, change-maker and acknowledging) point to the idea that teacher agency is central to teacher professional development and can hold potential for teacher practice and learning and create favourable conditions for regaining some aspects of teacher professionalism within a top-down and structured education system. Evidence from this study suggests that although the bottom-up TPD context provided a favourable environment for exercising certain teacher agency types, those who utilised the opportunity showed a certain level of capacity for agency. Although there is still no consensus in the literature for the understanding of whether teacher agency is an individual capacity to act agentically or is an emergent 'ecological' phenomenon which depends on the quality of individuals' engagement with their environments (Biesta and

[48] Hybrid professionalism is when professional and managerial principles (how work is coordinated, how authority is established and what values are at stake) come together (Noordegraaf, 2016).

Tedder, 2007), in case of this study, I can argue that *creating favourable environment supports teachers illumination of agentic features and continuous exposure to such opportunities would enhance even less agentic teachers' agentic manifestations*. This belief comes from the findings when some teachers reported 'building courage' and participating in a second bottom-up TPD conference already as a speaker[49].

Agency is achieved and exercised in unique temporal, spatial and relational contexts (Emirbayer and Mische, 1998; Edwards, 2015). Although being a temporal-relational phenomenon (Edwards, 2015), agency can be exercised within the bottom-up TPD conference approach, leading to transforming teachers' views of themselves and their work within too structured and prescribed education systems. Meanwhile, for the agency to become a capacity rather than merely dependent on the temporal-relational aspects of the context, I contend that promoting teachers' professional agency necessitates continuous and consistent professional development opportunities with favourable conditions for agency enactment. I argue that teacher agency is important in TPD whether bottom-up or top-down. Still, it is not a panacea as it is multi-dimensional and should be approached carefully.

In this study, I show and discuss that the experiences teachers have due to their participation in a bottom-up TPD conference support the enactment of teacher agency due to the interaction of subjective conditions and specific contexts of TPD. In this regard, bottom-up TPD conferences can help systems create environments that emphasise social support, encourage continuous interactions between teachers, avoid professional isolation to learn from each other, and exercise agency, filling in some of the gaps of the top-down TPDs.

[49] They participated as participants in 2019.

CHAPTER SIX CONCLUSION

6.1 INTRODUCTION

In this concluding chapter, I lift findings to discuss their significance on multiple levels. From my perspective, what is the future of bottom-up TPD conferences and what are their affordances and constraints? I also provide practical guidance for policymakers on the perspectives of teacher professionalism and agency, as well as for future organisers of bottom-up TPD conferences.

I also reflect on the methodological aspects of this research: the qualitative exploratory approach, the tri-dimensional analytical framework, and its applicability for future research. I briefly discuss how exploratory research design, together with inductive and deductive approaches, can be deployed as a way to investigate teacher agency.

This concluding chapter contributes to a new understanding of teacher agency in the context of bottom-up TPD and provides insights into the potential of bottom-up TPD for practice.

6.2 CONCLUSIONS

I began this study with the observation that teacher professional development is a complex and multidimensional field in which there is no consensus on which TPDs are more impactful, partially because the success of TPDs depends on multiple factors. What surprised me was the level of importance of teacher agency in the context of teacher professional development and the scant of relevant studies available. None of the existing teacher agency models completely grasp the phenomenon's complexity and do not position it in the context of teacher professional development, specifically in the context of bottom-up TPD. The argument for teacher agency in the context of bottom-up TPD is in favour of balancing teachers' responsibility for their professional development so that they feel like their learning needs (however they understand them) are generally considered. That does not mean, as my findings show, that there will not be a need for expert-led TPD or state-mandatory TPD, nor does it

mean that every teacher's every learning need can be met by the bottom-up TPD conference approach. However, it does mean that teachers would be afforded more scope than they have now in their TPD to treat themselves as autonomous and complex learners, in other words, as professionals. I believe that an increased trust that would emerge from such a reconceptualisation would benefit the whole ecosystem of TPD, fostering teachers' intrinsic desire for self-improvement. Teacher agency alone is clearly not enough to ensure teacher professional development, but professional learning cannot improve without it.

In my study, teacher perspectives and their actions taken (e.g., the decision to participate, the decision to be a speaker, and the decision to open a discussion group) show the positive interplay between their agency and the bottom-up TPD conference context. Teachers exercised four agency types i) enquiring: an agentic teacher seeking learning opportunities, reading professional literature, feeling responsible for own PD; ii) autonomous: making autonomous decisions and choices; iii) change maker: bringing change in own classroom and iv) acknowledging: desire to be valued and respected, seeking opportunities for recognition. These agency types are important in fostering teacher professionalism as an autonomous and agentic professional and suggest the worth of sustained and continuous implementation of a bottom-up conference approach to TPD. The type of teacher agency can vary according to individual teachers' learning needs and motivations and the systemic structures that support or limit agency. However, the fact that the bottom-up TPD conference approach fosters teacher agency is an important insight that is worth attention.

6.2.1 AFFORDANCES AND CONSTRAINTS OF THE BOTTOM-UP TPD CONFERENCES

The findings of my study indicate that teachers appreciated the alternate, bottom-up structure to traditional professional development. Such an event allows a classroom teacher to become a resource to another teacher. It provides an opportunity to return to their school with new ideas allowing the possibility of future growth. Hence, I advocate for the utilisation of a bottom-up TPD conference approach for its strengths, which include creating opportunities for teachers' autonomous decision-making and self-directed learning, an opportunity for feeling valued and for creating an environment for fostering agency. The positive aspects of

the bottom-up TPD conferences are also topics which are mostly practical, a positive collegial environment, a diverse group of presenters, and an opportunity for needs-based learning and knowledge sharing. In such conferences, teachers are active learners who practice their autonomy and agency, the two most important aspects of teacher professionalism.

The possible constraints of the bottom-up TPD conferences are that it would be hard to monitor the implementation of what participants learned or the flexible nature of the conference can make the schedule difficult to follow as the discussions during or after the workshops may take longer than expected, which could be beneficial if discussions result in new knowledge and tackle new ideas. Although the bottom-up TPD conference approach encourages innovating, experimenting and sharing teachers' own experiences in an environment where teachers are not exposed to consuming and producing research, this hardly would happen, which was the case for most of the sessions in the examined conferences in Armenia. Hence, I argue that to utilise the full potential of the bottom-up TPD conference approach, more input should be made into the concept of 'teacher as a researcher' (Stenhouse, 1975) as an essential aspect of contributing to teacher professionalism and the notion of 'mature profession' (Sachs, 2016). Teachers research independently or with their colleagues to experiment, gain knowledge and become curriculum makers. The experience of researching teachers' own practice will provide an opportunity to attend bottom-up conferences and share both conceptual and practical ideas. When new knowledge is created and shared with colleagues rather than duplicated past training content, the community benefits and growth in knowledge capital happen. By adopting the role of a researcher, teachers are encouraged to question, reflect, and refine their practice constantly. In this regard, the bottom-up TPD conference approach can serve as a positive environment for promoting researching teacher concepts.

6.3 IMPLICATIONS FOR PRACTICE

The study contributes to the understanding of teacher agency as a vital element in shaping TPD practices, which is often overlooked in policy and provision. The findings of this study have significant implications for improving the state of teacher agency, as well as for promoting a

culture of bottom-up ongoing professional development in schools and outside of schools. By highlighting the importance of teacher agency in TPD, this study offers insights for policymakers, school leaders, and educators who are seeking to develop teacher professionalism and sustain effective professional development practices for teachers. Implementing bottom-up TPD conferences can be an impactful approach to promoting teacher agency and supporting ongoing teacher development. Overall, this research has the potential to contribute to the improvement of teacher professional development practices, ultimately leading to increased manifestations of teachers' agentic actions.

The analysis of TPD literature revealed that education systems/policymakers' efforts are directed toward the improvement of TPD (e.g., design, content, implementation). However, models of teacher development adopted by policymakers usually do not adequately address teachers' learning needs over a career or contribute to enhancing motivation for improvement and learning. One of the main gaps of the traditional (top-down) approach to TPD is that it is within a 'one fits all' where teachers are passive consumers of knowledge that might not even be relevant to their professional needs, with a lack of agency and autonomy. In this view of teachers' professional development, teachers' core qualities (e.g., creativity, trust, care, courage, decisiveness, commitment, flexibility) are disregarded, which stand in the centre of an onion model[50] of teacher learning proposed by Korthagen (2004, 2017). The review of education policy reforms in Armenia shows that they are directed mostly at promoting the notion of a 'good teacher' that lies solely on subject content knowledge, which is a poor proxy for a good teacher, as 'good teacher', while being a construct that differs from country to country, is much more than just subject knowledge (Day et al., 2007). Based on my study, I propose a working definition of a good teacher who is autonomous, professional (e.g., subject knowledge, pedagogy), has agency and has 'love in their hearts' (loves their students and is committed to their success).

[50] A model of levels of reflection (Korthagen, 2017, p. 395).

The reform in teacher mandatory (top-down) TPD in Armenia can provide some reasons for optimism; the TPD system is decentralised, allowing teachers to choose their desired organisation for training, yet not modules. Although the mandatory modules include critical topics such as digital literacy, inclusive education, and teacher research, as an insider who knows the system, and its capacity and who led a nationwide TPD reform programme with an emphasis on teacher research, I can contend that there is not enough capacity either in pre-service teacher education or the TPD system to provide teachers with the necessary knowledge and skills for researching own practice. There are both subjective (e.g., lack of capacity for reflective practice, analytical thinking) and objective (e.g., access to high-quality research literature, lack of high-quality teacher educators) reasons. Hence, it should be appreciated that the policymakers consider teacher research as an important area for teacher professional development; however, lacking the capacity and resources to support teachers in reaching such a difficult developmental milestone might result in demotivating teachers' learning and the value of TPD in general. If we refer to Sachs's (2016) conception of teaching being a mature profession, then in Armenia, it is not, as teachers are not research literate yet, either as consumers or producers. Within the current conceptualisation of teacher professionalism in Armenia, a good teacher is a compliant teacher who only passes the subject testing and strictly follows the state curriculum; teachers are restricted to thinking for themselves, challenging policy, and innovating.

The capacity of teachers to be responsible for their own professional development and rely on a needs-based approach to TPD is overlooked by policymakers and school leaders as, for instance, the needs-based approach to TPD can be best implemented at school (schools are complex systems but they are sites for teacher learning, Daly et al., 2020). To address this, steps should be made to create a favourable environment for encouraging school leaders to have more bottom-up, needs-based, meaningful TPD experiences. Policymakers might consider ways of encouraging teachers to voluntarily participate in TPDs (either school-based or not) and have opportunities to exercise their agency, as teacher agency is believed to support teacher powerful learning (e.g., Noonan, 2016) and professionalism.

