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FACULTY OF SOCIAL SCIENCES

Institute of Sociological Studies

Department of Public and Social Policy

Master's Thesis

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Policy Design of the Unified National Examinations to Higher Education Institutions in Georgia

Master's thesis

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Year of the defence: 2023

Declaration

1. I hereby declare that I have compiled this thesis using the listed literature and resources only.

2. I hereby declare that my thesis has not been used to gain any other academic title.

3. I fully agree to my work being used for study and scientific purposes.

In Prague on May 3, 2023   Mariam Gabunia

Reference

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Abstract

The Unified National Examination (UNE) is a policy, which regulates the students' admission procedure to higher education institutions in Georgia. The UNE is a special policy in terms of its design, which manages admission procedure with a centralized and standardized approach. The main goal of this thesis is to study the 'side-effects' and challenges of UNE policy, explore its organizational structure and understand the main design patterns in the policy process to find the optimal solutions for current challenges. The research problem is studied through policy design conceptual framework in order to understand how a specific instrument mix was chosen by the policy-makers and how particular redesigns of the system were made in the previous years. The thesis discusses the design process of UNE, its design types and spaces and identifies the levels of government capacities in this process and its impact on tool choices. The thesis highlights the following challenges of UNE policy: contested testing model, controversial design of reforms, 'black holes' for corruption, inequality of access to higher education and restricted autonomy of higher education institutions, which need to be addressed for system sophistication in the future.

Keywords

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List of Abbreviations

ECTS - European Credit Transfer and Accumulation System

EQE - National Center for Educational Quality Enhancement

GAT – General Ability Test

GDP – Gross Domestic Product

GEL – Georgian Currency 'Lari'

HEI – Higher Education Institution

IT – Information Technology

MES – Ministry of Education and Science of Georgia

MOF – Ministry of Finance of Georgia

NAEC – National Assessment and Examinations Center

UME - Unified Master Exams

UNE – Unified National Examination

1. Introduction

The Unified National Examination (UNE) policy regulates the admission process at higher education institutions (HEIs) in Georgia. The UNE is the main requirement for admission to bachelor programs in Georgia. It is a standardized and centralized procedure, regulated by the state, which is based on the principles, such as transparency, meritocracy and equity. It provides a complex assessment of skills and knowledge, state grants based on meritocracy and the possibility for applicants to have multiple choices in programs (NAEC, 2016).

The UNE was launched in 2005 to eliminate corruption in higher education institutions, namely in the students' admission process. Before the UNE, the main patterns in higher education in Georgia were nepotism, favouritism and paying bribes. Therefore, establishing the Unified National Examination was a significant first step toward combating corruption and transforming the higher education system with significant results in a short period of time (Orkodashvili, 2012).

Even though the UNE had transformative effects on the Georgian higher education system, from a present-day perspective various challenges could be detected in the system. Therefore, this thesis aims to study the 'side-effects' and challenges of UNE policy in terms of the student's admission process and its anti-corruption measures, understand its policy design-making process and find the optimal solutions for further sophistication.

The policy design as a conceptual framework will help to explore the design processes, instrument choices and outcomes in the UNE policy process that might guarantee to have a more sophisticated system of student admission in Georgia in the future. Considering the fact that UNE has been successful in combating corruption in Georgian higher education, it will be appealing to study its special policy design process, look back at its design-making process and highlight the shortcomings that need to be addressed at present. Additionally, the thesis aims to focus on a particular research agenda item identified by the scholars, namely, understanding government capacity and its impact on tool choices and use (Howlett, et al. 2020; Capano and Howlett, 2020). Hence, the thesis will attempt to understand the role of the government capacity in terms of instrument choices in relation to design spaces and make a scarce contribution to the field.

Personally, I am also the representative of the generation, who has received higher education without any special financial background. The UNE gave me a chance to be admitted to a desired program and provided the opportunity to receive a merit-based grant. Without it, receiving higher education degree might be remained a dream for me. Therefore, researching one of the most successful policies of my country, which has changed a lot of youngers' future for better is very appealing. Besides, looking at the UNE policy-making process in-depth is reasoned by my interests in the education policy field. I believe that researching the UNE policy in-depth, underlining the current shortcomings of the system and looking at the whole policy design process will help to work on the sophistication of the system further in the future.

1.1. Structure of the Thesis

The thesis is divided into 8 chapters. The first chapter presents an introduction to the topic, explains the reasons for choosing this particular topic, overviews the research problem and underlines the research objectives and questions. The second chapter provides a general overview of the Georgian education system and highlights its main characteristics and trends. The third chapter overviews policy design as a conceptual framework and presents its important theoretical aspects, such as: instrument mixes, types of design and design spaces. The fourth chapter describes the research methods, data collection and limitations.

The fifth chapter presents the literature review of the UNE policy. Firstly, in this chapter, the UNE reform is described chronologically and the situation before and after the reform is summarized. Secondly, the chapter describes how the UNE policy works in practice at the moment and highlights the current challenges. Furthermore, the chapter looks at the main changes and reforms that were done in UNE system. The sixth chapter is about the analysis of UNE policy design and mainly highlights the UNE instrument mix, design spaces and design types. In the end, the seventh and eighth chapters present the discussion and conclusions of the research respectively.

To make it easier for readers to follow and understand the topic, each chapter is divided into respective sub-chapters. Furthermore, the thesis contains 3 tables to summarize the redesigns (modifications) of UNE, its design spaces and the final summary table of the

UNE design process. Besides, the thesis provides three appendices, where important figures, interview questionnaires and briefs of interviews are presented.

1.2. Research Problem

The Unified National Examination (UNE) is the primary prerequisite for enrolment in bachelor's programs at higher education institutions in Georgia. According to the Law of Georgia on Higher Education, the Unified National Examination is a procedure that examines the readiness of an applicant to study at a higher educational program (article 2, par, p.). The UNE sets the list of mandatory subjects that the applicants are required to pass, the examination process is fully handled by the state agency - National Assessment and Examinations Center (NAEC) and the exam results are assessed, calculated and announced through the agency.

Even though the UNE has been successful in terms of elimination of corruption in higher education because of its special policy design, through the analysis of the research topic, multiple aspects of research problem have been revealed. The following paragraphs will briefly overview the current challenges of the system, however, in-depth analysis will be provided in fifth chapter.

The UNE requires to pass three compulsory subjects to be enrolled in bachelor programs. At the moment the mandatory subjects are: 1. Georgian language and literature 2. foreign language (English/German/French/Russian – choice of the university) and 3. third subject, which is defined by the Regulation of Unified National Exams Performance (Order No 19/n, Annex 1, art. 6). The third compulsory subject list is defined by the law according to study fields and usually is it a group of subjects that students can take to be enrolled in desired programs. The student has the possibility to choose any from this group of subjects, when the HEIs are obliged to accept students based on all the subjects that are offered by the law as a third subject for a particular study field.

The design of UNE and the list of mandatory subjects was modified multiple times throughout these years. However, still today the design of UNE is publicly contested: which subjects should be mandatory or non-mandatory within the national examination

process, besides, how many subjects are sufficient to assess the knowledge and skills of an applicant and what subjects should be required for different study field programs. Besides, the lack of assessment of critical and logical thinking and analytical skills in admission procedure is highlighted as a crucial problem (referred to interviews №1, №4, №5 and №7).

It's discussed in the public that even though the UNE has been successful in its primary goals, it has not been harmonized to other levels of education. The lack of coherence, consistency and transparency as well as lack of respective communication with stakeholders in decision-making process has been emphasized (referred to interviews №3, №4, №5 and №7).

The UNE has a high trust in society that it provides equal chances to everyone for accessibility to higher education. This high trust is based on the fact that there is no evidence of current corruption cases. However, the current system might still have some 'black holes' for corruptive behavior, which need attention and possibly some solutions (referred to interview №5).

Another aspect of research problem is how socially equitable is the UNE system and if it promotes equal chances for access to higher education (Chakhaia and Bregvadze, 2018; Orkodashvili, 2010). The current system results in "teaching to the test" pattern (Machabeli et al. 2011), which means attending private tutoring by the large majority of future students for UNE examination preparation. This is hindering factor for low-income and disadvantaged students and encourages inequality in terms of access to higher education.

Another aspect of research problem is limited academic autonomy of higher education institutions. Academic autonomy comprises the ability to control the students' admission process (Jibladze, 2017). The UNE is the centralized and standardized process of admission at higher education institutions, which limits the HEIs to conduct the admission process internally within the institution, therefore, the limiting frames of UNE policy shall be seen as an issue.

1.3. Research Objectives and Questions

The main objective of this thesis is to study the 'side-effects' and challenges of UNE policy in terms of student's admission process and its anti-corruption measures, explore its organizational structure and processes, understand the main design patterns in the policy process and find the optimal solutions for current challenges. Policy design as a conceptual framework will help to study the 'side-effects' and challenges of UNE policy and understand how specific instrument mix was chosen by the policy-makers and how the particular changes were made in the system throughout these years.

Mainly, the study aims to explore concepts, such as instrument mixes, design types and design spaces. Mixes are combinations of instruments that aim to reach particular policy objectives in a more effective way (Howlett and Mukherjee, 2018). Design types are packaging, patching and stretching that emphasize the role of the government in policy design process (Capano and Mukherjee, 2020). Additionally, design spaces identify technical and political capacities of the government in policy design and based on that there are 4 main types of design spaces (Capano, 2018).

Hence, the main research question of this thesis is:
- How is the UNE policy designed in terms of processes, instruments choices and policy outputs?

In order to answer the main research question, the following sub-questions will be answered:
- What are the goals of UNE?
- How is UNE arranged in terms of organizational structure and processes?
- What are the limitations of existing UNE policy?
- What types of design are represented in the UNE policy design process?
- In which policy design spaces is the UNE policy deployed?
- Do the instrument mix of UNE promote reaching the desired policy goals?

Hence, the thesis will overview the entire UNE policy with its various system designs, identify its goals and understand organizational structure and process, besides, explore its main limitations and distinguish the main design types and design spaces, analyze the goals and instrument mix and their interlinkage in UNE policy design process.

2. Overview of Georgian Education System

This chapter will overview Georgian education system in general and provide its main characteristics. The statistical data will be presented to capture the scope of higher education and its sector's size in Georgia. The chapter will cover basic information to understand Georgian higher education system and highlight main trends. Namely, it will explain the structure of Georgian education system, underline the main goals of higher education, explain briefly the enrollment requirements at higher education institutions and provide statistical information regarding number of HEIs, students, study programs, tuition fees and governmental expenditure on higher education.

2.1. Structure of Georgian Education System

Georgia has been full member of the Bologna Process since 2005 (EHEA, n.d.[1]). Georgian education system consists of different levels *(review figure 1, p. 74)*. First one is preschool education, which is universal and voluntary. Second level is full general education with duration of 12 years and includes three levels, such as primary, basic and secondary education, where first two levels are mandatory. The state provides full funding for general education. After completion of full general education, students acquire the Atestate – full general education certificate, which entitles them to continue study at higher education level. Georgian education system also includes vocational education with basic, secondary and higher vocational education levels as well as vocational trainings, retraining programs and short cycle educational programs, which connects vocational education to higher education by recognizing credits. Additionally, teacher education, medical education, dental and veterinary education programs are implemented through integrated master's programs (EQE, n.d.).

Higher education institutions base their programs on European Credit Transfer and Accumulation System (ECTS) and thereby bachelor programs include at least 240 ECTS credits, master programs at least 120 credits and PhD programs' learning component no more than 60 credits, which lasts at least 3 years (Law on Higher Education, art. 46, par. 2).

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[1] n.d. – no date

Higher education system consists of three levels: bachelor, master and doctoral (Law on Higher Education, art. 46). Higher education is regulated by the law on Higher Education, the law on education quality enhancement and orders and regulations of Minister of Education and Science of Georgia (EQE, n.d.).

According to the law on Higher Education, the primary goals of higher education are: to promote development of Georgian and world cultural values by emphasizing the main principles, such as democracy and humanism; to give possibility to students to develop their skills and competence in a particular field in order to be competitive in domestic and international labor markets; to provide high quality education and create and maintain the space for academic research; to train and retain academic personnel for the development of higher education system and sustainability of the country (art. 3, par. 1).

Georgian education sector has been expanded over the past years. For instance, between 2015-2021 years, total growth of educational sector amounted to 81% with almost equal pace for private and public sectors, respectively 79% and 82%. A considerable growth of 18% was observed in 2021. The higher education sector value exceeded GEL 760 million in 2021 and it is anticipated to increase with annual rate of 9-10% in following years (Kvakhadze et. al, 2022).

2.2. Enrollment to Higher Educational Programs

The applicants who have Atestate of full general education or equalized document to Atestate, are eligible to register for Unified National Examinations to enroll in bachelor programs. The UNE is a mandatory requirement for admission to bachelor programs. The requirements for master programs are: bachelor degree, passing the Unified Master Exams and passing the internal conditions defined by the higher education institution (EQE, n.d.). The internal conditions usually are in the form of exam, interview or submission an application with CV, motivation letter an etc. This is decided by the HEI internally. The Unified Master Exams are also administered by the agency, but the exam is in different format and regulated by different legislative act (Order No 227/n). Therefore, UNE is for bachelor programs and UME – for master programs. Each step of higher education has a corresponding diploma that is awarded upon completion (Law on Higher Education, art. 46, par. 3).

It is expected that demand for higher education will rise in following years. The World Bank's statistics shows that the enrollment rate has been rising gradually since 2012. The enrollment rate grew to 67% in 2020 (from 32% in 2012), which is the highest figure ever recorded in Georgia. The demand for higher education is expected to rise significantly from 2025, while birth rates surpass the 2004 figure by 15% and 24% *(review figure 2, p. 74)* (Kvakhadze et. al, 2022). Therefore, because of birth rate increase from 2007, it might be expected that by 2025 the numbers of students who wish to enroll higher education will increase as well.

However, it is interesting to look at the trends of last years: in 2021, there were 38,415 applicants registered for UNE exams. From them 29,362 became a student. The state grant was gained by 10,769 applicants and 4,224 were enrolled to fully state-funded programs (NAEC, 2021). In 2022, 41,264 applicants were registered and 32,111 were enrolled to higher education programs (NAEC, 2022). In 2023, more than 45,000 applicants were registered for the exam, which is the record number of all years (NAEC, 2023a). The trend shows that every year the number of applicants are gradually increasing and the anticipation of the Work Bank statistics is genuinely true.