Agency also conditions autonomy, which is one of the basic psychological needs supporting teachers' motivation and job satisfaction (Vansteenkiste and Ryan, 2013) and fostering teacher professionalism (Wermke and Hostfalt, 2014). Autonomy itself is transformative if it is translated into agency; that is, it must be enacted in some way to make a positive change to practice' (Kennedy, 2014, p. 693). Hence, I argue that providing a favourable environment and resources for enactment, developing, and exercising teacher agency and considering ways that structure (e.g., policy regulations) supports and encourages teacher agency manifestations would benefit teachers' professionalism. Most straightforwardly, increasing opportunities for teachers to exercise agency over their professional development, as bottom-up TPD conferences allow, for instance, would not only allow teachers to find learning experiences that they believed would best respond to their learning needs but it is also a concrete demonstration of professional respect for teachers' judgment. When teachers are given an opportunity to bear responsibility for their professional development, it is likely that some choices will not meet their expectations.

Nonetheless, in educational systems that value teacher agency over professional development, teachers may perceive negative (learning) experiences as opportunities for improvement rather than solely blaming the system itself. Such an approach enables teachers to reflect on their experiences, which hints them to make better and more informed choices in the future. This will positively contribute to the feeling of being valued and trusted, which teachers reported lacking within the existing structure. Following the discussion above, it is important to mention that solely providing space for teacher agency will not solve all issues in the TPD field, and although teacher agency is highly beneficial in teachers' professional development, it is not a panacea.

Nevertheless, the practical implications of the ecological approach to teacher agency, in the case of this study, are that the achievement of agency results from the interplay of individual efforts, available resources and contextual and structural factors as they come together in particular and, in a sense, always unique situations (Biesta and Tedder, 2007, p. 137) in which

agentic teachers can identify and use available opportunities to enhance their professionalism and make changes with their actions (Anderson, 2010).

6.3.1 PRACTICAL RECOMMENDATIONS

The findings of this study show that there is a tangible potential for a bottom-up TPD conference approach, especially in contexts like Armenian, where the last hundred years (around 70 within the USSR and 30 as an independent country), teaching has not been an autonomous profession, and there has been little if any collaborative and experimenting cultures and without collaboration and sharing opportunities teaching may become stagnated. To summarise the recommendations for future practice, I divided them into two groups, one for future organisers and the second for policymakers.

Future organisers might:

- Consider more structured opportunities for participants to network and collaborate in groups.
- Consider having a few expert-led sessions. While the bottom-up TPD conference approach has significant potential for enacting teacher agency, external expert input is also necessary, at least in similar contexts, as explored here. Also, there is strong evidence that professionals outside school networks and accountability systems contribute significantly to teachers' capacity to learn by introducing critical perspectives and bringing a 'broader range of knowledge reflecting the wider research evidence which allows for the prevailing assumptions to be challenged' (Cordingley, 2014, p. 25 in Daly et al. 2020). As the data shows, expert-led sessions enjoyed popularity during all three conferences, and their popularity tells me that teachers want certain aspects of a top-down approach (e.g., conceptual thinking, big and challenging ideas) to be part of the bottom-up conference.
- Consider providing guidance on how a topic can be presented or how a discussion can be started/led, depending on the capacity of teacher communities.

- Consider encouraging a presentation/discussion of teachers' experiences/practices, emphasising the importance of teacher research.
- Consider inviting other community members for the bottom-up TPD conference because teachers seek recognition, and involving other community members might help get it. The positionality of teachers will change. Teachers who present will experience a situation where their role changes to include expertise others view as a resource.

In the literature, I present a view that such bottom-up conferences can be organised in schools, referring to Daly et al. (2020) paper where the schools are seen as complex and dynamic systems but are 'sites of professional learning for both new entrants and experienced practitioners' (p.1). However, I suggest a more neutral space with adequate resources for the educational landscape, similar to Armenia. To create a positive environment and ensure resources, the organising team can also involve organisations committed to the common good and willing to support the bottom-up TPD conference, as was the case in Armenia.

Education policymakers might:

- Consider providing/creating more opportunities for agency manifestations without fear that teachers may act against any policy initiative.
- Consider creating incentives for teachers to participate in any professional development activities, especially needs-based.
- Consider encouraging schools and teachers to hold bottom-up TPD conferences, emphasising teacher research and collaboration, and ensuring no interference from education authorities.

Despite the dynamic and unique nature of teacher agency, the teachers' self-reported experiences suggest some insights for reconsidering TPD design and policy for the advantage of teacher agency. The teacher communities, school communities and, consequently, education systems can benefit from adopting the bottom-up TPD conferences model as an additional approach to other professional development activities. Such a bottom-up approach

can allow teachers to develop an ability to reflect upon their work and experience, foster innovation and act as a resource for others' learning. I acknowledge that providing teachers with more agency in their development will not solve every challenge in their professional development. Still, it will provide an opportunity to engage in constructive meaning-making about who they are, what they do, and why they do what they do.

In this pivotal time of change in the Armenian educational environment with new curriculum standards and subject knowledge testing of in-service teachers, it seems necessary for teachers to reclaim teacher agency aspect of their professionalism to change, including curriculum change and innovation.

6.3.2 REFLECTIONS ON METHODOLOGICAL ASPECTS

Besides the empirical insights that this study contributes to the field of teacher agency and teacher professional development, it also provides valuable insights into the field for its methodological design and analytical frame. In particular, the qualitative exploratory study using inductive and deductive approaches provides an opportunity for researchers to look at the design from a different perspective. Using induction helped me look at the wider spectrum of teachers' ideas and not frame my thinking by the pre-defined themes, especially considering that the topic of teacher agency in the context of the bottom-up TPD conference is a poorly explored area. Using deduction allowed me to link my findings with the themes available in the literature to contrast and compare. For me, as a researcher, applying the principles of both inductive and deductive reasoning has proven to be a promising way to capture rich data.

As for the analytical frame, it can serve to identify broad indicators for teacher agency. It was possible to identify teacher agency types and create a typology using my analytical frame. The analytical frame can guide other researchers in their study design, and the typology can be used for coding qualitative data on teacher agency. I would maintain that the focus that guided the design of this study may be instructive for researchers aiming to investigate teacher agency in the TPD context.

6.4 LIMITATIONS

I acknowledge that teacher agency is a complex phenomenon, and this study on the interplay of teacher agency and bottom-up TPD conference approach with a limited number of a self-selected group of teachers is not representative of the profession as a whole. A complex and relatively less investigated notion of teacher agency cannot always be confined to a research frame with a limited timeframe. Teacher professional agency and the specific context it was explored within is broader than the scope of this research study. Nevertheless, the embedded qualitative exploratory study provided several distinct advantages; most remarkably, it allowed me to investigate teacher agency in a specific bottom-up TPD conference context by gaining participating teachers' insights and perspectives within the constraints of a specific timeframe. Another advantage is that I could collect rich data using different data collection instruments from different years of conference participants.

I carried out research with the teachers as an insider. The role of an insider presented both affordances, such as accessibility to research participants, and limitations, with possible influence on the participants' accounts. As the research proceeded, I became more aware of this possibility, as I brought my knowledge and understanding with potential influence at every stage of this study.

The findings of this study represent the data analysis gained from the restricted but motivated and self-selected group of teachers who desire to develop their professional standing and seek every opportunity for learning and improvement, thus they cannot represent the opinions of the whole teacher population. Hence, my findings cannot be applied directly to other contexts as such but can provide an understanding of the similar context and the state of teacher agency within that context.

6.5 SUGGESTIONS FOR FURTHER RESEARCH

The literature on teacher agency and bottom-up TPD did little or even no exploration of the interplay of both phenomena, and that is the area where my study contributes some understanding and makes suggestions for further research. For instance, investigating teacher

educators’ and school leaders' perspectives on bottom-up TDP conferences and teacher agency would be an insightful follow-up to my study findings. Also, schools as contexts for organising bottom-up TPD conferences can offer a rich area for future research.

Given the exploratory nature of this study and its scope, it was possible to look at teacher agency aspect of the bottom-up TPD approach; however, exploring other aspects of the bottom-up TPD conference approach and their links with teachers’ learning experiences and the change in practice would be ripe terrain for future research.

I also found that despite the highly engaged and positive participants whose ideas about their role in their own TPD and enactment of the agency were mostly alike, there is considerable importance in continuing the research on the topic of teacher agency within the highly structured systems to explore other less motivated and engaged teachers whose perspectives can be different from the self-selected group of participants of this study.

Abramov, R. (2016). *Understanding Professionalism in the Soviet Union and Post-Soviet Russia*: an Analytical Review. Springer. 47:81–101 DOI 10.1007/s12108-015-9294-5

Ahern, L. M. (2001). Agency. In A. Duranti (Ed.), *Key terms in language and culture* (pp. 7–10). London: Blackwell.

Anderson, L. (2010). Embedded, emboldened, and (net)working for change: Support-seeking and teach agency in urban, high-needs schools. *Harvard Education Review*, 80(4), 541–572. https://doi.org/10.17763/haer.80.4.f2v8251444581105

Apple, M.W. (1986). *Teachers and texts: a political economy of class and gender relations in education*. London: Routledge.

Apple, M.W. (2005). Doing things the 'right' way: Legitimating educational inequalities in conservative times. *Educational Review*, 57 (3): 271-293.

Attema-Noordewier, S., Korthagen, F., and Zwart, R. (2011). Promoting quality from within: A new perspective on professional development in schools. In M. Kooy and K. van Veen (Eds.), *Teacher learning that matters: International perspectives* (pp. 115–142). New York, NY: Routledge.

Bakkenes, I., Vermunt, J. D., and Wubbels, T. (2010). Teacher learning in the context of educational innovation: Learning activities and learning outcomes of experienced teachers. *Learning and Instruction*, 20, 533–548.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1–26. https://doi.org/10.1146/annurev.psych.52.1.1

Bangs, J., and Frost, D. (2012). Teacher self-efficacy, voice, and leadership: Towards a policy framework for educational international. Retrieved from Education International

Research Institute website: http://download.ei-ie.org/Docs/WebDepot/teacher_self-efficacy_voice_leadership.pdf

Belyavina, R.,Wiley, A., Tovmasyan, T.,Petrosyan, R.,Poghosyan, A., and A. Ter-Ghevondyan (2010). A study on recruitment, development, and salaries of teachers in Armenia. International Education Policy studies.

BERA. (2018). *Ethical guidelines for educational research*, 4th edition. https://www.bera.ac.uk/researchers-resources/publications/ethical-guidelines-for-educational-research-2018

Bernstein, J.M (2019). Can an Unconference Improve Online Pedagogy? Experiences and Expectations of Educators in the California Community College System, Community College *Journal of Research and Practice*, 43:7, 505-514, DOI: 10.1080/10668926.2018.1503104

Biesta, G. J. J., and Tedder, M. (2007). Agency and learning in the life course: Towards an ecological perspective. *Studies in the Education of Adults*, 39, 132–149

Biesta, G. J. J. (2010). Good education in an age of measurement: Ethics, politics, democracy. Boulder, CO: Paradigm.

Biesta, G. J. J. (2014). Measuring what we Value or Valuing what we Measure? Globalization, Accountability and the Question of Educational Purpose. Faculty of Language and Literature, Humanities, Arts and Education University of Luxembourg, Campus Walferdange.

Biesta, G. J. J and Robinson, S. (2015). "Understanding Teacher Agency." *Teacher Agency: An Ecological Approach*. London: Bloomsbury Academic, 19–35. *Bloomsbury Collections*. Web. 22 Sep. 2019. <http://dx.doi.org/10.5040/9781474219426.0005>.

Biesta, G.J.J., Priestley, M. and Robinson, S. (2015). The role of beliefs in teacher agency, *Teachers and Teaching: theory and practice*, 21 (7), 624-640

Biesta, G.J.J., Priestley, M., and Robinson, S. (2017). Talking about education: Exploring the significance of teachers' talk for teacher agency. *Journal of Curriculum Studies*, 49(1), 38–54. https://doi.org/10.1080/00220272.2016.1205143

Boone, S. C. (2010). Professional learning communities' impact: A case study investigating teachers' perceptions and professional learning satisfaction at one urban middle school (doctoral dissertation). Available from ProQuest Dissertations and Theses (UMI No. 3419559).

Bottery, M. and Wright, N. (2000). The directed profession: Teachers and the state in the third millennium. *Journal of In-Service Education*, 26(3): 475–487.

Boule, M., (2011). *Mob rule learning: camps, unconferences, and trashing the talking head*. New York, NY: Information Today.

Brandenburg, R., McDonough, S., Burke, J. and White, S.(Eds.) (2016). *Teacher education: Innovation, intervention and impact*, Springer. 10.1007/978-981-10-0785-9

Brant, J. and Panjwani, F. (2015). School economics and the aims of education: Critique and possibilities. *Journal of Critical Realism*, 14(3): 306–324.

Braslavsky, C. (2003). Teacher Education for Living Together in the 21st Century. *Journal of* research in international education, Vol.2 (2), p.167-183. SAGE Publications.

Braun, V., and Clarke, V. (2013). *Successful Qualitative Research: A Practical Guide for Beginners*. Sage Publications, Thousand Oaks.

Bray-Clark, N., and Bates, R. (2003). Self-efficacy beliefs and teacher effectiveness: Implications for professional development. *Professional Educator*, 26(1), 13–22.

Bridwel-Mitchell, E.N. (2015). Theorizing Teacher Agency and Reform: How Institutionalized Instructional Practices Change and Persist. *Sociology of Education*, 88(2) 140–159. SAGE

Brodie, K. (2019). Teacher agency in professional learning communities*. Professional Development in Education*, DOI: 10.1080/19415257.2019.1689523

Bryman, A. (2012). *Social Research Methods.* Oxford University Press. 4th Edition.

Bubb, S. and Earley, P. (2008). From self-evaluation to school improvement: The importance of effective staff development. Reading: CfBT Research Report.

Buchanan, R. (2015). Teacher Identity and agency in an era of accountability, *Teachers and Teaching, 21:6*, 700-719, DOI: 10.1080/13540602.2015.1044329.

Burr, V. (1995). *An introduction to social constructionism*. London: Routledge.

Campbell, C., Lieberman, A. and Yashkina, A. with J. Rodway, and S. Alexander (2017). *The Teacher Learning and Leadership Program: Research Report 2016–17*. Toronto, Canada: Ontario Teachers' Federation.

Campbell, C. (2017). Developing Teachers' Professional Learning: Canadian Evidence and Experiences in a World of Educational Improvement. *Canadian Journal of Education / Revue canadienne de l'éducation*, Vol. 40, No. 2. pp. 1-33 (33 pages)

Campbell, C., DeLuca, C., and LaPointe-McEwan, D. (2022). Teacher-led learning cycles: Developing teacher leadership and teaching practice for the use of formative assessment to improve students' learning. *Education International.* Available at: https://issuu.com/educationinternational/docs/2022_eiresearch_teacher-led_litterature_eng_final

Caro-Bruce, C., Flessner, R., Klehr, M., and Zeichner, K. (Eds). (2007). *Creating equitable classrooms through action research*.Thousand Oaks, CA: Sage.

Carpenter, J.P. (2016). Unconference professional development: Edcamp participant perceptions and motivations for attendance, *Professional Development in Education*, 42:1, 78-99, DOI: 10.1080/19415257.2015.1036303

Cheng, A.Y.N and Szeto, E. (2016). Teacher leadership development and principal facilitation: novice teachers' perspectives. *Teaching and teacher education*, 58, 140-148.

Charmaz, K. (2006). *Constructing Grounded Theory*. A Practical Guide Through Qualitative Analysis. Sage Publication. London. UK.

Charmaz, K. (2008). Grounded Theory as an Emergent Method. S.N. Hesse-Biber and P.Leavy (Eds). *Handbook of Emergent Methods*. (pp. 155-172). New York. The Guilford Press.

Charmaz, K. (2014). *Grounded Theory in Global Perspective*: Reviews by International Researchers. Qualitative Enquiry. Sage Journals. https://doi.org/10.1177/1077800414545235

Clarke, D. and Hollinsworth, H. (2002). Elaborating a Model of Teacher Professional Growth. *Teaching and Teacher Education*, 18(8), 947-967.

Cochran-Smith, M., and Lytle, S. (1993). *Inside/Outside: Teacher Research and Knowledge*. New York: Columbia University Teachers' College.

Cochran-Smith, M. and Lytle, S. (2001). Beyond uncertainty: Taking an inquiry stance on practice. In A. Lieberman and L. Miller, eds. *Teachers caught in the action: professional development that matters*. New York: Teachers College Press, 45-58.

Cohen, D. K., and Hill, H. C. (1998). *Instructional Policy and Classroom Performance: The Mathematics Reform in California* (RR-39). Philadelphia, PA: Consortium for Policy Research in Education.

Cohen, D.K. and Hill H.C. (2000). Instructional Policy and ClassroomPerformance: The Mathematics Reform in California. *Instructional Policy and Classroom Performance.* pp. 294–343 Teachers College Record Volume 102, Number 2.

Cohen, L., Manion, L. and Morrison, K. (2011). *Research methods in education*. 7th Edition. London: Routledge.

Connell, R. (2009). Good Teachers on Dangerous Grounds: Towards a New View of Teacher Quality and Professionalism. *Critical Studies in Education* 50(3):213-229. DOI:10.1080/17508480902998421

Cordingley, P., et al., (2005). The impact of collaborative CPD on classroom teaching and learning review: how do collaborative and sustained CPD and sustained but not collaborative CPD affect teaching and learning? In Research Evidence in Education Library. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London. Available from: http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=392&language=en-US

Cordingley, P. (2014) 'Inquiry paper 5: The contribution of research to teachers' professional development'. In *The Role of Research in Teacher Education: Reviewing the Evidence.* (Interim Report of the BERA-RSA Inquiry). London: British Educational Research Association, 25–7

Cordingley, P., S. Higgins, R. Coe, T. Greany, N. Buckler, and B. Crisp. (2015). Developing Great Teaching: Lessons from the International Reviews into Effective Professional Development. *Teacher Development Trust*.

Cordingley, P., Greany, T., Crisp, B., Seleznyov, S., Bradbury, M. and Perry, T. (2018). Developing great subject teaching: *Rapid evidence review of subject specific continuing professional development in the UK*. London: Wellcome Trust.

Cordingley, P., Crisp, B. Johns, P., Perry, T., Campbell, C., Bell, M., and M, Bradbury (2019), Constructing Teachers' Professional Identities, *Education International,* Educational International and UNESCO.

Creswell, J. and Poth, C. (2017) *Qualitative Inquiry and Research Design*: Choosing among Five Approaches. Sage, London.

Creswell, J. W. (2009). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (3rd ed.). Thousand Oaks, CA: Sage Publications.

Crotty, M. (1998). *The Foundations of Social Research: Meaning and Perspective in the Research Process.* London: Sage.

Crocker, D. A., and Robeyns, I. (2010). Capability and agency. In C. W. Morris (Ed.), Amartya Sen (pp. 60 90). Cambridge University Press.

Crook, D. (2008). Some historical perspectives on professionalism. In: Cunningham, Byran and Cunningham, Bryan, (eds.) *Exploring Professionalism.* (pp. 10-27). Institute of Education, University of London: London

Cunningham, B. (2008). *Exploring Professionalism*. Bedford Way Papers. Institute of Education.

Cuthell, J. (2009). Thinking and changing practice: Collaborative online professional development. In: R. Carlsen, K. McFerrin, R. Weber and D. A. Willis (eds.), *Proceedings of SITE 2009* (pp. 2264–2269). Norfolk, VA: AACE.

DADA6 Report. (2017). Functional Review of the National Institute of Education, Armenia.

Daly, C., Milton, E. and Langdon, F. (2020). How do ecological perspectives help understand schools as sites for teacher learning? *Professional Development in Education,* 46(4), 652-663. https://doi.org/10.1080/19415257.2020.1787208

Daly, C., Davidge-Smith, L., Williams, C., and Jones, C. (2020). Is there hope for action research in a "directed profession"?'. *London Review of Education*. 18 (3), 339–55. https://doi.org/10.14324/LRE.18.3.02

Darling-Hammond, L. (2009). Educational opportunity and alternative certification: New evidence and new questions. Stanford Center for Opportunity Policy in Education Policy Brief. Retrieved from http://www.edpolicy.stanford.edu/

Darling-Hammond, L. (2013). Powerful teacher education: Lessons from exemplary programs. Jossey-Bass, San Francisco.

Darling-Hammond, L., Hyler, M. E., and Gardner, M. (2017). *Effective teacher professional development.* (Palo Alto, Learning Policy Institute). https://learningpolicyinstitute.org/product/teacher-prof-dev

Darling-Hammond, L. (2021) Defining teaching quality around the world, *European Journal of Teacher Education*, 44:3, 295-308, DOI: 10.1080/02619768.2021.1919080

Day, C. (1999). *Developing teachers: The challenges of lifelong learning*. London: Falmer Press.