2.3. Higher Education Institutions

There are different types of higher education institutions in Georgia: such as university, teaching university and college. The university conducts all three cycle education programs: bachelor, master, PhD and academic research. The teaching university implements bachelor and master degree programs and the college - only bachelor degree programs (Law on Higher Education, art. 2). At this moment, there are in total 62 higher education institutions.[2] Particularly: 33 - universities, 20 – teaching universities, 2 – colleges and 7 – Orthodox Theological Higher Education Institutions (Ministry of Education and Science of Georgia, n.d. a).

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[2] All teaching legal entities (university, teaching university, college) are named higher education institutions (HEIs) in Georgian legislation. Respectively, HEIs are differentiated by the levels of education they provide.

Furthermore, higher education institutions are differentiated as state and private ones[3] (EQE, n.d.). According to National Statistics Office of Georgia, in 2022/2023 years there are 19 state higher education institutions and 43 private ones *(review figure 3, p. 75)*. Besides, 19 universities out of 33 and 14 teaching universities out of 20 are private (Ministry of Education and Science of Georgia, n.d. a). Private education institutions held 70% share of all HEIs (Kvakhadze et. al, 2022). However, according to national statistics, 64% of total share of students are enrolled into state higher education institutions.

Besides, there is an unequal distribution between regions and higher education institutions, while the capital Tbilisi is primarily dominant. Tbilisi dominates the market supply and is represented by 70% of all higher education institutions, in total 44 HEIs, when in other regions of Georgia only 19 entities are presented. The domination of higher education institutions in the capital results in large migration of students from other regions and this unequal distribution impacts access and affordability of higher education. Furthermore, the various factors, such as rent prices and living costs in Tbilisi, play a crucial role for accessibility to higher education (Kvakhadze et. al, 2022).

2.4. Number of Education Programs and Students

The total number of accredited educational programs at bachelor level that are offered by all HEIs is 638 and majority of them is offered by state HEIs. At master degree level, 431 accredited programs are provided and 70% of them - by state HEIs. Besides, doctoral level programs are mostly offered by state universities as well, while 74% of Ph.D. students are enrolled in state HEIs (Kvakhadze et. al, 2022).

There is a trend that majority of 18 years old young Georgians choose to continue studies in higher education (Kvakhadze et. al, 2022). According to National statistics Office of Georgia (2022a), there were about 101 000 students in state universities, 58 000 – in private universities in 2021/2022 academic year. The majority of students 71% are enrolled in bachelor programs, 24% - master programs, 3% - VET at universities and 2% - doctoral. Furthermore, in 2021-2022 academic year, the total number of new enrollments at

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[3] State higher education institution is founded by the state in the form of public legal entity. Private higher education is founded in the form of private legal entity.

university was 46,368. Out of this 68% enrolled in bachelor programs, 24% - in master programs, 5% - at VET programs and 2% - at Ph.D. programs (Kvakhadze et. al, 2022).

2.5. Tuition Fees

The tuition for higher education is different between state and private education institutions. The tuition fee at state universities has been unchanged for past years and it equals to GEL[4] 2,250 per academic year both in bachelor and master programs. However, the fees at private universities vary between GEL 2000 - GEL 4000+ and the trend shows that tuitions fees are increasing. For instance, in 2022 average fee of bachelor programs grew by 3% in private universities (Kvakhadze et. al, 2022). Furthermore, it should be noted that average monthly nominal salary in Georgia is 1,595 GEL according to 2022 data (National Statistics Office of Georgia, 2022b). Therefore, the tuition fees comparing to average salary are contrasting.

Analysis of bachelor's degree programs reveals that state universities are more in demand because of their lower tuition, availability of fully financed programs, and wider range of study programs. Additionally, the study places in state HEIs are in higher demand with the ratio of 1.1 on average, compared to private ones with 0.6 ratio. The overall ratio is 0.9, which illustrates the disparity between the supply and demand for places: at bachelor level over the past 8 years 15,000 places were left vacant, which can be reasoned by unpredictable market dynamics and inaccurate expectations by HEIs (Kvakhadze et. al, 2022).

2.6. Government Expenditure

The Ministry of Education and Science of Georgia (MES) is the main actor, which distributes the budget for higher education. There were major changes in the structure of higher education budget in previous years, such as separation of scientific research subsidy from higher education expenses in 2016. Furthermore, in 2017 new category – international education subsidy was added to the education expenses and therefore, government spending on higher education has been fluctuating (Kvakhadze et. al, 2022).

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[4] GEL – Georgian national currency (Lari), 1 Euro equals to 2,75 GEL according to National Bank of Georgia (Extracted on April 24, 2023).

In 2022, 83% of total higher education budget was spent on student grants and 5% on international education grants *(review figure 4, p. 75).* Georgian HEIs get a subsidy for teaching based on the number of admitted students via UNE. The subsidy is in the form of state grant, which is allocated through students to HEIs. Beside the state grants the main income source of HEIs are tuition fees paid by the students. Furthermore, HEIs are entitled to get financial support from the state in the form of scientific research grants, program funding and infrastructural grants (program funding and infrastructural grants only applies to state HEIs) (GRASS, 2018).[5]

The Unified National Exams arrangement costed 11% of overall budget. The graph shows that there has been a slight increase in national exams arrangement expenses over the past years (Kvakhadze et. al, 2022). However, state expenditure on education as a share of GDP remains quite low in the region. The share of education fluctuates between 2-3% of GDP since 2000, which is among the lowest in the region (Chakhaia and Bregvadze, 2018).

2.7. Summary

To summarize, the chapter covered higher education sector and presented different statistical data to describe the major characteristics and trends of Georgian education sector. It was highlighted that the number of private universities surpass the state ones, however, the major share of educational programs is offered by state higher education institutions and the majority of students are enrolled in state universities. Furthermore, state universities are more popular due to the lower tuition fees and variety of programs. The chapter also highlighted that there is a significant discrepancy between the capital and regions in Georgia in terms of representativeness of higher education institutions that affect the access and affordability to higher education. Furthermore, the growth of educational sector was underlined and as the recent trends show, the demand on higher education is gradually increasing. However, the disparity between education demand and supply has been detected due to the unpredictable market dynamics and wrong expectations.

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[5] Detailed information about state funding model is explained in chapter 5.3.9. State Funding and Grants.

3. Policy Design as a Conceptual Framework

The research problem of master thesis will be analyzed from the lenses of policy design. In general, policy design studies policy process and helps to connect policy goals, instruments and outcomes to each other constructed on the evidence-based knowledge of policy instrument effects. Policy design as a conceptual framework will enable to study the policy process of Unified National Examination in Georgia and identify the instrument mix, types of design and design spaces in the process. In turn, exploring the design processes, instrument choices and outcomes of UNE policy will enable to identify the shortcomings of student admission process in Georgia, create a ground for deep analysis and find the ways to address challenges later.

Policy design as a conceptual framework is useful for studying Unified National Examination policy. In general, the better-designed policies have a higher chance of successfully identifying or resolving the issues, as opposed to poorly or non-designed ones, which have a higher chance of failing (Howlett and Mukherjee, 2018). Therefore, studying the policy design process of UNE might guarantee in the future to have more sophisticated system of student admission in Georgia.

According to Howlett and Mukherjee (2018), There is a significant gap in the literature since sometimes even well-designed, well-thought-out, and well-intentioned policies fail as well. Therefore, it is still not well understood how the design process should result in effective policy tool selections, or how effective policy tool selections result in effective results (Howlett and Mukherjee, 2018).

Furthermore, the scholars have identified the *research agenda items* in policy instruments research based on existing knowledge gaps, such as understanding government capacity and its impact on tool choices and use (Howlett, et al. 2020; Capano and Howlett, 2020). This thesis aims to concentrate on this research agenda item to make a scarce contribution to the field and find out the role of government's capacity in relation to design spaces, particularly, in terms of political and technical capacities in UNE design process.

Therefore, this chapter will attempt to present literature review about policy design and explain the main theoretical aspects of it. Analysis of conceptual framework will help to look into the research problem more comprehensively and understand the main design

patterns within the UNE policy-making process. However, before applying and conceptualizing framework to the research problem, it is important to comprehend what does policy design comprise and what are important conceptual aspects of it.

3.1. What is Policy Design?

Policy design is the branch of policy sciences, which studies the policy processes (Howlett and Mukherjee, 2018). Policy design is the form of policy formulation based on the gathering of knowledge about the effects of policy tools used on policy targets, goals and outcomes (Howlett, 2019). Design means that the policy-maker makes purposeful assessment of effects of chosen policy instruments, that may have an impact on policy targets for realizing the desired policy outcomes. Policy design aims to connect policy goals and objectives with instruments (Capano and Mukherjee, 2020).

Studies of policy design underlines how these three aspects of policymaking should be aligned coherently in order to achieve successful results within the public policy, such as: *design processes, instrument choices and policy outputs* (Howlett and Mukherjee, 2018). According to Howlett and Mukherjee: „a superior process of policy formulation ('designing') will lead to a superior set of policy instruments and components ('design'), which will in turn result in a superior outcome than would some alternate kind of process." (2018, p. 5). Furthermore, the idea behind policy design is to improve policy-making and its results (Howlett, 2019).

Designing of policies itself is a complex process and might be hindered by various reasons: such as scarce resources, corrupted or inefficient governing patterns, incompetent actors motivated by personal interests, veto players with powerful capacities, vague goals and strategies and poor policy processes including poor implementation and evaluation of policies (Howlett and Mukherjee, 2018). Policy design concentrates on improving policy-making process and policy outcomes overall, however, not all policy formulation processes have these universal goals. Unfortunately, there might be involved self-interested or corrupted behavior, log-rolling or interest-driven trade-offs between actors, which leads the process to non-design situations (Howlett, 2019).

3.2. Instrument Mix

Policy instrument is the subject of deliberation, which affects all stages of policy process, such as: agenda-setting, policy formulation, decision-making, policy implementation and evaluation. The policy alternatives that are created by policy-makers contain different sets of policy tools. Policy tools sometimes are referred in the literature as policy instruments, therefore, tools and instruments in most occasions have the similar meaning (Howlett, 2019).

Policy instrument studies have a long history, but in recent years, the discipline has become more focused on the effectiveness of tool mixes. Mixes can be defined as combinations of policy instruments that are determined to reach particular objectives. Furthermore, mixes are more effective and efficient rather than one single instrument in reaching policy goals. However, mixes of instruments are very complex, while some combinations of the instruments might not align with each other (Howlett and Mukherjee, 2018).

On the other hand, the choice of a specific instrument is based on different aspects, such as: technical capacity, criteria – efficiency and effectiveness, expenditures, political preferences of actors or interest groups and furthermore, sociological or ideological preferences that inform tool choices. Furthermore, partisan, electoral, legislative and other preferences, such as government habits and historical *modus operandi* also impact the process of choosing tool mixes (Howlett and Mukherjee, 2018).

A policy mix is the combination of various policy instruments or the combination of policy goals and means. Policy mix has components such as strategy and instruments. Furthermore, instruments itself contain concrete tools for achieving policy objectives. It is useful for policy designers to differentiate between core (cornerstone) instruments and complementary (supplementary) instruments within a mix (Rogge, 2018). Tool choice is public policy-making, in turn, policy design is the analysis and comprehension of prospective choices related to implementation activities. The concept that stands behind the design is to „fashion an instrument that will work in a desired manner" (Howlett et, al. 2020, p. 489).

3.3. Types of Design

According to the typology of Capano and Mukherjee (2020), there are following types of design: packaging, patching and stretching. This typology concentrates on the role of the government and also the characteristics of particular issues that are the focus of policy design (Capano and Mukherjee, 2020). Based on this, the following sub-chapters will explain what packaging, patching and stretching comprise, which will help later to understand the design process of Unified National Examination.

3.3.1. Packaging

Policy packages are the new composition of policy goals and instruments that substitute the existing ones in a concrete policy area. New policy mixes or 'packages' can be developed when political reform or a noteworthy expansion in the gap between policy goals and means prompts a considerable reassessment of broad goals which should be given policymaking priority. As an example of packaging, the radical reforms in higher education field can be named, which have been ongoing in various countries over the last decades (Capano and Mukherjee, 2020).

Packaging is the way to replace significantly the existing policy design with the new sets of structure, tools and means. packaging is the ideal way for performing policy design, while it allows large modifications of status quo, where vertical, horizontal and chronological organization of instruments and goals are presented (Capano and Mukherjee, 2020).

However, majority of design styles are *path dependent* and delimited by the historic legacies. Based on this, packaging might be restricted by the strong historical legacies that won't allow deep redesign of a policy. Legacies from earlier decision-making processes can impact the initiation of new components and might hinder the redesign process. When the historical legacies hinder the deep redesign, the accumulation of anomalies is less relevant and intrusive, the government has high capacity and the policy-makers use 'smart patching' for design (Capano and Mukherjee, 2020).

3.3.2. Patching

Patching is second type of policy design content, which simply means 'repairing' of existing policy in order to increase its effectiveness. The policy-makers intervene only partially through patching and instead of proposing totally new sets of instruments and goals, they make slight adjustments of some elements such as tools and/or goals. Patching does not imply the horizontal or vertical organization of instruments and goals as in packaging. An example of patching can be the initiation of only one tool, for instance national test in higher education policy, which won't change other elements of current policy mix but will enforce the coordination of the entire education system (Capano and Mukherjee, 2020).

Patching could be strong (adding significant policy instruments or goals) or weak (making small calibrations) depending on the context and design changes. Furthermore, patching can be designed well with coherent and consistent process or badly without it. Besides, patching might cause issues in terms of coordination in current policy arrangements. Therefore, patching can be smart or incoherent. Smart patching is the way to change some elements of policy without replacing the existing one and furthermore, increase the effectiveness of policy instruments. However, incoherent patching happens when the accumulation of anomalies is significantly high and the government acquires low capacity for intervention. In such situations, policy design is delimited and it might result in incoherent patching or stretching (Capano and Mukherjee, 2020).

The policy-makers intervene partially into the policies through *layering*. The reason for layering might be the lack of capacity or simply no need for extended interventions. The policy-makers use patching and stretching while performing layering or delayering. Layering/delayering is a feature of all policy design, and this mode of design distinctly distinguishes patching and stretching. A design patch typically entails the addition (or deletion) of new tools and objectives in addition to the partial remix of existing components, while stretching denotes the addition of regulations to existing policy sectors that incorporate new issues, solutions, and policy domains in existing policy fields. Thus, layering can be defined as „recurrent pattern of additive design actions" which enables to bring closer the policy-makers' goals and the current policy mix and its components (Capano and Mukherjee, 2020).