Day, C., Elliot, B., and Kington, A. (2005). Reform, standards and teacher identity: Challenges of sustaining commitment. Teaching and Teacher Education, 21, 563–577.

Day, C. and Sachs, J. (2005). *International Handbook On The Continuing Professional Development Of Teachers*. Open University Press.

Day, C., Sammons, P., Stobart, G., Kington, A. and Gu, Q. (2007). *Teachers Matter: Connecting Work, Life and Effectiveness*. Open University Press; 1st edition.

De Vries, S., Jansen, E. P. W. A., and van de Grift, W. J. C. M. (2013). Profiling teachers' continuing professional development and the relations with their beliefs about learning and teaching. *Teaching and Teacher Education*, 33, 78e89. http:// dx.doi.org/10.1016/j.tate.2013.02.006.

Denzin, N. K., and Lincoln, Y. S. (Eds.). (2017). *The SAGE handbook of qualitative research* (5th ed.). Thousand Oaks, CA: SAGE Publication.

Dodman, S.L. (2021). Learning, leadership, and agency: A case study of teacher-initiated professional development. *Professional Development in Education*, DOI: 10.1080/19415257.2021.1955731

Doig, B. and Groves, S. (2011). Japanese Lesson Study: Teacher Professional Development through Communities of Inquiry. *Mathematics Teacher Education and Development*. Vol. 13.1, 77–93

Edwards. A. (2015) Recognising and realising teachers' professional agency. *Teachers and Teaching*, 21:6, 779-784, DOI: 10.1080/13540602.2015.1044333

Emirbayer, M. and Mische, A. (1998) What is Agency? *American Journal of Sociology*, 103 (4), 962- 1023.

Eraut, M. (1994). *Developing Professional Knowledge and Competence*. London: Falmer Press.

Erss, M. (2018). 'Complete freedom to choose within limits'-teachers' views of curricular autonomy, agency and control in Estonia, Finland and Germany, *The Curriculum Journal*, 29:2, 238-256, DOI: 10.1080/09585176.2018.1445514

Eteläpelto, A., Vähäsantanen, K., Hökkä. P.K. and Paloniemi, S. (2013). What is agency? Conceptualising professional agency at work. *Educational Research Review*, 10, 45–65. doi:10.1016/j.edurev.2013.05.001

Evans, L. (2002) What is Teacher Development?, *Oxford Review of Education*, 28:1, 123-137, DOI: 10.1080/03054980120113670.

Evans, L. (2008). Professionalism, professionality and the development of education professionals. *British Journal of Educational Studies*, 56, 20–38.

Evans, L. (2011). The 'shape' of teacher professionalism in England: professional standards, performance management, professional development and the changes proposed in the 2010 White Paper. *British Educational Research Journal*. Vol. 37, No. 5, , pp. 851–870.

Evetts, J. (2011). “A new professionalism? Challenges and opportunities.” *Current Sociology 59* (4): 406–422.

Fernandez, C (2002). Learning from Japanese approaches to professional development the case of lesson study. *Journal of Teacher Education*, 53 (5) (2002), pp. 393-405.

Fletcher-Wood, H. and Zuccollo, J. (2020). The effects of high-quality professional development on students and teachers. A rapid review and meta-analysis. Education Policy Institute.

Fraser, C., Kennedy, A., Reid, L. and McKinney, S. (2007). Teachers' continuing professional development: Contested concepts, understandings and models. *Journal of In-service Education*, 33(2): 153–169.

Frostenson, M. (2015). Three forms of professional autonomy: De-professionalization of teachers in a new light, *Nordic Journal of Studies in Educational Policy*, 1(2), 20–29.

Fryer, R. (2016). The Production of Human Capital in Developed Countries: Evidence from 196 Randomized Field Experiments. NBER Working Paper No. 22130.

Fullan, M. (2001). *Leading in a culture of change.* San Francisco, CA: Jossey-Bass.

Fullan, M. (2013). *Stratosphere: Integrating technology, pedagogy, and change knowledge.* Toronto: Pearson Canada.

Gale, T., and Densmore, K. (2003). *Engaging teachers*. London*:* Open University Press.

Giddens, A. (1984). *The Constitution of Society. Outline of the Theory of Structuration*. University of California Press, Berkeley.

Gilbert, R. (2010), “Curriculum Reform”, in International Encyclopedia of Education, *Elsevier*, http://dx.doi.org/10.1016/b978-0-08-044894-7.00103-2.

Goodwin, A. L. (2020). Teaching standards, globalisation, and conceptions of teacher professionalism. *European Journal of Teacher Education*, 44(1), 5–19.doi:10.1080/02619768.2020.1833855

Goepel, J. (2012). “Upholding public trust: an examination of teacher professionalism and the use of Teachers’ Standards in England.” *Teacher Development* 16 (4): 489-505. DOI: 10.1080/13664530.2012.729784

Goller, M. and Paloniemi, S. (2017). *Agency At Work. An Agentic Perspective on Professional Learning and Development.* Springer International Publishing.

Graham, L.J., White, S.L.J., Cologon, K., and Pianta, R.C. (2020). Do teachers’ years of experience make a difference in the quality of teaching?. *Teaching and Teacher Education*. https://doi.org/10.1016/j.tate.2020.103190

Greenhill, K. and Wiebrands, C. (2008). The unconference: A new model for better professional communication. Poropitia Outside the Box: LIANZA Conference, Auckland, N.Z., 2-5 Retrieved from http:// opac.lianza.org.nz/cgi-bin/koha/opac-detail.pl?bib=383

Groundwater-Smith, S., and Mockler, N. (2009). *Teacher Professional Learning in an Age of Compliance: Mind the Gap*. Dordrecht: Springer.

Gouëdard, P., Pont, B., Hyttinen., S and Huang.P. (2020). Curriculum Reform: A literature Review. OECD. Working Paper No. 239. https://one.oecd.org/document/EDU/WKP(2020)27/En/pdf

Guskey, T. R. (2000). *Evaluating Professional Development.* Thousand Oaks, CA: Corwin Press.

Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, 8(3/4), 381–391. http://doi.org/10.1080/135406002100000512

Guskey, T., (2009). Closing the knowledge gap on effective professional development. *Educational horizons*, 87 (4), 224–233.

Hargreaves, A. (2000). Four Ages of Professionalism and Professional Learning. *Teachers and Teaching: Theory and Practice*, 6(2), 151–182. http://doi.org/10.1080/713698714

Hargreaves, A. (2003). *Teaching in the knowledge society*. Buckingham: Open University Press.

Hargreaves, E., Berry, R, Lai, Y. C., Leung, L., Scott, D. and Stobart, G. (2013). Teachers' experiences of autonomy in Continuing Professional Development: Teacher Learning Communities in London and Hong Kong, *Teacher Development*, 17:1, 19-34, DOI: 10.1080/13664530.2012.748686

Hargreaves, E. and ElHawary, D. (2018). Exploring collaborative interaction and self-direction in Teacher Learning Teams: case-studies from a middle-income country analysed using Vygotskian theory, Compare: *A Journal of Comparative and International Education,* DOI: 10.1080/03057925.2018.1502609

Hargreaves, E. and Elhawary D. (2019). Professional development through mutually respectful relationship: senior teachers' learning against the backdrop of hierarchical relationships, *Professional Development in Education,* 45:1, 46-58, DOI: 10.1080/19415257.2018.1500390

Hargreaves, A., and Fullan, M. (2012). *Professional capital: Transforming teaching in every school*, New York, NY: Teachers College Press.

Harteis, Ch. and Goller, M. (2014). New Skills For New Jobs: Work Agency as a Necessary Condition For Successful Lifelong Learning. In Halttunen, T. Koivisto, M. and S. Billett

(Eds). *Promoting, Assessing, Recognizing and Certifying Lifel*ong *Learning* (pp.37-56). Springer Netherlands.

Helsby, G. and McCulloch, G. (1996). 'Teacher Professionalism and Curriculum Control'. In I.F. Goodson and Hargreaves (eds), *Teachers' Professional Lives*. London: Falmer Press.

Helsing, D. (2007). Regarding uncertainty in teachers and teaching. *Teaching and Teacher Education*, 23, 1317–1333. doi:10.1016/j.tate.2006.06.007

Hoekstra, A., Korthagen, F., Brekelmans, M., Beijaard, D., and Imants, J. (2009). Experienced teachers' informal workplace learning and perceptions of workplace conditions. *Journal of Workplace Learning*, 21(4), 276–298.

Hollis, M. (1994). *The Philosophy of Social Science: An Introduction*. New York, NY, USA: Cambridge University Press.

Hustler, D., McNamara, O., Jarvis, J., Londra, M. and A. Campbell. (2003). Teachers' Perceptions of Continuing Professional Development. Research Report RR429. London: Department for Education and Skills.

Imants J., and Van der Wal M.M. (2019): A model of teacher agency in professional development and school reform, *Journal of Curriculum Studies*, DOI: 10.1080/00220272.2019.1604809

Ingram, D. (2018). *World crisis and underdevelopment: A critical theory of poverty, agency, and coercion*. Cambridge University Press.

Kassner, L. (2014). Opportunities to Personalize Teacher Learning: Innovative Approaches to Bridge Evaluation and Professional Development for Continuous Improvement. Metropolitan Educational Research Consortium.

Kennedy, A. (2014). Understanding continuing professional development: the need for theory to impact on policy and practice. *Professional development in education*, 40 (5), 688–697.

Kemmis, S. (2006). Participatory action research and the public sphere. *Educational action* research, 14 (4), 459–476.doi:10.1080/09650790600975593.

King, F. (2012). *Developing and sustaining teachers' professional learning: A case study of collaborative professional development.* [Doctoral dissertation, University of Lincoln].

Korthagen, F. A. J. (2004). In search of the essence of a good teacher: Towards a more holistic approach in teacher education. *Teaching and Teacher Education*, 20, 77–97.

Korthagen, F. A. J. (2017). Inconvenient truths about teacher learning: towards professional development 3.0, *Teachers and Teaching*, 23:4, 387-405, DOI: 10.1080/13540602.2016.1211523

Kvale, S. (2007). Conducting an Interview. In Qualitative Research kit: *Doing interviews* (pp. 52-66). SAGE Publications Ltd doi: 10.4135/9781849208963.n5

Kvale, S., and Brinkmann, S. (2009). *InterViews: Learning the craft of qualitative research interviewing*. Los Angeles, CA: Sage Publications.

Kyndt, E., Gijbels, D., Grosemans, I., and Donche, V. (2016). Teachers' everyday professional development: Mapping informal learning activities, antecedents, and learning outcomes. *Review of Educational Research*. http://dx.doi.org/10.3102/0034654315627864.

Kyureghyan, H. (2023). Exploring teachers' learning experiences and core components of the professional development programme within a pilot reform project in Armenia. *Teacher Development: An International Journal of Teachers' Professional Development*. https://doi.org/10.1080/13664530.2023.2213678

Leander, K. M., and Osborne, M. D. (2008). Complex positioning: Teachers as agents of curricular and pedagogical reform. *Journal of Curriculum Studies*, 40, 23–46.

Le Fevre, D. M. (2014). Barriers to implementing pedagogical change: The role of teachers' perceptions of risk. *Teaching and Teacher Education*, 38, 56–64.

Lennert da Silva, A. L., and Mølstad, C. E. (2020). Teacher autonomy and teacher agency: comparative study in Brazilian and Norwegian lower secondary education. *The Curriculum Journal*, 31(1), 115–131.

Lewis, C., and Lee, C. (2018). The global spread of lesson study. In M. Akiba and G. K. LeTendre (Eds.), *International handbook of teacher quality and policy* (pp.185-203). New York: Routledge

Lieberman, A. and Pointer Mace, D. (2010). Making Practice Public: Teacher Learning in the 21st Century. *Journal of Teacher Education, 61*(1), 77-88. Retrieved from https://www.learntechlib.org/p/72720/

Lieberman, A. (2013). Teacher Leadership. An Introduction. *The New Educator*. Volume 9, issue 3. https://doi.org/10.1080/1547688X.2013.806721

Lortie, D. C. (2002). *Schoolteacher: A Sociological Study*. Chicago: University of Chicago Press.

Lumpe, A. T. (2007). Research-based professional development: Teachers engaged in professional learning communities. *Journal of Science Teacher Education*, 18, 125e128. http://dx.doi.org/10.1007/s10972-006-9018-3.

MacBeath, J. (2007). Leadership as a subversive activity. *Journal of educational administration*, 45 (3), 242–264. doi:10.1108/09578230710747794

Macias, A. (2017). Teacher-Led Professional Development: A Proposal for a Bottom-Up Structure Approach. *International Journal of Teacher Leadership*, Vol. 8, N. 1.

Manukyan, N. (2019). The Reform of General Education System in Armenia: Education Policy Borrowing in a State of Democratization and Transitional Institutional Capacity. In W. Hilz, and S. Minasyan, *Armenian Developments: Perspectives of Democratization and the Role of the Civil Society*. Bonn, Germany: Tectum Publishing.

Mausethagen, S. and Mølstad, C. E. (2015). Shifts in curriculum control: Contesting ideas of teacher autonomy, *Nordic Journal of Studies in Educational Policy*, (2), 30–41.

McLaughlin, M. W., and Talbert, J. C. (2006). *Building school-based teacher learning communities*. New York: Teachers College Press.

McLaughlin, C. (2015). Policy and Practice: Reflections and Implications. In McLaughlin, C., Cordingley, Ph., McLellem, R., and Baumfield, V. (Eds.). *Making a Difference: Turning Teacher Learning Inside Out* (pp. 31-51). University Printing House. Cambridge.

Mercer, S., (2011). Understanding learner agency as a complex dynamic system. *System*, 39, 427–436. doi:10.1016/j.system.2011.08.001

Mills, M., Mocker, N., Stacey, M., and Taylor, B. (2020). Teachers' orientations to educational research and data in England and Australia: implications for teacher professionalism. *Teaching Education*. Volume 23, 2021.

Miles, M., and Huberman, A. (2014). *Qualitative Data Analysis* (2nd ed.). London: Sage.

Mockler, N. (2011). Beyond 'what works': understanding teacher identity as a practical and political tool, *Teachers and Teaching*, 17:5, 517-528, DOI: 10.1080/13540602.2011.602059

Mockler, N., and Groundwater-Smith, S. (2015). Engaging with Student Voice in Research, *Education and Community*. doi:10.1007/978-3-319-01985-7

Mockler, N. (2020). Teacher professional learning under audit: reconfiguring practice in an age of standards, *Professional Development in Education*, DOI: 10.1080/19415257.2020.1720779

Moir, E., D. Barlin, J. Gless, and J. Miles. (2010). *New Teacher Mentoring: Hopes and Promise for Improving Teacher Effectiveness. Cambridge*, MA: Harvard Education Press.

Molla, T. and Nolan, A. (2020) Teacher agency and professional practice, *Teachers and Teaching*, 26:1, 67-87, DOI: 10.1080/13540602.2020.1740196

Moon, J., Passmore, C., Reiser, B.J., and Michaels, S. (2014). Beyond comparisons of online versus face-to-face PD: commentary in response to Fishman et al. 'Comparing the impact of online and face-to-face professional development in the context of curriculum implementation.' *Journal of teacher education*, 65 (2), 172–176.

Moore, M.F. (2007). Agency, Identity and Social Justice Education: Preservice Teachers' Thoughts on Becoming Agents of Change in Urban Elementary Science Classroom. *Research in Science Education*. 38(5):589-610. DOI:10.1007/s11165-007-9065-6

Mitchell, D. and Lambert, D. (2015). Subject knowledge and teacher preparation in English secondary schools: the case of geography. *Teacher Development*, http://dx.doi.org/10.1080/13664530.2015.1042024

Mitchell, D. (2016). Geography teachers and curriculum making in “changing times”. *International Research in Geographical and Environmental Education*. Volume 25. https://doi.org/10.1080/10382046.2016.1149338

Munthe, E. (2001). Professional uncertainty/certainty: How (un)certain are teachers, what are they (un)certain about, and how is (un)certainty related to age, experience, gender, qualifications and school type? *European Journal of Teacher Education,* 24, 801–813.

National Centre for Education Development and Innovation Foundation. (2021). RA MoESCS. https://escs.am/am/news/7741.

Neuman, W.L., (2011). *Social Research Methods*. Boston: Pearson Education, Inc.

Nolan, A., and Molla, T. (2017b). Teacher confidence and professional capital. *Teaching and Teacher Education*, 62(1), 10–18. doi:10.1016/j.tate.2016.11.004

Noonan, J. (2016). *Teachers Learning: Engagement, Identity, and Agency in Powerful Professional Development*. [Doctoral dissertation, Harvard Graduate School of Education].

Noordegraaf, M. (2016). Reconfiguring professional work. *Administration and Society*, 48(7): 783–810.

Organisation for Economic Co-operation and Development. (2009). Creating effective teaching and learning environments: first results from teaching and learning international survey (TALIS) [online]. Available at: http://www.oecd.

Organisation for Economic Co-operation and Development. (2014). TALIS 2013 Results: An International Perspective on Teaching and Learning. Retrieved from http://dx.doi.org/10.1787/9789264196261-en

Organisation for Economic Co-operation and Development. (2016). Supporting Teacher Professionalism. Insights from TALIS 2013.

https://www.oecd.org/publications/supporting-teacher-professionalism-9789264248601-en.htm

Organisation for Economic Co-operation and Development. (2018). TALIS 2018 Results Teachers and School Leaders as Valued Professionals. https://www.oecd-ilibrary.org/sites/19cf08df-en/1/2/5/index.html?itemId=/content/publication/19cf08df-en&_csp_=67e65b72be0b468ed3dac915593716de&itemIGO=oecd&itemContentType=book.

Opfer, V.D. and Pedder, D., (2010). Benefits, status and effectiveness of Continuous Professional Development for teachers in England. *Curriculum Journal* 21(4):413-431. DOI:10.1080/09585176.2010.529651

Opfer, V.D. and Pedder, D., (2011). Conceptualizing teacher professional learning. *Review of educational research*, 81 (3), 376–407.

Opfer, V. D. and Pedder, D. (2011). The lost promise of teacher professional development in England. *European Journal of Teacher Education*, 34:1, 3-24, DOI: 10.1080/02619768.2010.534131

Pachler, N. (2007). "*Teacher Development: A Question(ing) of Professionalism*". In *New Designs for Teachers' Professional Learning,* edited by J. Pickering, C. Daly., and N. Pachler, 242–268*.* Bedford Way Papers. Institute of Education, University of London.

Pantic, N. (2017). An exploratory study of teacher agency for social justice. *Teaching and Teacher Education*. School of Education, University of Edinburgh, United Kingdom.

Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods*. 3rd edition. Sage Publications, Inc.

Patton, K., Parker, M., and Tannehill, D. (2015). Helping teachers help themselves: Professional development that makes a difference. *NASSP Bulletin*, 99(1), 26-42.

Pedder, D., Storey, A., and Opfer, V.D. (2008). Schools and Continuing Professional Development (CPD) in England-State of the Nation Research Project. Synthesis Report.

Pedder, D. and Opfer, V.D., (2013). Professional learning orientations: patterns of dissonance and alignment between teachers' values and practices. *Research papers in education*, 28 (5), 539–570. doi:10.1080/02671522.2012.706632

Phelps, P. H. (2006). *The Three Rs of Professionalism*, Kappa Delta Pi Record, 42:2, 69-71, DOI: 10.1080/00228958.2006.10516436

Phillpott, C. and Oates, C. (2015). Learning rounds: what the literature tells us (and what it doesn't). *Scottish Educational Review*, 47(1):49-65 DOI:10.1163/27730840-04701006

Philpott, C. and Oates, C, (2016). Teacher agency and professional learning communities; what can Learning Rounds in Scotland teach us? *Professional development in Education*. Pp.318-333. https://doi.org/10.1080/19415257.2016.1180316

Porritt, V., Spence-Thomas, K. and Taylor, C. (2017). Leading professional learning and development. In: P. Earley and T. Greany (Eds.), *School leadership and education system reform*. London: Bloomsbury.

Preston, Ch. and Cuthell, J. (2012). *MirandaMods: From Practice to PraxisInformal Professional Learning Contexts.* In C. Jimoyiannis (Ed.) Research on e-learning and ICT in Education. Springer pp 17-28. Chapter 2

Priestley, M. (2011a). Whatever happened to curriculum theory? Critical realism and curriculum change, *Pedagogy, Culture and Society*, 19, 221-238.

Priestley, M., Edwards, R., Priestley, A. and Miller, K. (2012). Teacher agency in curriculum making: Agents of change and spaces for manoeuvre, *Curriculum Inquiry*, 42(2), 191–214.