Eventually, policy-makers layer everything: such as new regulations, new actors, arenas, goals, ideas and new policy sectors. Layering enables policy-makers to layer or delayer different aspects of policy and furthermore, entitles design for patching and stretching (Capano and Mukherjee, 2020).

3.3.3. Stretching

Stretching is another type of policy design. Stretching occurs when the actual policy instruments are extended over decades or longer to encompass areas they were not initially intended to cover. Stretching is a particularly difficult aspect of policy design because small adjustments to the combination of elements over a decade or more can result in a situation where the elements fail to be mutually supportive, incorporating conflicting goals or instruments and this combination creates perverse incentives that confound the initial policy goals (Capano and Mukherjee, 2020).

3.4. Design Spaces

Governments politcal and technical capacity is vital for policy design process. Policy design focuses on political and technical capacities of government in policy design process, There are different types of design spaces based on the levels of government's technical and political capacity (*review figure 5, p. 18).* The *technical capacity* comprises the evidence-based knowledge about the decision to be made, while *political capacity* emphasize the power of government in decision-making process (Capano, 2018).

Design space 1 is called *optimal policy design*, where government's technical capacity and political capacity are both high. This space is coherent, congruent and consistent, where the government can introduce the totally new package and replace the existing one or in case of political tension, may use patching by adding new instruments or mixes to fit with the goals (Capano, 2018).

Design space 2 – *contradictory policy design* embodies high political capacity of government with low technical capacity, where tense layering or bricolage happens. Tense layering means adding new incongruent and incosistent policy instruments, when bricolage

is a type of patching which re-mixes existing policy instruments on random and poorly informed logic and final outcome of it is inconsistent and incoherent design (Capano, 2018).

Figure 5: Types of design spaces *(source: Capano, 2018, table 1, pp. 677).*

Table 1 Types of design spaces in policy formulation

		Level of governmental technical capacity	
		High	Low
Governmental political capacity	High	SPACE 1 *Optimal policy design* Packaging Patching	SPACE 2 *Contradictory policy design* Tense layering Bricolage
	Low	SPACE 3 *Adaptive policy design* Adaptive layering	SPACE 4 *Poor policy design* Neutral layering

Design space 3 – *adaptive policy design* enables adaptive layering, where technical capacity is high, but political capacity is low. In space 3, even though the government can propose consistent and congruent policy instruments, it is hindered by low political possibilities, therefore design process is conducted within the existing design (Capano, 2018).

In design space 4, the government scores low in technical and political capacities. Here government can pursue neutral layering which means adding new instruments in an unconscious way. Space 4 is named *poor policy design* (Capano, 2018).

3.5. Summary

The conceptual framework chapter discussed policy design as a framework to understand UNE policy design process better. Namely, the chapter covered the significance of policy design for this thesis and explained useful concepts for exploring UNE design process later. Particularly, instrument mix, design types and design spaces were covered. The chapter summarized that instrument mixes are usually more effective for achieving policy goals rather than particular instruments separetaly. Design types such as packaging,

patching and stretching have their own grounds in policy design process. Packaging is the ideal method for coducting policy design and patching and stretching are usually performed through layering. Besides, design spaces uderlined the role of the government's technical and political capacities in design making process and introduced four main design spaces.

4. Methodology

4.1. Research Methods

The research methodology applied in the thesis is qualitative one. According to Creswell (2013), qualitative research is conducted to explore the problem or issue. According to Denzin and Lincoln (2018), When studying phenomena, qualitative researchers observe objects in their natural environments in an effort to understand or interpret in terms of the meaning that individuals assign to them.

Therefore, this thesis aims to explore the policy-making process of Unified National Examinations and bring to the light its main shortcomings and system issues. In qualitative research the data is not presented in forms of numbers (Punch, 2013). Considering this, the thesis attempts to get the data mainly from words rather than numbers and provide the answers to research questions.

Qualitative research uses the following approaches in order to study the research problem: inquiry, collection of data, data analysis and establishment of patterns or themes (Creswell, 2013). This thesis uses the same approach for exploring the UNE design process. The data is collected, analyzed and the policy design patterns are applied to UNE.

The data for this thesis is collected through empirical research and desk-based research. Through empirical research the data is gathered by the researcher on his own, for instance through interviews or focus groups. On the other hand, through desk-based research the data is collected indirectly (e.g. via the internet). Desk-based research comprises gathering qualitative data from existing sources without having direct contact to people. There are different types of data such as primary and secondary. Primary data is original, while secondary data is the description or analysis of primary sources (Bassot, 2022). Hence, this

thesis uses primary and secondary data for analysis. First step of the research was desk-based research and based on that the secondary data regarding the research problem and conceptual framework was gathered. Furthermore, the primary data was collected and analyzed in the thesis.

4.2. Data Collection

The data to study the Unified National Examination policy was collected from primary and secondary sources. According to Creswell (2013), qualitative researchers mainly gather data in multiple forms, for instance, documents, interviews, observations and they do not base their study on a single data source. Considering Creswell's point of view, the data for this thesis was collected through multiple sources, such as secondary and primary sources.

Firstly, the data was collected from secondary sources. Namely the following sources were gathered and analyzed: the legal acts of Parliament of Georgia and UNE policy documents; academic articles, books and publications, annual reports, regulations and declarations of Ministry of Education and Science of Georgia, National Assessment and Examination Center, Statistics Office of Georgia, Ministry of Finance of Georgia, National Bank of Georgia, National Center for Educational Quality Enhancement; reports of international and local organizations, such as The World Bank, Transparency international, Education Policy and Research Association (EPRA), Georgia's Reforms Associates (GRASS), The International Institute for Education Policy, Planning and Management (EPPM) and etc. The up-to-dated legislative acts were accessed through Legislative Herald of Georgia: https://matsne.gov.ge/.

After analyzing secondary data and concluded the literature review, the primary data was collected through in-depth interviews. In total 8 interviews were conducted with different stakeholders, such as: representatives of higher education institutions (academics and administrators), policy experts and public officers.

Namely, the interview was held with the representative of National Assessment and Examination Center (NAEC). Unfortunately, the interview could not be arranged with the representative of Ministry of Education and Science of Georgia. Besides, one exam evaluator was selected for interview, who was hired as an exam evaluator in 2021-2022.

The interviews were conducted with the representatives of 2 private universities, which are smaller in terms of size - Free University of Tbilisi, Agricultural Univeristy of Georgia and the representatives of 2 state universities. One of them is the second biggest university in Georgia - Ilia State University and second one is smaller, located in different region - Batumi Shota Rustaveli State University. Three other universities are located in the capital. Also for interviews, 2 policy experts were selected, who have more than 10 years of experience in education policy field with academic experience and work experience in different public offices in the past. In total 8 interviews were conducted.

The respondents were asked for interviews via email and telephone calls. The description of research was sent them in advance via email. The interviews were held online via ZOOM application and all of them were recorded. The recordings were used later for writing the interview briefs. The questionnaires for interviews were prepared in advanced based on research topics according to the different respondents. The interview questionnaires were semi-structured with open-ended questions, which helped to investigate the additional issues or aspects freely during the in-depth interviews. The questions for respondents were based on their experience and relation to UNE policy. Therefore, the representatives of the universities, public officers and policy experts were asked slightly different questions. The interviews were approximately 30-45 minutes and conducted in Georgian language. The interviews were coded and provided in the form of briefs. The briefs were translated and written in English, which comprise all of the important topics mentioned during the interview. The questionnaires and briefs are presented in Appendix II and III respectively.

4.3. Limitations

Even though the most parts of data collection went smoothly and without restrictions, still there were some limitations in the data collection in terms of accessing to some sources. First of all, due to the data unavailability it was not possible to find many studies about the relation of UNE and corruption, which can be used as an evidence that the corruption has been totally eliminated. Due to the fact that the data unavailability in some aspects of research problem was apparent, the data was also collected through primary sources/interviews.

Furthermore, unfortunately, it was not possible to conduct the interview with a representative of Ministry of Education and Science of Georgia, despite the fact that they were contacted a few times. During the conduct of this research, the Minister of Education and Science has been changed and due to the organizational changes in ministry, it was not possible to arrange the interview with them. Despite this fact, the positions of ministry have been analyzed through their statements and published documents. However, for research purposes it would have been advantageous to have in-depth interview with the representative of ministry as well.

5. Overview of UNE Policy

This chapter will overview the literature and legislation around Georgian educational system and in particular, about the Unified National Examination policy. It will describe the student admission process in Georgian HEIs within two main periods: period before 2005 and after 2005, while Rose Revolution in 2003 was a turning point and followed by the transformative reforms of Georgian education system from 2005. This chapter will attempt to present the historical overview of UNE policy and its main reasons behind it. Furthermore, the chapter will summarize the main changes and reforms of the system that took place through these years. Besides, the chapter will explain how the UNE system works in practice at the moment, what are the main policy tools deployed in the system and how the design of UNE policy has been changing over the years. However, first of all, it's reasonable to look at the times when the policy was launched, which will help to understand the design process of the system later.

5.1. Period before 2005

Georgia has been a part of the Soviet Union for 70 years, therefore, not surprisingly the higher education system was similar to other soviet republics. During soviet times, all HEIs were owned by the state and were classified according to study fields and location. The transformation of higher education in Georgia started after the collapse of Soviet Union and gaining the independence in 1991. The first major change was the transition from state-run economy to market economy which, in turn, was followed by the

privatization of HEIs. Furthermore, the narrow fields of specialization was broadened. However, first transitional period of Georgian education system until 2003 can be characterized with poor governing capacity at central administrative level and lack of unified vision and coherent national policy due to the lack of experience and methodological knowledge (Chakhaia and Bregvadze, 2018).

The post-soviet path of Georgia was reflected in higher education system. The period before 2005 for Georgian education system was embedded in corruption, bribery and nepotism. The "Rampant Corruption" was the main character of Georgian higher education admission process as well as academic process in 1990s and early 2000s (Chakhaia and Bregvadze, 2018). The main reasons behind corrupted practices were the instability after gaining independence, lack of control and chaos of post-Soviet transition (Orkodashvili, 2012). Furthermore, in 2002 the average salary of university professor was about 60 GEL, which was incredibly low, less than half the minimum subsistence level, therefore, taking the bribes was considered as an acceptable way to survive the difficult economic situation. Besides, there were numerous private institutions, so called "diploma mills", which were open in small apartments with one "professor" and the corrupted practices were so common in such institutions (The World Bank, 2012).

While the admission process was administered by each university that time, the process was an important income source for those who were involved in admission process. Depending on the prestige of university and the program, the future students and their families were paying up to 20,000 USD for enrollment to university (Chakhaia and Bregvadze, 2018). Therefore, it was quite difficult to be enrolled into desired program without paying any bribe.

During 1990s, the admission process was remained same as during soviet times: applicants were asked to pass university-level exams (while majority of them were passing them by paying bribes), there was no option to apply to different universities at the same time and the mobility between universities was limited. During that time the duration of study programs was 5 years for all faculties and departments, however, from 1996s universities started to shift to Anglo-Saxon model with two-tier system consisted of 4-year bachelor and 2-year master programs, which was the attempt to get closer to Bologna Process (Chakhaia and Bregvadze, 2018).

The corrupted system was admitted by the Parliament of Georgia in 2002 and recognized as non-transparent, non-meritocratic and elitist system which contradicted the objectives of transparent access and high quality (Orkodashvili, 2012). However, the fundamental reorientation of the system has not been started until 2004.

5.2. The Rose Revolution and Transformative Reforms

The Rose Revolution in November 2003, followed by the reform waves started in 2004, was transformative not only for educational system, but overall for all public fields in Georgia. The transformative reforms based on the principle of deregulation and liberalization grew steadily country's economy. Furthermore, those reforms eliminated corruption and increased efficiency and flexibility in public services, which were based on the principles of market economy and New Public Management. Hence, Rose Revolution was a significant moment for transformation of the country and making it a post-Soviet success story (Chakhaia and Bregvadze, 2018).

The current Unified National Examination policy was launched that time. The UNE policy is one domain of anti-corruption policies pursued by the Rose Revolution government. The higher education system was not only the part of the extensive reform package, but it was the most outstanding and highly debated as well. The main drive of the reforms was the elimination of corruption in higher education, therefore reforms were genuinely top-down and not driven by the HEI community (Chakhaia and Bregvadze, 2018).

The corrupted practices hindered three important aspects of education, such as: access, equity and quality. The intensive reform waves against corruption was conditioned by Georgia's aspiration to join NATO. This aspiration forced the government to implement new and radical reforms against corruption (Orkodashvili, 2010). One of the main goal of foundation of Unified National Examinations in 2005 was the eradication of corruption in admission process, therefore centralized and standardized examination was the solution. Besides, another goal was to give access to disadvantaged students and make admission process based only on meritocracy, where the financial background of the family would not have any impact (Chakhaia and Bregvadze, 2018).

Georgian case can be considered as successful example how the severe corruption can be tackled in short period of time. Three main reforms were conducted during that time in

higher education to harmonize with EU educational area: 1) establishment of Unified National Examination, 2) establishment of Accreditation and Quality Assurance System (QAS) and 3) restructuring of academic and administrative staff (Rostiashvili, 2011; Orkodashvili, 2012). The transformative reforms included legislative change, institutional reforms and development of information and communication technologies related to Bologna Process (Rostiashvili, 2011).

The UNE reform included the four main aspects: establishment of centralized entrance examination, making it secure and transparent, improving quality of education in HEIs and communicating the reform goals with the public. Furthermore, education quality was one of the important elements of reform package for tackling the corruption in higher education. Therefore, in 2005 the Ministry of Education and Science of Georgia conducted the institutional accreditation of HEIs to reduce the number of low-quality HEIs and correspondingly, the number was minimized from 237 to 43. Restructuring and retrenchment of university staff was another main reform within the package. During 2006-2007, most of the professors at state HEIs had to reapply to their positions through a competitive process and about 10% of them were not rehired, which caused outrage in public and media (The World Bank, 2012).