Priestley, M. and Biesta, G.J.J. (eds.) (2013). *Reinventing the Curriculum: New Trends in Curriculum Policy and Practice*. London: Bloomsbury Academic.

Priestley, M., Biesta, G.J.J. and Robinson, S. (2015). Teacher agency: what is it and why does it matter? In R. Kneyber and J. Evers (eds.), Flip the System: *Changing Education from the Bottom Up*. London: Routledge.

Pyhältö, K., Pietarinen, J. and Soini, T. (2014). Comprehensive school teachers' professional agency in large-scale educational change, *Journal of Educational Change*, 15, 303-325

Pyhältö, K., Pietarinen, J. and Soini, T. (2015). Teachers' professional agency and learning – from adaption to active modification in the teacher community, *Teachers and Teaching: theory and practice*, 21 (7), 811-830

Quinn, R. and Mittenfelner Carl, N. (2015). Teacher activist organizations and the development of professional agency. *Teachers and Teaching*. 21(6). https://doi.org/10.1080/13540602.2015.1044331

RA Government Decree on N 596-Ն on approving the procedure of voluntary attestation, pay rise, and the committee formation. Available at https://www.arlis.am/documentView.aspx?docid=162427

RA National Assambley. (1999). RA Law on Education. HO-297. Retrieved from: https://www.anqa.am/en/about-us/legal-field/laws/law-of-the-republic-of-armenia-on-education/

RA National Assembly. (2009). RA Law on General Education. ՀՕ-160-Ն. Retrieved from: https://www.arlis.am/documentview.aspx?docid=55785

Reiser B.J., Michaels, S. et al., (2017). Scaling Up Three-Dimensional Science Learning Through Teacher-Led Study Groups Across a State. *Journal of Teacher Education*. Vol. 68(3) 280–298

Robson, C. (2011). '*Approaches to social research'* in *Real world research*: A resource for users of social research, (Ch.2, pp.13-41) Chichester: John Wiley.

Robson, C. and McCartan, K. (2016). *Real World Research*. Fourth Edition John Wiley and Sons Ltd.

Sachs, J. (2005). Teacher education and the development of professional identity: Learning to be a teacher. *Connecting policy and practice: Challenges for teaching and learning in schools and universities*, pp. 5-21.

Sachs, J. (2016). Teacher professionalism: Why are we still talking about it?, *Teachers and Teaching*, doi: 10.1080/13540602.2015.1082732, pp. 413-425, http://dx.doi.org/10.1080/13540602.2015.1082732.

Scardamalia, M., and Bereiter, C. (2003). Knowledge building. In *Encyclopedia of education* (pp. 1370-1373). New York: Macmillan Reference.

Scardamalia, M., and Bereiter, C. (2006). Knowledge Building: Theory, Pedagogy, and Technology. In R. K. Sawyer (Ed.), *The Cambridge handbook of the learning sciences* (pp. 97e118). New York, NY: Cambridge University Press.

Schreier, M. (2012). *Qualitative Content Analysis in Practice*. London: SAGE.

Sen, A. (1999). *Development as freedom*. Oxford University Press.

Simon, S. and Campbell, S. (2012). Teacher learning and professional development in Science education. B.J. Fraser, K.G. Tobin, C.J. McRobbie (Eds.), *Second international handbook of science education*. (Vol. 1, pp. 307–321), Springer.

Sims, S. and Fletcher-Wood, H. (2020): Identifying the characteristics of effective teacher professional development: a critical review, *School Effectiveness and School Improvement*, DOI: 10.1080/09243453.2020.1772841

Stenhouse, L. (1975). *An Introduction to Curriculum Research and Development*. London: Heinemann.

Stillman, J. and Anderson, L. (2015). From accommodation to appropriation: Teaching, identity, and authorship in a tightly coupled policy context. *Teachers and Teaching Theory and Practice*, 21(6). DOI:10.1080/13540602.2015.1044330

Stoll, L., Bolam, R., McMahon, A., Wallace, M., and Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7. http://dx.doi.org/10.1007/s10833-OO6-0001-8.

Stoll, L., A. Harris, and G. Handscomb. (2012). *Great Professional Development Which Leads to Great Pedagogy: Nine Claims from Research*. Nottingham: National College for School Leadership.

Suarez, V. and McGrath, J. (2022). *Teacher Professional Identity: how to develop and support it in times of change.* OECD Education Working Papers N267.

Tannehill, D., and MacPhail, A. (2017). Teacher empowerment through engagement in learning community in Ireland: working across disadvantaged schools*. Professional development* in Education. 43(3): 334-352

Tavory, I. and Timmermans, S. (2014). *Abductive Analysis: Theorizing Qualitative* Research. The University of Chicago Press. Chicago. USA.

Taylor, P. (2020). The complexity of teacher professional growth – unravelling threads of purpose, opportunity and response, *Professional Development in Education*, DOI: 10.1080/19415257.2020.1747106

Terzian, Sh. (2015). International Influences on Post-Soviet Armenian Education. *European Journal of Education*. https://doi.org/10.1111/ejed.12143

Timperley, H., Wilson, A., Barrar, H., and Fung, I. (2007). Professional learning and

development: a best evidence synthesis iteration.

Timperley, H. (2011). Realizing the Power of Professional Learning. Maidenhead: Open University Press.

Tjora, M.A. (2006). Writing Small Discoveries: An Exploration of Fresh Observer's Observations. 6(4). Qualitative Research. Sage Journals https://doi.org/10.1177/1468794106068012

Toom, A., Pietarinen, J., Soini, T. and Pyhältö, K. (2017). How does the learning environment in teacher education cultivate first-year student teachers' sense of professional agency in the professional community? *Journal of Teaching and Teacher Education.* https://doi.org/10.1016/j.tate.2016.12.013

United Nations Educational, Scientific and Cultural Organization (1994). Educational Policy Report. UNESCO

United Nations Children's Fund (2022a). Comprehensive Analysis of Teacher Management System in Armenia. https://www.unicef.org/armenia/media/15136/file/Analysis%20of%20School%20Teacher%20Management%20System%20in%20Armenia.pdf

United Nations Children's Fund (2022b). Education Sector Analysis for Armenia. https://www.unicef.org/armenia/media/15496/file/Education%20Sector%20Analysis%20for%20Armenia.pdf

Van der Heidjen, H.R.M.A., Geldens, J.J.M. , D. Beijaard, and H.L. Popeijus (2015). Characteristics of teachers as change agents, *Teachers and Teaching: theory and practice*, DOI: 10.1080/13540602.2015.1044328.

Vähäsantanen, K., and Eteläpelto, A. (2011). Vocational teachers' pathways in the course of a curriculum reform. *Journal of Curriculum Studies*, 43(3), 291–312.

Vähäsantanen, K. (2013). Vocational teachers' professional agency in the stream of change. Jyväskylä: University of Jyväskylä, Faculty of Education.

Vangrieken, K. Dochy, F., Raees, E. and Kyndt, E. (2015). Teacher collaboration: A systematic review. *Educational Research Review.* Volume 15. Pages 17-40. https://doi.org/10.1016/j.edurev.2015.04.002

Vangrieken K., Meredith, Ch., Packer, T and Kyndt, E (2017). Teacher communities as a context for professional development: A systematic review. *Teaching and Teacher Education (61), 47-59*

Vansteenkiste, M., and Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration*, 23, 263–280.

Vygotsky, L. S. (1986). *Thought and language*. Cambridge, MA: MIT Press.

Villegas-Reimers, E. (2003). UNESCO report. Teacher professional development: An international review of literature. https://unesdoc.unesco.org/ark:/48223/pf0000133010xdzz sscc

Wardrip P.S., Gomez L.M, and Gomez, K. (2015). We modify each other's lessons: the role of literacy work circles in developing professional community, *Teacher Development*, 19:4, 445-460, DOI: 10.1080/13664530.2015.1051186

Wei, R. C., Darling-Hammond, L., and Adamson, F. (2010). Professional Development in the United States: Trends and Challenges. Dallas, TX: National Staff Development Council.

Wenger, E. C., and Snyder, W. M. (1999). *Communities of practice: The organizational frontier*. Harvard Business Review.

Wenner, J.A. and Campbell, T., (2017). The theoretical and empirical basis of teacher leadership: a review of the literature. *Review of educational research*, 87 (1), 134–171. doi:10.3102/0034654316653478

Wermke, W., and Hostfält, G. (2014). Conceptualizing teacher autonomy in time and space: A model for comparing various teaching profession governing forms*. Journal of Curriculum Studies,* 46 (1), 58–80. doi:10.1080/00220272.2013.812681.

Wermke, W., and Forsberg, E. (2017). The changing nature of autonomy: Transformations of the late Swedish teaching profession. *Scandinavian Journal of Educational Research*,61(2), 155-168. doi:https://doi.org/10.1080/00313831.2015.1119727

Westheimer, J. (2008). Learning among colleagues: Teacher community and the shared enterprise of education. In M. Cochran-Smith, S. Feiman-Nemser, and J. McIntyre (Eds.), *Handbook of research on teacher education* (pp. 756e782). Lanham, MD: Rowman: Reston, VA: Association of Teacher Educators.

Whitty, G. (2000). Teacher Professionalism in new times. *Journal of In-service Education* 26(2):281-295 DOI:10.1080/13674580000200121

Whitty, G. (2008). '*Changing modes of teacher professionalism: traditional, managerial, collaborative and democratic*. In B. Cunningham (Ed), *Exploring Professionalism*. IoE, pp.28-49.

World Bank. (2003). Education Quality and Relevance. Report.

World Bank. (2010). Education Quality and Relevance: Implementation Completion and Results.

World Bank. (2019). *Education Improvement Project: Implementation Status and Results Report.* Washington D.C.: World Bank.

World Bank. (2019). *Project Information Document (PID) - EU4Innovation STEM* Project - P170001 (English). Washington D.C.: World Bank Group.

World Bank. (2021). Armenia: Teacher Profile and Policies. © World Bank, Washington, DC. http://hdl.handle.net/10986/35540 License: CC BY 3.0 IGO.

Wyse, D., Brown, C., Oliver, S. and Poblete, X. (2018). *The BERA Close-to-Practice Research Project: Research Report*. London: British Educational Research Association. Retrieved from: https://www.bera.ac.uk/researchers-resources/publications/bera-statement-on-close-to- practice-research

Zeichner, K. (2003). Teacher research as professional development for P-12 educators in the US. *Educational Action Research*, 11(2), 301-325.