There was a surplus of professors and state universities were given legal instrument to maintain people who were beneficial for their programs and fire the rest. Furthermore, the reorganization of state universities and merging different institutions was one of the bases of the reform. The state provided compensation fund and the fired professors were receiving academic scholarship for 3 years. The remained staff was given higher salaries. Another way would be initiation of criminal cases, however, it was impossible because of numbers and political situation. Besides, qualifications framework was created and the staff was re-evaluated. The creation of quality assurance mechanisms also established the base for harmonization of the staff with authorization and accreditation requirements (referred to interview №2 and №3). Before the reform average salary of a professor was about 60 GEL per month, which was extremely low, less than half the minimum subsistence level (The World Bank, 2012), minimizing the surplus of professors enabled to increase the salaries for remained staff.

The security was the main priority within the UNE reform for elimination corruption and building up the public trust. To give an example, exam tests were printed at the Cambridge University printing house in England, the sealed documents were sent to Georgia and placed in the National Bank of Georgia with a police security. During the test day, 700 local proctors, with 72 Georgian and 20 foreign observers and the international organizations (e.g. Transparency International) were observing the exams. Besides, police officers and doctors were also mobilized to ensure security and health of applicants during the examination period. The test answers were barcoded to eliminate the bias during assessment. Every testing room had closed-circuit television cameras installed so that parents could watch the proceedings from a waiting area outside. To increase transparency, completed tests were digitized and made accessible online and the appeal process was established (The World Bank, 2012).

The UNE policy also changed the public funding procedure of HEIs. Before the funds were allocated directly to HEIs based on number of students, staff, specific needs and etc. Within UNE system the funds are allocated through the students based on their results in UNE examination and in this mechanism both state and private universities are included (Chakhaia and Bregvadze, 2018).

The UNE has been one of the most effective policies for eradication of corruption in HEIs, which eliminated two most corrupted practices: admission bribes and extortion of private tutoring fees for entrance examination preparation. Hence, the UNE minimized the illegal flow of US$50 million that was spent on university admission bribes. Even though, nowadays private tutoring still exists, it has genuinely preparatory purposes for entrance examination and compensates low quality of school education without any direct impact on entrance examination process (Rostiashvili, 2011).

The reforms in higher education had immediate painful consequences, however, for long-term it brought positive outcomes and also promoted public awareness. The UNE was admitted as a positive change by the most of the public in Georgia, while people started seeing the immediate benefits of transparent admission procedure. Some studies argue that the UNE increased the accessibility to higher education for ethnic minorities and low-income students from rural areas (Orkodashvili, 2012; Orkodashvili 2010). The UNE opened up the competition among universities as well, while before the UNE, the system

allowed to apply to one program only. The UNE gave applicants more choice by applying multiple programs that increased the competition respectively (The world bank, 2012).

The success of UNE reform was based on strengthening of accountability framework. The autonomous organization (NAEC) was controlling the entrance examination and university insiders could no longer impact the admission process, therefore, students couldn't pay any bribes. NAEC's extensive security measures prevented the officials to impact the exam results as well and promoted the corruption-free environment in admission process (The world bank, 2012).

There were multiple reasons behind the success of UNE policy. First of all, the main drive of the reform was political will to transform the system into a transparent and merit-based admission procedure. Furthermore, the simultaneous reforms in higher education helped the higher education system to recover. The UNE was not the only reason for tackling the corruption in higher education, rather quality assurance reform and restructuring of HEI staff helped the elimination of corruption. Besides, the effective communication to the public about reform reasons was important for building up the public support. Lastly, the measures taken for security, integrity and transparency of the examination process was crucial. The sustainability of UNE reform now is based on the maintenance of established institutions, executive means and supporting them by checks and balances system (The World Bank, 2012).

To summarize, the period before 2005 can be characterized by chaotic development and lack of vision and coordinated reform effort embedded in corruption and lax regulations. The period after 2005 was significantly transformative for Georgian higher education system, however, government implemented reforms with top-down approach and HEIs were passive receivers of these changes (Chakhaia and Bregvadze, 2018).

It should be noted that according to Transparency International (2004), Georgia was placed at 133 place in Corruption Perceptions Index 2004 out of 145 countries, which was incredibly low indicator and indicated highly corrupted environment in the country. However, according to the newest data, Georgia ranked 41 out of 180 countries in 2022, which indicates the huge development of the country in terms of corruption perception

(Transparency International, 2022).[6] Despite the significant improvement in Corruption Perception Index, there is still research gap in terms of corruption and UNE relation. As one of the respondents mentioned:

"Another problem is that, before the agency was purposefully hindering the disclosure of data to interested groups and journalists. Today it happens rarely. The reasons were that this is personal data or we don't provide such data and etc. Therefore, there is only just a few studies around UNE, because of unavailability of data, not much research was done about the reality of this system" (Referred to interview №5).

Based on this, it is difficult to provide much inquiry about the concrete academic sources that evidently prove that corruption has been completely eliminated. Also the viewpoints of respondents are interesting in terms of corruption elimination. As the first respondent mentioned, the UNE helped to eliminate corruption in higher education sector (referred to interview №1). Another respondent indicated that corruption threats still exist, however, UNE is the tool that minimizes the risks and with other alternatives the more fundamental risks could be at stake. Besides, UNE has a high trust from society and there are usually no doubts about its mechanisms (referred to interview №2).

Corruption elimination was a main base for system recovery, while before launching the UNE, there was a very low trust to university admission process, therefore, the UNE also had an anti-corruption characteristic. Besides, the policy expert comments: the people who were working on UNE policy design were so devoted to their work and this excludes the chances for corruption, because devoted people never deviate from their duties. Besides, the mechanism of UNE is quite difficult to break. The tests are placed in special computer software and someone would need to crack it down in order to get the exam questions. Such cases would become scandal if happened ever (referred to interview №3). Another respondent mentions:

"The corruption schemes can't be eliminated totally, however, before there was a huge scale of corruption and this has been definitely minimized within the UNE. [...] The UNE reduced that and one of the mechanisms of that was the coding of answer sheets. This is the universal approach and if someone does not know the name of concrete applicant, it

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[6] However, it should be noted that Corruption Perceptions Index is based on citizen's perception about corruption.

would be very difficult to manipulate the system, I think that the rate of such cases would be very low" (referred to interview №4).

The respondent also mentions the argument that in the most successful and prestigious universities mostly applicants without any financial background are enrolled, that emphasizes the meritocratic characteristic of the system. Respondent 7 comments that the biggest achievement of UNE was the exclusion of corruption: "I have experienced both systems. UNE is the victory of our state" (referred to interview №7). The interviewee mentioned that he have not heard any corruption cases after the establishment of UNE.

Besides, the representative of NAEC explains that the UNE promotes the fair and equal admission procedure. However, the corruption issue is not tied directly to the agency and the elimination of corruption was the side-effect of UNE, not the main goal. As the main goal, the respondent identifies to select adequate and skillful persons for the programs, who are accepted at the programs with 'healthy' competition. She mentioned: "Therefore, the fact that corruption does not exist anymore, is the outcome of centralized system in general, not only the UNE. However, the agency does not fight directly against the corruption, there are other institutions for this" (Referred to interview №6).

As the primary data shows, there are not many sources that empirically proves that corruption in admission procedure is totally eliminated. There are not publicly known facts about corruption cases, therefore, the society believes that it doesn't exist. Another argument is that the corruption had such a huge scale before and now the scale is minimized by the particular measures, however, total elimination of it is difficult to prove empirically.

5.3. How UNE works in Practice?

5.3.1. Goals of UNE

The Unified National Exams examine the readiness of the applicant for studying at higher educational institutions. The exams check the knowledge, skills and abilities of school graduate, who wish to become a bachelor degree student. According to the Regulation of Unified National Exams Performance (Order No 19/n), the UNE policy has its own pre-defined goals. The goals of UNE are: a) to ensure the objectivity and transparency of entrance process at higher education programs; b) to give opportunity to the applicants to reveal their skills and abilities (art. 3). As it was mentioned, The UNE was launched in 2005 to eliminate the corruption in entrance process of higher education institutions. Before 2005, favoritism, nepotism and bribe payment were the main patterns in higher education of Georgia (Orkodashvili, 2012). Therefore, the primary goal of the UNE is to create the transparent and objective environment for enrolment at universities without nepotism and corruption and furthermore, give candidates a chance to demonstrate their knowledge and abilities in a fair and equal procedure.

5.3.2. NAEC – National Assessment and Examination Center

National Assessment and Examinations Center (NAEC) is the state agency, which is responsible for conducting Unified National Examinations. The agency except UNE also conducts other types of exams, such as: teachers' examination, school Olympiads, master examinations, vocational examinations, student grant competition and might also have private projects (referred to interview №6). The center conducts the whole process of UNE from registration and preparation of examination until the enrollment of an applicant into the higher education institution. The Ministry of education and Science of Georgia (MES) coordinates the conduct of Unified National Exams. NAEC ensures the conduct of it (Regulation of Unified National Exams Performance, art. 11). MES and NAEC both are important actors in UNE policy-making process. Ministry sets policy goals, decides upon policy instruments, while NAEC is responsible for the implementation of the policy.

The necessary space and buildings for national examination is allocated from state-based educational institutions (art. 11). The National Examinations are held in 11 different cities:

Tbilisi, Batumi, Zugdidi, Kutaisi, Poti, Akhaltsikhe, Gori, Ozurgeti, Rustavi, Telavi and Khulo. The exams are conducted in 25 exam centers (NAEC, 2021).

National Assessment and Examination Center has 25 different structural units, such as: directorate, administration, audit department, public relations department, legal department, financial department, exam organization department, subject's test approbation department, registration and process management department, IT department and IT provision department, scanning department, research and psychometric department and each subject department (Order No 938-19, art. 1). In total, NAEC has 180 employees including subject groups (NAEC, 2023b).

NAEC develops tests for each subject of Unified National Exams, general assessment criteria and evaluation schemes (Regulation of Unified National Exams Performance, art. 12). Furthermore, the centre evaluates the answer sheets (by hiring evaluators for each subject) and organizes all the processes related to the performance of Unified National Examinations. Moreover, after the evaluation of exams and having the final results, the center creates the coefficient ranking document upon which each applicant is allocated to the specific academic program (art. 31).

The answer sheets are barcoded and evaluated anonymously minimum twice by the two different independent evaluators and the score received after second evaluation is final. If there is a bigger difference between two evaluations than it is defined by the evaluation scheme, then the third person evaluates the test again and this score is final. The answer sheets should not have any identification sign of a student, otherwise it is not evaluated (Regulation of Unified National Exams Performance, art. 24). The applicants are also entitled to appeal the results of their exam and the violation of the testing procedure with special commission (art. 27). The process of correcting the answer sheets is completed for all of the Unified National Exams within one month after the end of the testing in all subjects. The results of each subject is published on the website of NAEC within this one month (art. 24).

The financial sources of the center are: a) memberships and contributions; b) targeted funds allocated from the state budget; c) income received from the execution of the state orders; d) income received from the work performed on the basis of the contract; e) other incomes permitted by the legislation of Georgia (Order No 93, art. 4). The budget to

NAEC is allocated from the state budget of Georgia. According to state budget of Georgia, 15,128,500 GEL were spent on organizing exams in 2022, out of this almost 4 million were dedicated to salaries. Besides, NAEC itself is separately financed within the budget by 4,328,500 GEL (Ministry of Finance of Georgia, 2022).

As policy expert remarked, the agency has a quite big budget that they shouldn't have budget problem: "considering that school exams have been abolished and they still have approximately the same budget, I don't think so that they have problems with capacities or budget" (referred to interview №5).

5.3.2.1. Subject Commissions and Exam Evaluators

National Assessment and Examination Center has subject commissions/groups in each UNE subject. The main duty of subject commissions is to work on test tasks for all of those exams that NAEC is conducting. There are around 2-5 employees in each subject commission, which are mostly regular employees of the agency. However, sometimes they can be hired temporarily as well, while not all of the tests need the whole year to be worked on. These subject groups also select evaluators, conduct trainings for them and develop evaluation schemes (referred to interview №6). As the representative of the agency explained:

"The evaluators are temporary employees. The subject commissions and evaluators collaborate together in creating evaluation schemes. The public competition for selecting evaluators is not mandatory by the law. The subject commissions decide how would they collaborate with evaluators. [...] Also the results of previous year evaluations are considered, the analysis of which evaluators' evaluations was changed after the appeal and based on that they decide to continue collaboration or not. Therefore, there is not always an open public competition. Sometimes there is open competitions for rotation, but sometimes it might not happen, the subject group decides it according to necessities" (referred to interview №6).

The evaluators are divided according to tasks and each task has its own evaluator. As one of the respondents told, who was working as an essay evaluator in English exam:

"There was a competition when I was hired as an evaluator. There was a multiple step competition: firstly, we wrote essays, then we evaluated essays and they have checked how we were evaluating. They required bachelor and master degrees and also language certificates, I think the minimum requirement was C1 level. My generation and people before me as well, were hired by competition, but maybe older evaluators were not in the beginning. There was a training every year before the evaluation process. It doesn't matter how much experience you have, the training is mandatory and it was practical training, we were evaluating papers together and then comparing that we had a same score" (refereed to interview №8).

In 2021-2023, there were about 150-200 evaluators for just English exam according to the respondent. The salary is based on the number of evaluated papers. The evaluators usually have the restriction about the number of papers they can evaluate each day. For instance, in English exam they could evaluate 60 essays per day. As respondent mentioned:

"It was prohibited to evaluated more than 60 during 24 hours. For instance, they were giving 400 papers and 10 days' deadline for this. Each essay requires averagely 3-5 min for evaluation. There were cases when blank papers were sent (some applicants might not write essay), even though the blank papers, you were not allowed to exceed 60 papers per day" (refereed to interview №8).

5.3.2.2 Security Measures

There are several measures that are taken by the agency to protect the anonymity and security of the exam process. First of all, all the exams are observed by cameras and monitored through video recording. In the beginning of UNE, the tests were printed abroad that needed special security measures for protection that time. However, at the moment the exams are held in hybrid format, that means that tests are placed in computer and answer sheets are paper-based. The security measures are taken for answer sheets' protection. Besides, the tests itself are secured electronically. The agency has the special software and privacy mechanisms for this. Before the exams, the tests are placed in a computer, which does not have internet connection and the software is accessible by 1 or 2 employees in the agency. Only at the start of the exams, the tests are simultaneously sent to exam centers via this software. The tests are hybrid format, because fully moving to electronic model is not

feasible at the moment because of lack of IT skills in secondary education. While the school format is mostly based on hand-writing, if would be unfair to require applicants in admission examination to write exams on keyboard and the speed of writing is also considerable (referred to interview №6).