APPENDIX 1: COLOR CODING AND ASSIGNING CODES

	Why do teachers want to participate in a bottom-up TPD?
	What characteristics do teachers that participated in a bottom-up TPD showed having?
	What changes do teachers report having in their professional practice due to participation?
	Bottom-up TPD conference features
	Other (related to teacher PD, teacher professionalism, teachers' work, system, etc)

Grey: only noted in the data gained from the teacher-speakers

APPENDIX 2: CODING EXAMPLE FOR TEACHERS RATIONALE OF PARTICIPATION

Codes: Why do teachers want to participate in a bottom-up TPD (rationale of participation)

Themes	Codes	Excerpts
PD opportunity	New learning Improvement	Interviewee 4 'The conference was a unique chance for learning and development, why unique because as you know because of the state system reforms almost 2 years there was no mandatory trainings'.
Networking opportunity	Meeting colleagues Getting to know new people Meeting new speakers	Interviewee 2 'We are usually very reserved and do not communicate much even within the same school and here there is the opportunity to meet teachers from all over the country, how could I miss that chance [laughs]'.
Curiosity	Interesting Desire not to miss an important event	Interviewee 5 'I was really curious to know what it is like, it seemed to be a very new thing, I did not want to miss the chance'.

Being/feeling valued by the teacher community/colleagues	Desire to stand out from others Desire to be known as a good teacher	Interviewee 2 'Participation in a conference or any PD is seen something more, it tells about your desire to learn and develop and this makes you, hmm how to say, stand out from others'. Interviewee 4 'My colleagues usually joke that I participate in every PD activity that is there, and I like that, they think positive about me, they know that I want to learn'.
Meeting field professionals		Interviewee 3 'It was great to see teachers, my colleagues presenting, but of course it was valuable to meet those field professionals that we cannot meet at any other place'.
Commitment to colleagues' development		Interviewee 6 'It is important to share what you know with colleagues to help them develop'.

APPENDIX 3: CODING IN RELATION TO BOTTOM-UP TPD FEATURES

Codes identified in relation to the core features of the bottom-up TPD conference

Codes	Features of the bottom-up TPD conference
Expression of free will Free participation	Voluntary participation
Self- directed learning Self-awareness Needs based PD Autonomy of choosing the desired topic	Autonomy in decision making
Freedom Autonomous decision making Valuing own time	Rule of two feet
Contribution to others' development Raised self-esteem Seeking learning and development opportunities	Learning from peers

Sharing knowledge Talking about their own experiences	Sharing own classroom experiments and practice (e.g. practitioner inquiry, lesson study)
N/A	Knowledge creation
N/A	Collaboration and networking

APPENDIX 4 EXAMPLE OF CODED TRANSCRIPT

October, 2021 transcript

Welcoming note. Presenting the procedure. Providing information about the research study. Welcoming questions if any. Getting permission for recording.

PT / Cu

What year did you participate in the bottom-up conference and were you a speaker or a participant?

To be honest, as it was the first time, it was interesting to see how it happens, what the format is, and how many teachers would participate. Well, I particularly mean that collaboration and experience exchange is hard for us teachers, we are bad at it, and in general, umm, I mean sharing is not developed in our teachers. Now we try, of course, to promote it all in our own workplaces, so that people express willingness to share their knowledge and experience. It was interesting also in terms of meeting new colleagues, making new friends, and new experiences of learning, just from others' successful experiences. In fact, the format was very interesting, the topics as well, and I wanted to see how the teachers would be involved, and how that sharing would be in practice. In 2019 I participated as a speaker, besides that, I was interested to see how the conference would go, and also I wanted to share what I knew and why not people would get to know me, not only as just a teacher but as somebody more. As for the 2020 conference I was a participant. Though I wanted to be a speaker again because of the limited resources, and space my topic wasn't included. But it did not matter I was there as a participant.

new formats new meetings

curiosity int

networking meeting new people

new experiences of learning

knowledge sharing

valuing actors both participant and speaker

Did you have any experience being a speaker before this?

Well, I can say, yes, but very little experience, and also I made a presentation for a very limited audience which is incomparable with the experience of this conference. Unknown people, new environment, a new format, everything was new. Though I have once acted as a speaker that was a small group of teachers I knew. Whereas here, it was different, with teachers from all over the country. I was worried and a bit nervous, but I do not regret it, I now feel more confident. Also, being a speaker and sharing my knowledge made me feel valued. I feel proud because I can share my knowledge with others, help others learn and also be known as a speaker. Working with students is a usual thing but acting as a speaker for teachers is different. The community gets to know you as a good teacher.

developed speakers skills confidence

contributing to peers learning

desire to be valued

You mentioned a notion of a good teacher who is a good teacher from your perspective?

I think a good teacher is a teacher who has good subject knowledge, loves their students and constantly learns to improve. You are at school and no matter the conditions you should work well for your kids. They deserve the best.

understanding of a good teacher

I subject knowl
love students
cont. learning

Thank you. So coming back to the bottom-up conference, what aspects/characteristics of the conference motivated you to participate (as a speaker and as a participant)?

I think the most important aspect is the audience, no matter how much you try to be a speaker in your local environment you can never have a similarly large and diverse audience as it was during this conference. Teachers came from all over Armenia, from all regions. Second, in fact, is that people became to know you as a teacher who is ready to learn and develop, and also share knowledge. The format was interesting and new, hmm I'd say unusual when a teacher is given a chance to act as a speaker. Also, it has the aspect of freedom. In any case, when people say that teachers' job is a creative one, it has a lot of boundaries, even if we try to lessen them, they exist, working with standardized curriculum, and standardized programs, you are limited by state requirements, you kind of are put into limits. However, within this new format, you can present whatever you do, even if it's beyond your immediate work-related tasks.

How do you choose your PD activities-what seminars and workshops to attend? Who is responsible for teachers' PD?

Well firstly, there should be a personal responsibility, no matter who would tell you to participate in a PD, no matter how much teachers are appreciated/valued, I believe that if you are a teacher if you decided to work at school, you knew the conditions, and not a single child is guilty, no one should suffer, that there are certain reservations or there are certain concerns toward teachers' work in general from the state, but the kids are not guilty of that. I think everyone is responsible firstly towards self, thus that self should be either blamed or rewarded as a main responsible person. The number one responsible person for own development is a teacher. However, the general approach is not that way, because when I participate in other PD projects and try to engage other teachers most of the time I hear "why do you need it". Unfortunately, it's still impossible to get rid of that kind of thinking in our teachers' minds- for example, why do you need it, what that will give you". Not necessarily that everything must give you something tangible, the fact that you get your knowledge and skills improved and that you can use them tomorrow. When you do it without any force or mandatory things, both you and the students definitely benefit from it. The knowledge stays with you, it's yours, you can use the gained knowledge in the most unpredicted places and ways. Unfortunately, the reality is that most of the teachers do any PD if they are forced or it's mandatory.

How do you feel about being able to participate in a bottom-up PD conference? Could you please mention any benefits and drawbacks of the approach?

Very well. I have a feeling that I am making some change, even a little one. That feels great but also it adds responsibility If you can bring change into somebody's life, in this case, learning, then it should be done even if it's scary at first. Presenting in front of other teachers requires risk-taking. When you learn for

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yourself it's one thing, but when you share your knowledge with your colleagues it's completely another feeling, you feel more energy by developing others. For example, when you can motivate another teacher so that he/she participates in PD activities and be successful. The feeling of a mentor. You work you improve, you need those gains. A lot of teachers say 'oh no, I can't, I don't have time, etc' but when I for example can motivate those kinds of teachers, it's a success for me, I feel good and then it comes in a school level. In fact, you cannot lead the progress alone, I mean you can go forward beyond your limits alone, but if you want to make a change to make a difference you need to have a team, a like-minded group of people, and colleagues.

How do you try to motivate others?

Well, it's hard, I usually share my excitement, and tell them what I learned and what opportunities this or that seminar gave to me. I usually talk about my own experience. Of course, most of my colleagues just listen, you know I don't blame anybody it's hard teachers with a full workload usually have little or no time for anything else. Also, low salary plays a role here.

Yeah, those are challenging. And how does your participation in these bottom-up conferences impact your professional practice/your beliefs about your teaching?

From the speaker's perspective they impacted my self-esteem, on self-confidence, because when the audience is different and you present a new topic, you become more emotional, and controlling that emotional stance is hard. In general, I am a calm and balanced person both in my job and work, but in any case, when you feel that another step is made, a new challenge is faced and overcome you feel proud and more confident. For example, after my experience, I now feel more confident during any QA sessions. I was presenting a very practical topic; thus you could never anticipate the questions you could get from the participants. This was a valuable experience for me. What I did not get from the conference though is networking, there were so many sessions and the time was limited that, I think, teachers did not have time to network. I really wanted to meet new people, but honestly, I did not make contact with anybody, I don't know why maybe we were busy with other staff and did not have time for communication.

What are your professional/personal qualities that help you in your work/professional development?

I may sound immodest, but I am a hardworking person, the most important thing. It's the foundation of everything because I love my job a lot. I hear people say to me "why do you work at school you can work in other places and earn more money" and honestly this makes me angry because the school shouldn't be a place with average people, only great people should work at schools, the school, the kids need them, I just love the school a lot and can't imagine my life without it. I was waiting too long to be able to work at school. For a long time, there were no vacancies in the city where I was living and did not want to leave

Institute of Education

Anyone conducting research under the auspices of the Institute of Education (staff, students or visitors) where the research involves human participants or the use of data collected from human participants, is required to gain ethical approval before starting. This includes preliminary and pilot studies. Please answer all relevant questions in simple terms that can be understood by a lay person and note that your form may be returned if incomplete.

Registering your study with the UCL Data Protection Officer as part of the UCL Research Ethics Review Process

If you are proposing to collect personal data i.e. data from which a living individual can be identified **you must be registered with the UCL Data Protection Office before you submit your ethics application for review**. To do this, email the complete ethics form to the UCL Data Protection Office. Once your registration number is received, add it to the form* and submit it to your supervisor for approval. If the Data Protection Office advises you to make changes to the way in which you propose to collect and store the data this should be reflected in your ethics application form.

Please note that the completion of the UCL GDPR online training is mandatory for all PhD students.

Section 1 – Project details

a. Project title
'Exploring teacher professional agency and learning in the context of a bottom-up approach to teacher professional development: perspectives and implications'

b. Student name and ID number (e.g. ABC12345678) Hasmik Kyureghyan

c. ***UCL Data Protection Registration Number** **Z6364106/2021/07/83**
   a. Date Issued: 2021/07

d. Supervisor/Personal Tutor Norbert Pachler

e. Department Culture, Communication and Media

f. Course category (Tick one)
PhD ☐
EdD ☒
DEdPsy ☐

g. **If applicable**, state who the funder is and if funding has been confirmed.