The answer sheets are barcoded and there is no name placed on it. All the answer sheets are scanned and evaluated through special software E-marker, where the evaluators can access with their username and password. The evaluators receive papers for assessment electronically. The system randomly selects two different evaluators and sends them the same paper. When they open a sheet, the only identification sign they can see is 5-digit number, there is no name or surname of the applicant. If there is any sign of identification or written a name that cause some doubt, the evaluators send this paper to 'problematic group' and those papers are reviewed separately in case of doubts. The papers which contain identification sign are not evaluated (referred to interview №8).

Another security measure is that the evaluators are divided into tasks, for instance, essay evaluator, open-ended questions evaluator and etc. So one evaluator is not assessing one students' whole answer sheet. It minimizes risks for possible corruption bargains.[7] Besides, one paper is evaluated at least by two different evaluators independently, and third one is checking if there is any difference in scores. As the respondent explained:

"I was a first evaluator, second one was evaluator with more experience and the third one - team lead. Two evaluators were assessing paper independently and then team lead was comparing their assessment. If there was less than 2 points difference, team lead was writing the score, which was the highest. If there was more than 2 points difference, then team lead evaluating the paper third times and she was giving the score." (referred to interview №8).

Besides, the evaluation criteria are publicly available. Another measure to exclude bias is to minimize the open-ended questions and involve more multiple choice questions, where the exact correct answers are available and the assessment is not depended on the evaluator's individual perceptions. However, this is not possible in all of the exams, but

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[7] To imagine an example that evaluator is helping to a student and have corruptive bargain, he/she can only evaluate student's essay and other parts of the test will be evaluated by other evaluators, who are in a different team.

where there are multiple choice questions, this risks for bias are more secured (referred to interview №5 and №8).

Besides, the evaluators are prohibited to participate in evaluation, if their family member is an applicant that year. As the respondent mentioned: "I know one woman, whose daughter was applicant that year and she was not allowed to work that year." (referred to interview №8). This restriction also minimizes risks for bias. However, in reality this still could be difficult to be identified and excluded by the agency.

5.3.3. Examination Procedures

The Unified National Exams are held in written form or/and electronic form, through testing. Test in an electronic form is conducted by a special computer program (Regulation of Unified National Exams Performance, art. 7). The UNE is held once in a year during summer period. The applicants take each exam on different dates, however, there is no possibility to retake the exam in the same year in case of absence, but because of Covid-19 pandemic the additional exam sessions were held for Covid-infected applicants (NAEC, 2021).

An applicant is enrolled at the university by passing Unified National Exams. The future students are required to possess full general education certificate - Atestate (Regulation of Unified National Exams Performance, art 9, par. 1) and pass all required subjects with fulfilment of minimum score requirement. However, there are some exceptions from this general rule. According to Law of Georgia on Higher Education, exceptions are: person who acquired full general education or qualification in foreign country, they do not necessarily need to pass the UNE (art. 52), Furthermore, for theological programs not all UNE subjects are required to pass. Besides, for art and sport programs, as well as military educational institutions, the law imposes the different approach: applicants should pass Unified National Exams and the additional competition defined by the higher education institution (art. 5).

The applicants register on the website of www.naec.ge for Unified National Examination with paying the fee in prior (Regulation of Unified National Exams Performance, art. 15). There is set a fee for UNE, which amounts 10 GEL for each subject (art. 10). The applicants make a choice for academic programs on the website based on the principle of

priority. The applicants create a list of programs from universities based on their preferences and they put them in order. The principle of priority means that the first program on the list has priority toward the next one and so on. The applicant is entitled to choose the academic programs unlimited based on the third compulsory subject that they take (art. 14). The third compulsory subject is different for different types of study fields[8].

5.3.4. Unified National Exam Subjects

The Unified National Examination have different sets of subjects. Subjects are mandatory or additional. There are several mandatory subjects imposed by the law: 1. Georgian language and literature 2. Foreign language (English/German/French/Russian – choice of HEI) and 3. third subject, which is defined by the Regulation as a mandatory subject for each study field (Regulation of Unified National Exams Performance, art. 6). Annex N3 of the regulation sets subject/group of subjects that are required as a mandatory third subject in each study field. For example, for social science programs third mandatory subjects are: mathematics, history and geography (Order No 19/n, Annex N3).

The applicant has a prerogative to choose from the group of subjects and take one or several of them according to his desired study field. However, the university is obliged to accept students based on all subjects defined as third subject. It is defined by the law that at least 10% of place quotas should be assigned to each third subject (Regulation of Unified National Exams Performance, art. 6). Every applicant is obliged to pass the three mandatory subjects at least: Georgian language and literature, foreign language and third subject (according to study field).

For instance, for social sciences program, the applicant will pass Georgian language, foreign language and mathematics, history or geography (the applicant can take 1, 2 or 3 of them as well upon his decision). However, the HEIs in their social sciences program will receive applicants based on those three subjects (math, history and geography), they will

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[8] The only restrictive factor for an applicant for putting every program in the system is third compulsory subject, while third compulsory subject is different for different study field programs (it can be mathematics, history, physics, biology or etc. for different programs). However, if the applicant takes more than 3 exams, in theory it is possible to apply to every program. However, with 3 compulsory subjects it is still possible to apply to different study field programs, while e.g. history or mathematics is required in many other programs.

allocate number of places/quotas according to each subject, considering at least 10% of places for each subject.

Furthermore, the higher educational institutions are entitled to impose additional exam within Unified National Examination (Regulation of Unified National Exams Performance, art. 6). Additional exam can be in: physics, chemistry, biology, General Ability Test (GAT)[9], geography, literature, fine and applied arts and civic education. The additional exam should be different from third compulsory subject exam (art. 6). Moreover, with art, sport and military educational programs there is an exception, universities can impose internal competition with national exams, which is compulsory for applicants as well (art. 5).

Additional exams are also held by NAEC. It allows the HEI to have additional exam on top of 3 compulsory ones. But usually HEIs don't set the additional exam because of competition (less students choose those programs that require additional exam). For instance, all respondents from universities mentioned that they do not set additional subjects, while it makes their programs less competitive that affects the quality as well. There was one university which mentioned that they used additional exam in their programs a few years ago, however, since other HEIs did not set additional subjects, still the competition was within the three subjects and their additional fourth subject didn't impact the admission process much (referred to interview №1, №4 and №7).

Besides, according to Regulation of Unified National Exams, higher education institutions can set additional requirement/requirements to any program, which can be mandatory medical examination, passing a specific foreign language, passing the competition in case of a program that does not belong to art, sport and/or military educational programs and etc. (Regulation of Unified National Exams Performance, art. 13, par. p). Only one respondent from university mentioned that they use additional requirement only to architecture program, because it is not considered as an art program and they are excluded the chance to use the admission rule of art programs for architecture program. The additional requirement for architecture program is internal competition, which is mandatory (referred to interview №1).

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[9] General Ability Test (GAT) is similar to SAT in USA (EPRA, n.d.).

There is minimum score requirement for each subject. The minimum competence threshold for mathematics and foreign language is 20% of maximum score, for General Ability Test (GAT) – 30%, and in any other subject – 25%. The HEIs are entitled to increase the required threshold in each subject for their programs, however they are not allowed to decrease this threshold (Art. 7). For instance, one of the representatives of university mentioned that they require higher threshold for English exam rather than minimum required threshold (referred to interview №7).

5.3.5. The Competences of Higher Educational Institutions

The higher educational institutions define the number of available places for each program in every year. The HEIs define the quota of available places for each UNE third subject (Regulation of Unified National Exams Performance, art. 13, par. 3/d). It is mandatory for HEIs to define at least 10% of places for each third subject, if there is defined group of subjects for such study field (art. 6). The HEIs consider different points when they decide number of places in each program:

"1) Approval within authorization to whole HEI (can't exceed this number/active students number) 2) places for mobility 3) internal capacities – considering the internal resources: teachers, number of groups, rooms and etc. 4) education market trends analysis – the choice of students (1st place, 2nd place…) 5) mobility rates also shows the demand for programs 6) results of last year's admission" (referred to interview №1).

 Also the HEIs define quotas for each third subject according to program goals and results. As one of the respondents mentioned: "For instance, if history is more important for the program study field the more quotas comes to this subject. E.g. civil education is easy to pass, we set less quotas for this subject" (referred to interview №7).

The higher educational institution for each academic program assigns coefficients to the subjects of the national exams, the sum of which equals to 12 (Regulation of Unified National Exams Performance, art. 7. Par. 7). Those coefficients are used later for allocation of students to different programs. The universities have the possibility to define coefficients for each UNE subject based on their preferences. The HEIs take into consideration a few points while deciding coefficients:

"1) if the subject is essential for the field/program, 2) the third subjects should have the same coefficient when there are group of subjects, so we take into consideration not to have too high coefficient to third compulsory subjects, because sometimes the required subjects are not logically assigned to the field. The system is inflexible in this sense and making a compromise is needed, 3) considering overall results of each subject in the cohort, which helps to maximize the applicants scores and is beneficial for them. For instance, if they have better results in Georgian language, HEI gives higher coefficient to this subject" (referred to interview №1).

To understand the system better, it will be useful to explain the practical example. For instance, for social sciences bachelor program the compulsory subjects are: 1) Georgian language 2) foreign language and 3) third subject (by law it should be mathematics, history or geography). The HEI accepts applicants based on those three subjects, because the quota for each subject should be at least 10%. The HEIs assign coefficients to each subject. For instance, Georgian language – 4, foreign language, - 5, and third subject – 3, which in total equals 12. Those coefficients later are used into allocation process. Student's scores in each subject are multiplied by those coefficients. Within this process, the higher is the coefficient for a particular subject set by the HEI, the more influence can the HEI have on the process. In this particular example with such allocation of coefficients, the HEI prioritizes a little bit more the students who know foreign language better.

5.3.6. Ranking with Coefficients

The coefficient ranking document is created by NAEC to allocate each applicant to the academic programs. The document is based on various parameters: 1. the number of available places for each program; 2. Final competition score received by the applicant; 3. Priority listing of programs created by the applicant and 4. Coefficients of exam subjects defined by HEIs (if coefficients are identical, then subject priority) (Regulation of Unified National Exams Performance, art. 31).

In the end of the evaluation process, each applicant has a final competition score, which is taken into consideration into the coefficient ranking document for allocation to the program. Firstly, every applicant receives a score in each subject test, which is placed on a

unified standard scale according to the psychometric parameters of the test and a scaled score of the subject is obtained.[10] Then the scaled score is multiplied by the coefficient of the subject announced by the higher educational institution and a specific score is obtained. Eventually, the specific scores of all subjects are summed up and the final competition score is received, which is placed into coefficient ranking document (Regulation of Unified National Exams Performance, art. 31). All the calculations based on this formula are conducted through a special computer software, several groups are working on that and they compare the results to each other (referred to interview №6).

If the applicant won't be allocated to the academic program which is the first on his priority listing based upon this abovementioned procedure, then his candidacy is considered on the second program in the list and so on. If the applicant is allocated to any of the programs from the list, then his candidacy is not considered to the next program from the listing (art. 34). The applicants are allocated to programs based on the available places on the program and their final competition score. The highest is the final competition score, the more chance has the applicant to obtain a place in the program.

Based on the coefficient ranking document, the final results of Unified National Examination are released on the website of NAEC, where each applicant can view in which university and program was he allocated (art. 34). Final results are available to each applicant individually by accessing the website with special username and password assigned during the registration. The enrolment of students in the higher education institutions is based on coefficient ranking document. The coefficient ranking document is published publicly on NAEC website keeping in mind the protection of personal data. The HEIs are obliged to receive an applicant based on coefficient ranking document at their bachelor program, register them in the university and sign the contract with them (art. 39).

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[10] As the representative of NAEC explained: "*We have a psychometric group, philologists and mathematicians who worked on scaling formula. The equalization of scores happens in different test variants, if any of them was more difficult. Scaling scores procedure is used because minimum and maximum scores are different in different subjects. For instance, in Georgian language 80 scores out of 80 and in English – 80 out of 100, doesn't equal to each other and it wouldn't be fair to sum up this together. Therefore, scaling by psychometric parameters helps to have a fair procedure. All scores are placed on one scale for instance, 200 scale and it is defined by the special formula that 80 in Georgian language exam equals to 200 on this scale and 80 in English equals to – 160.*" (referred to interview №6).

5.3.7. State Funding and Grants

Allocation of state funding is an important aspect of UNE policy. Before the UNE reform the state funding to HEIs was directly assigned based on different criteria: number of students, staff and specific needs (Chakhaia and Bregvadze, 2018). However, the UNE replaced this model with the new system. Namely, the state funding is allocated through students in the form of a state grant which is based on UNE results.

According to Law of Georgia on Higher Education, the HEIs are financed through various sources: 1. Tuition fee, that is paid by state grant (only applies to accredited programs); 2. income from grants, donations or bequests; 3. State grants for academic and scientific research allocated through competition; 4. Program funding allocated from ministries (to state HEIs) and 5. Other legal incomes, including incomes from economic activity (Regulation of Unified National Exams Performance, art. 79).

The state funding to HEIs is allocated through grant system and it is one of the main sources for HEIs to receive financial support from the state. The maximum amount of state grant to each student is 2,250 GEL per year. The income source for HEIs are also tuition fees paid by the students and other private grants or economic activities (GRASS, 2018). One of the representatives of HEIs explains that HEIs are obliged to attract as many students with state grants as possible to have some funding from the state (referred to interview №4).

The state funding allocation through grants is based on Unified National Examination results and is tied to individual student (Order No 19/n, Annex 2). The students have an opportunity to receive the grant from the state for studying at accredited programs at HEIs. There are different options: 50%, 70% and 100% grants (Chakhaia and Bregvadze, 2018). The grant for the academic program will be obtained according to the absolute score received in the compulsory subjects ranked from the highest to the lowest, in accordance with the absolute score ranking list and the procedure established by the Georgian legislation within the scope of the annual amount of the grant allocated for the academic program (Order No 19/n, Annex 2, art. 3).

Except state grants, Ministry of Education and Science of Georgia also provides need-based scholarships to disadvantageous groups, such as: students from mountainous regions

or occupied territories, war victims, ethnic minorities, socially unprotected students (Orkodashvili, 2011). Besides, the ministry provides full funding of particular study programs at state HEIs,[11] such as: Georgian philology, history, archeology, philosophy, mathematics, physics, chemistry, biology, economics, primary school teacher's preparation program, architecture, agronomy, geology, IT technology and etc.[12] (Order No 92/n, 2022). Furthermore, every student once a year is given possibility to take a grant competition test, which is General Ability Test (GAT) and obtain a state grant or upgrade the current one (e.g. from 50% to 100%) (NAEC, 2020).

5.3.8. Modifications of UNE

There were multiple modifications to Unified National Examination policy in previous years. It is interesting to look through the previous changes of the UNE and have an overview of them. It will be valuable to discuss what has changed and why has changed with the reforms in UNE policy to understand the UNE policy design process. It might guide us as well, where the UNE policy development strives and what challenges are left that need to be addressed respectively.

When the UNE policy was established in 2005, it was launched in the form of a new policy package. The UNE replaced the existing goals and instruments in admission procedure that time and transformed the admission system through *packaging.* In the beginning there were three compulsory subjects within UNE: Georgian and foreign languages and General Ability Test (GAT). Additionally, some portion of students were taking math test according to respective faculties. In 2006, the system was repaired through *patching* and three new optional/additional subjects were added: natural sciences, Georgian history and literature. The HEIs were given the possibility to add additional subjects from this list. Furthermore, state funding rule has been changed as well and merit-based grant was allocated based on the results of GAT exam instead of 3 subjects (NAEC, 2016).

Since 2006-2007 the ICT development of UNE has begun: applications were placed in the internet, the work of applicants became available online and the eMarker system for

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[11] This is so called 'program funding allocated from ministries' as mentioned in legislation.
[12] The state full funding applies to particular programs at state universities in the capital as well as in regions. The financed program list is different for each HEI and the full list can be found in the order of Ministry of Education and Science: https://mes.gov.ge/mesgifs/1660369775_brZaneba-N92n.pdf

evaluation was introduced. Furthermore, in 2008 the tests were translated to minorities' languages: Azerbaijani and Armenian languages (NAEC, 2016).

Since 2009, multiple *patching* has happened: the minimum competence threshold was increased and the test evaluators were chosen based on competition. Besides, the 4th subject became compulsory from the following list: literature, mathematics, history, geography, chemistry, biology and physics. The state fund allocation rule was changed again and was based on the results of 4 exams. In 2011, online registration became available for applicants. In 2012, students were given possibility to choose 20 programs instead of 7 and minimum competence threshold for medical and law programs was increased by 10% (NAEC, 2016).

From 2013, the applicants were given the possibility to choose the programs unlimited and consequently, there was no necessity of secondary enrollments. At the same year, the state funding was increased, which created the possibility to fully finance particular programs by the state. From 2013, the students were given equal chance for every program to gain 100%, 70% and 50% state grant; 30% grant was abolished. In 2014, a listening part was added to the foreign language exam, and civic education and fine and applied arts were added to the list of optional subjects. In 2015, the entrants were given the opportunity to take GAT, chemistry and mathematics exams in English (NAEC, 2016). *Patching* the system through *layering* was a common practice during these years as well.

Since 2016, the tests were transferred to partly electronic format (the test is available on the screen for students and answer sheets remained on the paper). The main aim of it is to establish fully electronic format in the long-term. Since 2018, exams in optional subjects has been conducted only in Georgian. Due to the specifics, the change did not affect the GAT. A webpage with information on the number of applications submitted by applicants to specific programs was launched. The special program allowed applicants to follow the changes related to the choice of educational programs from the beginning of registration to the end of enrollment. Starting from 2019, when choosing two or more optional subject exams, the applicants retains the opportunity to receive a state educational grant even in case of failure in one of them (failing to overcome the minimum competence threshold) or not appearing for one of the optional subject exams (NAEC, 2016).

The redesign of UNE in 2020 attracted public attention and became highly debated. The UNE policy was patched through layering again in 2020. The major change within the reform 2020 was the reduction of mandatory subjects and moving General Ability Test (GAT) from mandatory subject to optional/additional subjects. According to the report of NAEC (2020), this change encouraged talented art and sport applicants, who couldn't enter programs because of low scores in GAT. Also, within the reform, biology became third compulsory subject for healthcare programs. Mathematics and history became third compulsory subjects for certain programs, which increased the number of applicants for those two subjects. As it is mentioned in NAEC's report (2020), if applicant passed 4 subjects in 2020, chances for securing state funding has doubled.

In 2019 the final examination at secondary school was abolished and the modifications to admission process was planned. However, As the respondent policy expert discussed, before that it was planned to have 8+1 reform, which meant 8 school exams and 1 UNE – General ability test for selection (that time there was 8 school exams and 4 UNE exams). Initially, 8+1 reform was aimed to replace the UNE exam scheme by school exams. However, in 2019 school exams was abolished totally and UNE was *stretched.*

The main goals of redesigning the UNE in 2020 were: gradual increase of the autonomy of universities, bringing the national exam program closer to the school program and reducing parents' expenses. Therefore, from 2020 three mandatory subjects were defined: Georgian language, foreign language and third subject: mathematics for – technical programs and history – for programs of social science and humanities (Ministry of Education and Science of Georgia, 2019). The Fourth compulsory exam GAT was moved to additional/optional subjects.

In 2022, *another patch* was introduced and the subject list was changed again. The narrowed down third compulsory subject list was expanded and to mathematics and history,other subjects were added as well: Literature, Physics, Chemistry, Biology, Geography, Fine and Applied Arts, and Civic Education, that enabled applicants to have more choice and choose more relevant subjects for their desired programs. The enrolment process remains based on three subjects at the moment (NAEC, 2021).

The thesis presents a small summary table of UNE policy redesigns to understand better the modifications of UNE and its timeline. The table summarizes the main redesigns of the system and provides better overview in the form of the table:

Table 1: Summary table of UNE Policy Redesigns

Year	Design Type	Change
2005	Packaging	- Replacement of existing admission instrument - 3 compulsory subjects *(Georgian and foreign languages, GAT)* - 1 optional subject *(mathematics)* - New model of state grant allocation (based on 3 subjects)
2006	Patching	- Expanding optional subjects up to 6 *(Mathematics, physics, chemistry, biology, literature, history)*. - Change of state grant allocation rule (based only on GAT results)
2009	Patching	- Expanding compulsory subjects up to 4 *(Georgian and foreign languages, GAT and 4th subject from this list: Mathematics, physics, chemistry, biology, literature, history, geography)*. - Change of state grant allocation rule (based on 4 subjects)
2012	Patching	- Expanding the choice of students from 7 programs up to 20
2013	Patching	- Expanding the choice of students from 20 programs to unlimited - Change of state grant allocation rule (30% grant removal)
2014	Patching	- Adding civic education and fine and applied arts to subject list
2016	Patching	- Moving to partially electronic test system
2019	Patching and stretching	- Change of state grant allocation rule *(the applicant retains the opportunity to receive a state educational grant even in case of failure in one of optional subjects)* - Abolishment of final examination at secondary schools and maintaining UNE as the main admission procedure
2020	Patching	- Minimizing mandatory subjects to 3 *(Georgian and foreign languages and third compulsory subject)* - Moving GAT to optional subjects - Narrow specialization of third compulsory subject *(mathematics or history)* - State Grant allocating based on 3 subjects
2022	Patching	- Expanding third compulsory subject list *(adding literature, physics, chemistry, biology, geography, fine and applied arts, and civic education)*.

5.3.9. Reform of UNE 2020

It's worth to highlight the UNE reform in 2020, which caused public debates and was mentioned by all of the respondents during interviews. Therefore, it's valuable to discuss the reasons and positions behind this reform in separate sub-chapter. The main point of the reform 2020 was moving General Ability Test (GAT) from mandatory subjects to optional subjects. This reform was criticized and assessed as unfavorable by all of the respondent from HEIs.

One of the reasons for assessing this reform unfavorable is that GAT was evaluating logical and critical thinking skills that every person should have, who would like to continue studies at higher education level (referred to interview №1 and №4). GAT exam was a very important instrument for giving opportunity to the applicants to reveal their skills and abilities, while it was a tool for demonstrating general and transferable skills. This exam had different components, such as: language, mathematics, analytical thinking and etc., which was showing the details that the school education was not teaching properly. Therefore, this exam was a tool to observe all of this and could be used for improvement of secondary education as well (referred to interview №7). GAT exam was giving the orientations to school education and showing the real picture of applicant's skills (referred to interview №3). As the respondent 7 mentions: "GAT had a crucial purpose, however, with this reform this was lost" (Referred to interview №7).

Also it was mentioned that within this reform the lack of research was evident: "I don't know on which research it was based, but GAT was removed from mandatory subjects. I don't know what was the reasoning behind it or on what research and study was the reform founded" as commented one of the representatives of HEIs in the interview (referred to interview 4). Besides, this reform was described by one of the representatives of HEIs literally as the abolishment of GAT exam, because in reality only 2 or 3 programs add it as additional exam now (referred to interview 2).

However, there were some arguments from state's side, why GAT was removed from mandatory subjects. As the representative of NAEC explained: GAT was not abolished, but it's moved to additional subjects and each HEI can decide to add it and make mandatory for their programs. The respondent mentioned:

"The main reason was the study of GAT Validity of predictability toward later academic achievements and also other tests format has changed. Now other subjects are checking the general skills, for instance, history checks the logical thinking as well. This subject was not taught at school, therefore, it shouldn't be mandatory for admission, while it requires additional tutoring. The person, who wants to become pianist, should not be obliged to take GAT, the minimum logical thinking, necessary for his profession can be checked through Georgian language exam, for instance" (referred to interview №6).

However, the HEIs do not agree with the argument that the logical and critical thinking skills are assessed in other subjects. As one of the representatives of HEIs mentioned:

"I don't agree with the argument that test format has been modified and other subjects have included critical thinking parts. I have looked through the tests and I don't see these components in other exam tests. GAT was giving several instruments that was crucial from critical and logical thinking" (referred to interview №7).

Besides, another repsodent mentioned that even though some similar tasks are now included in other exams, when observing the process the outcomes are not really changed (referred to interview №4).

Besides, the lobbying by different subject groups was evident in this process. As the respondents mentioned, throughout the years, different subject groups were trying to lobby to make mandatory some subjects within the UNE. This interests comes from tutoring practices, while with mandatory subjects the demand for tutors are higher. As the respondent mentions, there was a lack of tutors in GAT subjects and when the last reform started one of the factors against GAT was that no one tried to defend in subject commissions this subject (referred to interview №1). Besides, GAT was not popular in society, because it was not taught at schools and was one of the most expensive subjects in tutoring. That time in ministry/NAEC they wanted to minimize subjects and less painful was GAT, because with other subjects some groups would become irritated. There were other lobbying examples in previous years as well internally and externally. For instance, in the beginning it was 3 mandatory subjects and 4th subject was added through subject groups' lobbying. It was an internal lobbying example. As respondent mentions: "Those groups whose tests were not taken that often, for instance, natural sciences, that time quite a few people were passing those exams. Those groups learned that they would lose a job

and they lobbied 4th subject to become compulsory" (referred to interview №5). If we look at the summary table of UNE policy redesigns (table 1, p. 45), we can observe that subject lists were expanding from 2006 and from 2009, 4th subject became compulsory as well. The policy expert explains these patching by lobbying of subject commissions and tutors.

Abolishment of secondary school exams and moving General Ability Test (GAT) from mandatory subject to additional subjects was criticized by local NGOs as well. As Education Policy and Research Association (EPRA) mentions in their report, GAT was a test that didn't require any special knowledge or tutoring and was based on analytical and logical thinking. Therefore, GAT exam was the mechanism that enabled socially disadvantaged groups to access to higher education without paying any tutoring fees and promoted equality in terms of accessibility to higher education. While the promotion of accessibility was mentioned as one of the goals of the recent reform by the Minister of Education, this change contradicts this primary goal. Besides, narrowing down the third mandatory subject list to mathematics and history and neglecting science subjects was highlighted as a severe issue. Overall, EPRA assess the reform as incoherent that is not based on systemic understanding, is developed based on only one study containing mistakes, and contradicts the goals of the reform itself (EPRA, n.d.).

5.4. Current Challenges

This chapter will discuss the main challenges of current UNE system that have been found out through the research. Namely, the chapter will be divided into small sub-sections and cover the main highlights, such as: contested testing model, controversial design of UNE reforms, possible 'black holes' for corruption, inequality of access to higher education and restricted autonomy of HEIs. Through the empirical research these challenges were emphasized and highlighted by the different stakeholders, therefore, the following sub-chapters will cover them in order to explain each challenge and bring to the light the shortcomings of the system. The underlined challenges might be the reasons, why the current UNE system is not fully sophisticated at the moment.

5.4.1. Contested Testing Model

The lack of assessment of critical and analytical skills in current UNE exams was assessed as one of the crucial challenges of the system. This issue is related to General Ability Test (GAT) and it movement to additional subjects from mandatory ones. As respondent from one of the HEIs mentions:

"At the moment the main problem of UNE subjects is that majority of subjects doesn't contain logical/critical thinking tasks. There are some fragments in different tests but still lack of that is evident. The deficit of critical thinking is reflected in the knowledge of students when they enroll to university" (referred to interview №1).

GAT exam was helpful for improving critical thinking skills, while school materials do not include this, lack of critical thinking is evident in any subject at school and GAT was an indicator for detecting this (referred to interview №7). Therefore, the testing model itself is contested by different stakeholders. According to NAEC's annual report (2021), Numerous studies have proven that applicants who score higher on the General Ability Test are more successful in learning and developing in their careers. Considering this fact, it is more unclear and vague why this exam was removed from mandatory subjects.

Besides, another issue mentioned is lack of logic in third compulsory subjects. As the respondents from HEIs mention, the required third compulsory subjects sometimes do not relate to study field and are not logically set. For example, one of the respondent mentions: "For architecture program third compulsory subjects are: mathematics and physics, while it is not logical to require physics at architecture program" (referred to interview №1). Another respondent mentions: "for instance, with history exam they [students] are allocated to totally different field program. Therefore, this is one challenge" (Referred to interview №4). This point is very crucial in terms of admission process, because the universities are obliged to receive applicants based on all of required third subjects and they are not entitled to choose.