Departmental use

If a project raises particularly challenging ethics issues, or a more detailed review would be appropriate, the supervisor must refer the application to the Research Development Administrator

via email so that it can be submitted to the IOE Research Ethics Committee for consideration. A departmental research ethics coordinator or representative can advise you, either to support your review process, or help decide whether an application should be referred to the REC. If unsure please refer to the guidelines explaining when to refer the ethics application to the IOE Research Ethics Committee, posted on the committee's website.

Student name	Hasmik	
Student department	CCM	
Course	EdD	
Project title	Exploring teacher agency in the context of the bottom-up professional development conferences: perspectives and Implications	
Reviewer 1		
Supervisor/first reviewer name	Norbert Pachler	
Do you foresee any ethical difficulties with this research?	No	
Supervisor/first reviewer signature	Norbert Pachler	
Date	June 15, 2021	
Reviewer 2		
Second reviewer name	Jacek Brant	
Do you foresee any ethical difficulties with this research?	No	
Supervisor/second reviewer signature	J. Brant (by email)	
Date	15/6/21	
Decision on behalf of reviews		
Decision	Approved	☑
	Approved subject to the following additional measures	☐
	Not approved for the reasons given below	☐
	Referred to REC for review	☐
Points to be noted by other reviewers and in report to REC		
Comments from reviewers for the applicant		

Once it is approved by both reviewers, students should submit their ethics application form to the Centre for Doctoral Education team: IOE.CDE@ucl.ac.uk.

APPENDIX 6 GUIDING QUESTIONS FOR SEMI-STRUCTURED INTERVIEW

1. What year did you participate in the conference? Were you a speaker or a participant?
2. Why did you decide to participate in the conference as a speaker/participant?
   If a speaker - Did you have any experience of a speaker before this conference?
3. What aspects/characteristics of this type of conference motivated you to participate (as a speaker and participant)?
4. How has your participation impacted your professional practice/your beliefs about your teaching?
5. How do you choose your PD activities-what, seminars, and workshops to attend?
6. What professional/personal qualities help you in your work/professional development?
7. What challenges can you mention, if any, that you encounter in your PD and how you overcome them?
8. What role does autonomy/opportunity to make choices in your professional development play in your professional practice as a teacher? What's the motive for participating in the conference?
9. What do you value the most in your teaching? In your opinion, is teaching a respected job in Armenia?
10. Is there anything else you would like to discuss that we have not talked about?

Institute of Education

Consent Form

Title of Study: 'Exploring teacher professional agency in the context of the bottom-up professional development conferences: perspectives and Implications'.
The aim of this study to explore the interplay of bottom-up teacher professional development conferences and teacher agency.
Department: Culture, Communication and Media
Name and Contact Details of the Researcher(s): Hasmik Kyureghyan
This study has been approved by the UCL Research Ethics Committee.

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

If you are happy to participate in this study, please complete this consent form and return it to Hasmik Kyureghyan at the address below.

	Yes	No
I have read and understood the information leaflet about the research.	☐	☐
I agree to participate in the proposed study.	☐	☐
I understand that if any of my words are used in reports or presentations, they will not be attributed to me.	☐	☐
I understand that I can withdraw from the project at any point and that if I choose to do this, any data I have contributed will not be used.	☐	☐
I understand that I can contact Hasmik Kyureghyan at any time and request for my data to be removed from the project database.	☐	☐
I understand that the results will be shared in professional conferences and seminars.	☐	☐
I consent to my interview being audio-recorded. I understand that the recordings will be stored anonymously, using password-protected software and will only be used for this specific research purpose.	☐	☐

Name _____Signed _____Date _____

Contact details of the researcher

APPENDIX 8: EXCERPT FROM THE QUESTIONNAIRE

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	1. Please indicate what reagion are you from?	2. What subject are you teaching?	3.Please select your age range.	4. Please indicate your years of etaching experience?	5. What PD activities have you ever participated?/Do you usually participate?	6. What year have you participated in bottom-up PD conference?	7. Please indicate if you participated as a speaker or participant.	8. Please indicate what was your motivation for participation?	9. Please indicate what features did you like the best in this bottom-up conference? You can indicate more than one answer.	10. How did you choose what sessions to particiapte?	11. what features of the bottom-up PD conferene do you like?	12. Has participation in this bottom-up PD conference(s) influenced on your practice or thinking about teaching?	Would you like to participate in an interveiw for more detailed discussion. If yes, please inndicate either phone number or email so the reseracher can contact you to schedule interview.
2	Tavush	El school teacher	32-40	5	ICT and others	2019 and 2020	Participant	Professional developmenet opportunity, Opportunity for professional networking	The opportunity to participate inn discussions, to freely choose the desired topic, the opportunity to engage with professional community	Based on my professisonal need. The topic seemed interesting	Free particiation opportunity, whoever wanted could participate no restrictions	Yes, for example I applied visual poem method in my teaching.	yes, provided phone number and email (I deleted them)
3	Lori	Physics	51-63	5	I participated in a number of PD activities and trainings, organized by the Ministry of Education, some NGOs on inclusive education, etc.	2019 and 2020	Speaker and participant	Professional development, Profeessional networking, The opportunity to exchange knowledge, meeting with colleagues, Participation in professional discussions	The opportunity to freely choosee what I need for my professional development, the opportunity to meet field professionals, the opportunity to exchange my knowledge and skills, the opportunity to engage with professional community	Based on my professisonal need. The topic seemed interesting	The unprecednted format, the variety of topic, the opportunity to choose, opportunnity to meet field profesisonals, and of course opportunity to meet knowledgable people and communicate with them.	Yes, I tried to project the gained knowledge in my practice.	no, thnak you.
4	Yerevan	History	41-50	22	A lot	2019 and 2020	Participant	Professional deveelopment	The opportunity to freely choose the desired topic, opportunity to participate in professionanl discussions, the opportunity to engage with professional community	Based on my professisonal need. The topic seemed interesting	The opportunity to choose	Yes, there have been interesting methods and techniques that I applied in my teahcing.	no, thnak you.
5	Aragatsotn	El school teacher	41-50	27	A lot	2020	Speaker	Professionnal networking, Participation in professional discussions	The prinnciple of voluntary participation, the opportunity to meet field professionals, the opportunity to engage with professional community	Based on my professisonal need The topic seemed interesting	Free and honest communication between participants	Yes, they were certain ideas that I used in my teahcing.	No

APPENDIX 9 PARTICIPANTS' GEOGRAPHIC AND AGE DISTRIBUTION

Chart 1. Participants geographic distribution[51]

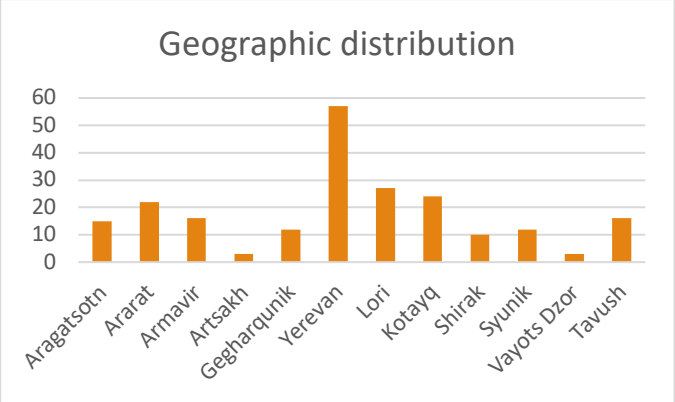
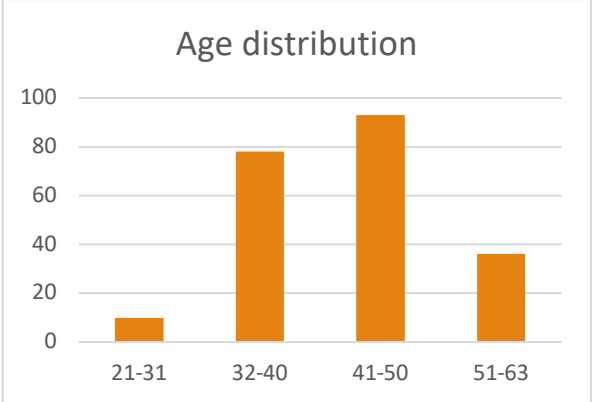
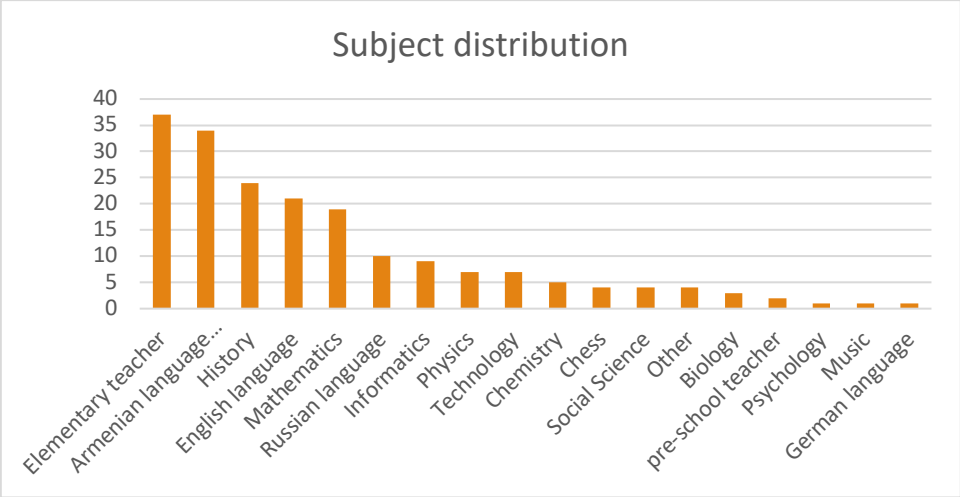


Chart 2. Age distribution



[51] Artsakh/Nagorno-Karabakh, a self-proclaimed republic in South Caucasus inhabited by ethnic Armenians.

Chart 3. Participants' subject distribution



APPENDIX 10 DETAILS OF FIELD NOTES

Identifier	Topic	Number of participants[52]	Presenter
FN 1	Coaching in Education	20+	School psychologist
FN 2	Class observation	20+	Teacher and headteacher
FN 3	Debate as an alternative teaching method	14	Teacher
FN 4	Designing learning materials	9	Elementary school teacher

[52] As teachers are allowed to leave the session if they do not find it useful for their PD, this number is counted in the beginning.