Moreover, as one of the challenges, lack of correct methodology in test designs and lack of accountability was highlighted. Firstly, one of the policy experts underlined that the topics and tasks of exams are restricted around specific books, and not really comprising the whole national curriculum. Besides, in agency's reports, sometimes it can be found out that

the tests are designed methodologically not correct, however, no one is accountable for that. As respondent explains:

"If we check the distribution of scores in previous years, we can detect that the distribution is not normal. For instance, in physics the distribution is skewed and it shows that the test is much more difficult than methodologically planned. However, nothing changes" (referred to interview №5).

Besides, the frequency of exams was mentioned as one of the issues of current system (referred to interview №2). The UNE is held just once a year in summer and for applicants' interests it would be better to have at least twice a year.

5.4.2. Controversial Design of UNE Reforms

The main policy-maker in UNE policy field is Ministry of Education and Science. However, NAEC and HEIs are also involved in the process. The reforms or changes of the system can be initiated by the ministry, agency or HEIs. Technically, according to law the changes are initiated by NAEC, however, before initiation there are multiple discussions with ministry and very often with HEIs and other stakeholders (referred to interview №6). However, actors involved in policy-making still highlight some shortcomings of this process.

For instance, the representative of small private university mentions that within the last reform their suggestions were not considered and this is related to the fact that they "don't want to hear" small private university with less students and less political power. Even though they have addressed the ministry in different platforms, there was no response or visible action (referred to interview №1).

The respondents also highlight the lack of communication with stakeholders. Despite some communications, it was nominal or not strong or memorable. The respondent 4 mentions: *"For example, I remember, when the UNE was created in 2005, the messages that were communicated from the state that time, I still remember those messages. Therefore, this is very important during communication between state and HEIs. In 2005 the communication was much effective and intensive"* (referred to interview №4).

Furthermore, the respondents underline the lack of coherence, consistency and harmonization of reforms. The policy expert explains that when post-revolution government was thinking about the transformation of the system, they were working in emergency mode, however the UNE system is still based on risk averse mode. The respondent emphasizes that after the initial phase, it is crucial to think about next development steps, which has not happened in UNE policy-design process. Recovering trust toward involved actors should be one of the steps, which was not considered. The respondent explains:

"If there is not trust with other actors, then being a center of power and control is the easiest policy decision, especially in the systems which are not well-developed, it is called in social sciences institutional flux. Therefore, in countries with instable democratic institutions the policy-makers are tend to re-regulate instead of deregulation" (referred to interview №3).

The policy expert explains that in countries where formal rules don't work, the system is built on individuals and when visionary policy-makers are changing and next ones don't have visions, the transformation ideas disappear. The Georgian education system's policy-making can be characterized by stagnation, because "the next minister does not listen to the previous one, is not interested what he was doing and what worked or didn't and the system has no continuity" (referred to interview №3).

Another example of inconsistency of the UNE policy design-process was the initiation of 8+1 reform. It was planned to have 8+1 reform, which meant 8 school exams and 1 UNE – General Ability Test for selection. That time there were 8 school exams and 4 UNE exams mandatory. But then in 2019, school exams were abolished totally and UNE was stretched again. The respondent explains:

"It was planned that this model would replace the UNE exams, however, when the government has changed, people has changed in the agency as well and the reform ideas changed as well. 8 school exams were maintained with UNE exams. Then group in agency has changed again and the school exams were abolished and only 3 exams are left in UNE" (referred to interview №5).

This example also shows how the reforms are related to particular persons or teams in government and how the reform ideas might circulate and changed multiple times simultaneously with the change of government.

The respondents also highlight that the UNE reform was top-down in 2005 and started directly from higher education. However, it would be advantageous to had simultaneous reforms in secondary education as well, because the separate UNE design process eventually became detached from secondary education. The lack of harmonization and lack of connection to secondary education was mentioned as crucial problem. The respondent mentions:

"Therefore, the goals were not fully reached. The UNE itself separately was an excellent and ideal reform, however, for harmonization with other fields, only this was not enough… Now higher education is separately, school education is separately as well, far away from each other and they are not harmonized together" (referred to interview №7).

Policy expert mentions that there are problems at each level of education and they develop separately, thus there are no linkages between the various educational levels; as a result, there is no harmonization between them; "the systemic problems are persistent and it is matter of path dependency" (referred to interview №3). Besides, National Curriculum Center and NAEC had a significant disagreement on the exam topics since they held opposing viewpoints about education (referred to interview №5). This example also shows the disharmony within the system.

The respondents discuss that the UNE policy-making process is connected to politics rather than policy. The decisions are made based on the fact what will be less painful for government party. For instance, the history exam was added as mandatory because historians started protesting and then the Prime-minister ordered to add it in UNE (referred to interview №5). Another respondent mentions: "To be honest, this country has not had a minister for a long time, who is capable of decision-making in education policy… The reforms should be based on educational policy decision-making, which we don't have in most of the cases" (referred to interview №4).

The policy expert explains that policy decisions are related to other events, such as elections rather than effectiveness of education system: "Even the education as a general

policy area is not connected/tied to anything in formal documents. It is not involved in general policy area. Therefore, the consequence is the fragmented policy-making" (referred to interview №3).

The lack of research and informed decision-making is highlighted as a crucial issue. The lack of public discussions is highlighted too. The respondent mentions that sometimes decisions are made late, when the registration is already started and the applicants have to accept the new barriers in the middle of the process (referred to interview №5). The policy expert highlights that the last reform was either political or uninformed decision. There was a huge debate and even the opinions of NAEC were not taken into account. Hence, the decision was less professional (referred to interview №3). The UNE because of its longevity gives us the opportunity to study and research the previous mistakes well, analyze them and work on sophistication wisely. The respondent comments: "I don't think so that it's right decision-making process without comprehensive analytical study of results and whole process and without involvement of wider public" (referred to interview №4).

5.4.3. Possible 'black holes' for Corruption

Despite the fact that the UNE minimized the scale of corruption in admission procedure, policy experts still see some possible "black holes" in the system for bias. The first issue is that it is not explained well to the society what are the mechanisms that excludes the disclosure of exam tests. In reality the trust of society is based on the fact that there is no evidence of corruption cases. The policy expert explains: "There were some 'holes' in the system that might be used by some groups, maybe it was used even but we don't know". (referred to interview 5).

The policy expert reminds a few cases, where some threats were at stake. For instance, there was a cases when someone entered the exam center and attempted to write an exam on behalf of another person. This person was caught, but there might be other cases that didn't publicize. Besides, a few years ago, there was a mistake in the system and grant amounts were paid several times incorrectly to the HEIs. If such mistakes, happen, there is no guarantee that there are no other mistakes as well (referred to interview №5).

Another crucial issue is the absence of ethical code that would prohibit evaluators and members of commissions to have tutoring practice. The evaluators know that some questions are repeated as well and they mostly have active tutoring practice (referred to interview №5).

According to the representative of NAEC, the members of subject commissions and evaluators are restricted to be tutors. The prohibition clauses are presented in their contracts and in internal regulations (referred to interview №6). According the agency's internal regulation, the person who is employed at staff position in the agency or has a contract for more than a year is prohibited to tutor a school student in any subject. The person who takes part in creation of tests is prohibited to tutor any person in any subject. This clause does not exclude teaching at school or at HEI (Order No 246/19, art. 6, par. 5). The representative of the agency comments that teaching practice at schools is even valuable for those positions because it helps the UNE not to be detached from school education (referred to interview №6).

However, the research around this topic shows contradictory results. There is no ethical code, however, the contract and internal regulation prohibits tutoring for subject commissions' members and evaluators as it was explained. However, an exam evaluator in the interview confirmed having students for tutoring while also working as an evaluator. The respondent comments: "Tutoring was not restricted, I think everyone had students, I don't remember if it was mentioned in the contract, but everyone had students and it would be impossible to find evaluators without tutoring practice" (referred to interview №8). However, the evaluator also mentions that it was impossible to help her students: "However, it was impossible to help your student for instance, because the answer sheets are barcoded and you don't know whose paper you are evaluating. Therefore, there was no chance to help your student, even you wished for" (referred to interview №8).

The possible 'black holes' of UNE system has been mentioned as well in the report of Transparency international. The interconnection of evaluators, subject commissions and tutors is referred as 'new elite tutoring' in their report. There are significant ethical hazards associated with the NAEC staff's potential dual role as test developers and student tutors (Transparency International, 2013). Considering all of abovementioned, the possible

threats to UNE goals should be analyzed and furthermore, the possible 'holes' of the system needs to be repaired.

5.4.4. Inequality of Access to Higher Education

The UNE was one of the most successful policies in higher education of Georgia and still remains as the most well-received, publicly supported reform by the society and political spectrum. Even though the UNE tackled corruption in higher education, it is difficult to determine whether the second goal of the policy – promoting equal chances for access to education has been reached due to the lack of data (Chakhaia and Bregvadze, 2018). Nowadays, the policymakers need to answer the questions: "How socially equitable are the present exams? How could socially-equalizing policies be further refined in the preparation process of UNEEs? Which testing models are preferable?" (Orkodashvili, 2010, p. 370).

Even though the goals of the Unified National Strategy of Georgian Education and Science 2022-2030 is to ensure equal opportunities for access and success in quality and inclusive higher education (Ministry of Education and Science of Georgia, n.d. b), it is questionable how socially equitable is the UNE system and if it promotes equal chances for access to higher education and addresses regional disparities within the country (Chakhaia and Bregvadze, 2018; Orkodashvili, 2010).

Furthermore, the studies show that current examination system results in "teaching to the test" in the final years of secondary education (Machabeli et al. 2011). Attending private tutoring by the large majority of future students for UNE examination preparation is hindering factor for low-income and disadvantaged students and promotes inequality in terms of access to higher education. Furthermore, tutoring practices also reveals the low quality of secondary education and its 'failure' for preparation of UNE examination.

According to the study in 2011, 57% of final year school students were preparing for UNE exams with tutors (EPPM, 2011). As one of the representatives of HEIs in interview explains:

"The deficit of school education and lack of quality education creates the demand for exam preparation and tutoring practices. Tutoring is replacing the school education, and

there is a purely economic issue, the teachers receive more income from tutoring. The teachers have less salary at schools, tutoring is more expensive and they of course have personal interests in this" (referred to interview №1).

The respondent 1 also mentioned that socially disadvantaged groups have worse results in UNE exams comparing to economically stronger groups. The respondent 4 mentions that the inequality is persistent even without the UNE because there is gap in school education if schools in the capital and rural areas are compared (referred to interview №4). The respondent 5 indicates about the research gap in inequality studies, however, issue with equal accessibility is evident because the pre-conditions are not considered as well. Not only financial resources, but also cultural and psychological differences play a crucial role in that sense. The respondent mentions that people from regions more often choose and enroll to non-prestigious programs (referred to interview №5). Besides, the respondents mention that General Ability Test (GAT) was one of the subjects that didn't require any special preparation and could be passed without special tutoring. However, the equal accessibility to higher education is questioned, due to the fact that GAT is not mandatory subject anymore (referred to interview №1 and №4).

5.4.5. Restricted Autonomy of HEIs

The scholars emphasize the lack of involvement and autonomy of HEIs in admission procedure. The universities have no possibility to select a student based on their preferences or criteria. The UNE was a heavy-handed (forceful) approach of government in 2005 and there was no opposition by HEIs that time, however, nowadays there might be time for reconsidering the admission procedure and increase the involvement of HEIs in the procedure as well (Chakhaia and Bregvadze, 2018).

Besides, the studies conducted with academics in Georgia demonstrates how the potential of higher education is not fully realized due to the lack of institutional autonomy and limited academic freedom. The study showed that the academics feel the interfere by the government in their internal affairs by introducing disruptive regulations and cause enormous additional paperwork (Chankseliani et. al, 2021). According to Rostiashvili

(2011) limited institutional autonomy remains a problem in Georgian higher education policy.

Academic freedom and institutional autonomy are key aspects for realization of higher education by HEIs (Chankseliani et. al, 2021). There is no precise definition of university autonomy, however, with the most of the interpretations autonomy describes the relation between the state and HEIs and the degree of control by the state over the HEIs. There are four main dimensions of autonomy: organizational autonomy, financial autonomy, staffing autonomy and academic autonomy. The ability to control the student admission process is comprised by the academic autonomy. The restricted autonomy within UNE system was by some HEIs. According to one of the representatives of HEIs, while the university cannot choose the student this means that the university cannot control the quality, because the quality is defined through money-follows-student scheme (Jibladze, 2017).

During the UNE policy design phase, policy-makers lacked the existence of democratic practices in HEIs. While they knew that window of opportunity was open only for limited time, they used top-down approach within UNE policy, where autonomy was not a priority, in turn, the fast transformation of the system was prioritized (Jibladze, 2017). The analysis of reforms shows that policy-makers introduced reforms in order to have external legitimacy at the EHEA and symbolically copied the principle of Bologna Process, however, deep investigation shows that autonomy has never been a part of policy discussion, in turn it was part of government's decentralization efforts (Jibladze, 2017). Besides, the centralized system of admission might also restrict international HEIs to open universities in the country (referred to interview №5).

However, within the UNE system the universities are entitled to set additional internal requirements. According to the representative of agency: "This entitles HEIs to be more active in their autonomy despite the centralized system" (referred to interview №6). The results of additional internal competition are considered in coefficient ranking document. Besides, the possibility that HEIs set additional subjects with mandatory ones and decide to have 3 or more exams for admission is also part of their autonomy (referred to interview №7).

6. Analysis of UNE Policy Design

6.1. UNE Instrument Mix

The Unified National Examination is composed by a mix of instruments. It combines two important tools: 1) tests for allocation students to particular HEIs and 2) funding from the state allocated to HEIs via student choices. As it was explained state grants allocated through UNE is one of the main financial source for HEIs received from the state. The UNE instrument mix comprise these two tools as it allocates places and funding through centralized system.

These instruments are combined in order to achieve particular policy goals. To remind, the goals of UNE are: a) to ensure the objectivity and transparency of entrance process at higher education programs; b) to give opportunity to the applicants to reveal their skills and abilities (Regulation of Unified National Exams Performance, at. 3). As the policy expert explains UNE policy is significant for Georgian society for multiple reasons:

"first of all, it is a central instrument for allocating seats at HEIs and state funding. Secondly, it has a huge impact on applicants' future and HEIs, their programs and school education. Additionally, it has societal significance as well, these exams give belief to society that the fairness exists" (referred to interview №5).

Other respondents comment that UNE is the instrument for equal competition (referred to interview №2 and №7). Besides, policy expert comments that when UNE was created, that time it was an effective instrument (referred to interview №3).

As in depth interviews with different stakeholders show the respondents admit that the first goal of UNE is better fulfilled than the second one (referred interview №1, №2, №4 and №5). The first goal is more reached than second one. As respondent comments: admission procedure needs renewal and new approaches, "Something that worked in 2005, doesn't mean that it's enough now" (referred to interview №4).

If we compare the old system and UNE, the first goal of UNE is more fulfilled. However, there is an issue with the second goal, while UNE measures and compares to each other, however, it doesn't evaluate applicants' readiness for higher education (referred to

interview №5). The respondents see the issues regarding mandatory subjects, that affects the fulfillment of second goal of UNE (referred to interview №1 and №2).

6.2. Design Types of UNE

According to Capano and Mukherjee (2020), packaging, patching and stretching are particular design types. This thesis argues that the UNE started by *packaging*, which replaced the existing status quo. The UNE totally transformed existing admission procedure in higher educational institutions in Georgia and presented the new sets of goals, tools and means. As Capano and Mukherjee (2020) explain, packaging is the perfect possibility to perform policy design. The UNE was design in the form of package in the beginning and introduced new policy goals and instruments that replaced the existing ones in admission process at HEIs.

As the analysis shows the UNE system was repaired multiple times by *patching* through these years. The UNE system was redesigned a few times and as the summary table of UNE Policy Redesigns (Table 1, p. 45) presented the redesigns were happening almost every year started from packaging in 2005 followed by the patching in 2006, 2009, 2012, 2013, 2014, 2016, 2019, 2020 and 2022. Namely, the mandatory or optional subjects were added or removed and the system was improving in terms of IT technologies and organizational issues. The design type of these redesigns was *patching* in the form of *layering.* As the policy expert explains: "The reform in 2005 was the most important than the modifications of this system was happening" (referred to interview №5). Through these years, the UNE has not been changed or transformed drastically, but the tools such as tests and funding mechanism within the policy were changing and replacing through *layering*.

Besides, this thesis also argues the dependence of UNE design process on historic legacies. The UNE policy design became *path dependent.* As Capano and Mukherjee (2020) argue most of design styles are restricted by historic legacies and are path dependent. This fact doesn't enable the deep redesign of a policy. The legacies that come from the earlier decision-making processes still influence the initiations of new redesign processes and might hinder full transformation to some extent.

The same applies to UNE design process. As in-depth analysis shows even though the system itself was done through packaging in the beginning, then the system was adopted only through patching. Since 2005 the admission procedure has not transformed totally, only the particular components were repaired by patching. This indicates the path dependence of UNE policy design on previous design decisions and besides, explains the fact that the it has not totally transformed after so many years.

Besides, another design type – *stretching* can be discussed in terms of UNE as well. The policy experts discussed in the interviews that it was planned in the beginning to recover corruptive system through regulation of admission procedure and then deregulate again. However, the discussions about it are over (referred to interview №3). Additionally, there were some discussions before, that the school exams should have replaced UNE in the end. One of the policy experts discussed that it was planned to have 8+1 reform, which meant 8 school exams and 1 UNE – General ability test for selection. That time there was 8 school exams and 4 UNE exams. But then in 2019 school exams was abolished totally and UNE has been stretched again (referred to interview №5). The inquiry from policy experts indicates that UNE policy has been extended longer that it was initially intended and this example shows that it has been stretched longer than it was planned at the start.

6.3. Design Spaces of UNE

According to Capano (2018), there are 4 different design spaces, which is differentiated by levels of technical and political capacity of the government. The design spaces are: optimal policy design (space 1), contradictory policy design (space 2), adaptive policy design (space 3) and poor policy design (space 4). For analysis of UNE policy and its design spaces, 4 main periods have been selected from the UNE redesign timeline. Namely, 2005, 2006, 2009 and 2020 years have been chosen for identifying design spaces of UNE. The reasoning behind it is that the major changes of UNE instrument mix happened in these years. Particularly, the main tools of UNE instrument mix, tests/subjects and state grant allocation rule was changed in these mentioned years.

In 2005, the existing admission instrument was replaced by the new instrument mix, which comprised 3 compulsory subjects and new mechanism for state grant allocation. In 2006, the optional subject list was expanded and subjects for grant allocation was minimized,

namely, the mechanism was based only on GAT results. In 2009, the compulsory subjects expanded up to 4 and grant allocation rule was adjusted to it respectively. In 2020, the compulsory subjects were minimized to 3 and grant allocation rule was based on 3 subjects as well. The thesis will summarize the design spaces of UNE policy in the following table for better visualization:

Table 2: Design Spaces of UNE

		Technical Capacity of Goverment	
		High	Low
Political Capacity of Government	High	**Space 1** *Packaging in 2005* New model of testing and grant allocation *Patching in 2006* Expanding optional subjects and minimizing subjects for grant allocation	**Space 2** *Bricolage in 2020* Minimizing compulsory subjects and subjects for grant allocation
	Low	**Space 3** *Adaptive layering in 2009* Expanding compulosry subjects and subjects for grant allocation	**Space 4** -

source: Capano, 2018, table 1, pp. 677. Adapted to UNE Policy Design by the author.

The packaging in 2005 and replacement of existing admission instrument was placed in design space 1. In *optimal policy design*, the government is able to launch totally new package and replace the existing one (Capano, 2018). In this space both technical and political capacities of the government are high. Post-revolution government of Georgia introduced the UNE as a new package, which changed the enrollment procedure to HEIs as well as state funding allocation procedure. This thesis argues that government that time had high political and technical capacities that enabled the change of existing status quo and transformation of the system drastically.

Patching of UNE in 2006 was in the form of expanded optional subject list and also changed state grant allocation rule, only basing it on GAT exam results. As Capano (2018) argues, the patching in *optimal policy design* happens when there is a political tension or new instruments are added in order to match with policy goals better. As the interviews with various respondents revealed, there were examples of lobbying from different groups in order to add some subjects in UNE examination scheme. There were some political tensions e.g. from historians, when even the Prime-Minister was involved (referred to interview №5). Besides, changing grant allocation rule and connecting it to GAT exam results might be reasoned by matching UNE better with its goals. Therefore, patching of UNE in 2006 was placed in design space 1 as well.

Redesign of UNE in 2009 was assessed as *adaptive policy design* and was placed in space 3. In 2009 the UNE compulsory subjects was expanded up to 4 and the state grant allocation rule adjusted respectively. The expansion of mandatory subjects was connected to intense lobbying. The adaptive layering is performed within the existing design (Capano, 2018). The redesign in 2009 was in the form of adaptive layering, where the changes happened within the existing design.

The reform of 2020 was placed in space 2 as *contradictory policy design*. In this space the government has low technical capacity with high political capacity and bricolage or tense layering can happen. This thesis argues that redesign of UNE in 2020 was in the form of bricolage. *Bricolage* is a type of patching, which is based on poorly informed logic and its outcome is incosistent and incoherent design (Capano, 2018). As the analysis of reform 2020 showed there was a lack of informed decision and therefore, the technical capacity can be assessed as low. Namely, evidence-based knowledge and lack of research before planning the reform was hilighted which eventually resulted into incosistent and incoherent design outcomes.

7. Discussion and Revision of Research Questions

The study of the 'side-effects' and challenges of UNE policy has revealed a few important points in terms of UNE design-making process. The longevity of UNE and almost 20 years of experience with such admission system has enabled to study its shortcomings more in-depth. Following the timeline of UNE redesigns step by step, analyzing each system change and identifying design types and spaces, enabled to capture the main trend of UNE policy process that the reform ideas around UNE circulate and change simultaneously with the change of government. However, those ideas are still limited by the previous design decisions that make student admission system path dependent.

The thesis also argues that in general disharmony between different education levels and separate UNE design process eventually makes the admission procedure detached from secondary education. Besides, critical and analytical skills need more attention in admission procedure as well as in secondary education. As the respondents highlighted, General Ability Test (GAT) was one of the main tools for checking these skills, however, the exam was removed from mandatory subjects with the reason that it is not offered as a subject at schools. The analysis of the reform gives the impression that the least effortful and painful decision was made and instead of bringing critical and analytical skills at schools, easily the subject was removed, even though the exam was assessed as very important by the HEIs. Furthermore, the inclusion of critical and analytical skills assessment in other exams was evaluated as not sufficient by the different stakeholders.

The analysis of UNE security measures and involved actors, such as subject commissions, evaluators and tutors, has revealed contradictory results. The thesis argues that there might be 'black holes' in the system for bias, while those groups are tightly connected and existing security measures might not exclude all possibilities for bias. Therefore, the system needs to be sophisticated in that sense to prevent any potential bias.

Besides, it is interesting to summarize the findings about the inequality of UNE system. There is an ambiguity to some extent in the literature that even though that the UNE has contributed to elimination of inequalities in the system, still it created a gap for flourishing the tutoring practice and made the system unequal for particular groups. Therefore, the inequality issue through UNE needs to be addressed further.

Furthermore, it is argued that UNE admission procedure is more related to the discretion of HEIs rather than autonomy. Besides, It's more difficult for HEIs to organize entrance exams logistically rather for the agency, which has more resources for organizing examinations. It's important to compare public goods – equal opportunities and elimination of corruption or giving the choice to universities. at the moment the matter is the reconciliation and balance between these public goods. One of the representatives of HEIs also argued that the autonomy of applicants is more valuable than HEIs discretion (referred to interview №1, №2 and №4).

There is no discourse on the policy level about extension the autonomy of HEIs, however, the risks should be evaluated first. In 2019 when the reform was in the process of planning, HEIs were offered to take over some exams on their responsibility, however, they refused, because they were not ready for that. The policy expert argues that UNE is much more beneficial for HEIs in terms of finances and also for their prestige and reputation (referred to interview №3 and №5). Apparently, it saves the internal staff capacities of HEIs at great extent.

The transformation of the system is based on the readiness of HEIs but it is not anticipated at the moment. It was argued that HEIs have difficulty to create the transparent measures for internal admissions. Besides, the number of applicants in bachelor program admissions is much more than in master programs, which would make more difficult for HEIs to organize the internal admission procedure. The policy expert was explaining: "In bachelor programs – there are more applicants and they are claiming, they [HEIs] will bother by the calls from the relatives and family members of the applicants. Therefore, they prefer centralized system" (referred to interviews №1 and №5).

To summarize, the deep redesign of UNE is not anticipated in the near future, because it's depended on the readiness of HEIs and other actors of the policy. Therefore, the expansion of HEIs' autonomy in terms of admission procedure is not planned yet. First of all, all actors should be ready for this and should be capable of establishing transparent, equal and objective requirements for internal admission procedure.

For sophistication of the existing system further a few significant points should be considered: firstly, systemic reform is needed, which will comprise, school education, higher education and admission exams and harmonize these fields with each other.

Secondly, UNE should come closer to secondary education and also check analytical and critical thinking skills more intensively through examinations. Besides, it can be argued to make UNE examination more universal with diverse criteria. Additionally, the establishment of hybrid model can be discussed as we have in master level at the moment. Besides, the respondent 7 commented that it would be better to give choice to HEIs between group of third subjects or General Ability Test (GAT) to add as a compulsory subject. With this model, that gap in assessment critical and analytical skills would have been covered partially and would be depended on HEIs choice. These policy recommendations might be valuable for policy-makers for sophistication of UNE system (derived from interview results №2, №3, №4, №5 and №7).

Based on the analysis of design types and spaces of UNE, this thesis argues that understanding the government's capacity is important in terms of tool choices and their application. Namely, the thesis observed this in UNE design process in relation to design spaces and government's technical and political capacities. The analysis of UNE design process reveals that the levels of technical and political capacities affect the instrument choices, its design types whether performed by packaging or patching and eventually it determines the consistence and coherence of design.

To revise the research questions, the main research question of the thesis was 'How is the UNE policy designed in terms of processes, instruments choices and policy outputs?' For answering the main research question, the thesis covered different aspects of Unified National Examination policy and its design process. The thesis explained the design types and design spaces of UNE and concluded that *packaging, patching* and *stretching* were types of designs presented in UNE policy design process. Besides, the thesis argued that the UNE redesigns in 2005, 2006, 2009 and 2020 were deployed in following design spaces: *optimal policy design* (space 1), *contradictory policy design* (space 2) and *adaptive policy design* (space 3).

Furthermore, for understanding the instrument choices first of all, the organizational structure and processes of UNE were discussed and the *instrument mix of UNE* composed of two elements: a) tests and b) grant allocation rule was explained. In terms of instrument choices, the government's political and technical capacities were underlined to understand how their low and high levels affected the design process of UNE. Namely, the different

capacity levels resulted the deployment of UNE redesigns in dfferent design spaces. Furthermore, the goals of UNE were underlined, namely the provision of transparency and objectivity and giving the possibility to applicants to reveal their skills. It was discussed that the instrument mix of UNE might not promote reaching fully the goals of policy (namely, the second goal).

In terms of policy outputs, it was dicussed that as a result the UNE creates the centralized and standardized admission prcoedure to higher education. Besides, the existing limitations of the current system were summarized, such as: contested testing model, controversial design of UNE reforms, possible 'black holes' for corruption, inequality of access to higher education and restricted autonomy of HEIs. The table below respectively summarizes the UNE policy design in terms of processes, instrument choices and policy outputs:

Table 3: Summary table of UNE Policy Design

Design Processes	Instrument Choices	Policy Outputs
Design types and spaces in UNE: Space 1 - packaging in 2005 and patching in 2006 Space 2 - bricolage/patching in 2020 Space 3 - adaptive layering/ patching in 2009.	**Instrument mix of UNE:** a) tests b) grant allocation *Limitation in reaching the second goal* **Govermments' Capacities:** - Low technical capacity resulted in brocolage - Low political capacity resulted in adaptive layering	Centralized and standardized admission to higher education **Limitations of UNE:** - contested testing model - controversial design - 'black holes' for bias - inequality of access - restricted autonomy.

8. Conclusions

This thesis studied the Unified National Examination policy and presented its organizational structure and processes, besides, revealed its main challenges and shortcomings related to the testing model, reform design processes, potential ethical hazards, system inequalities and limited autonomy of higher education institutions. The thesis analyzed the design process of UNE and presented several suggestions for system sophistication.

The thesis argued that UNE was a transformative step for the higher education system of Georgia. It acquired high trust in Georgian society and gave chance to ordinary citizens to enroll in higher education without corruptive bargains. The UNE minimized the scales of corruption in higher education, however, existing system 'black holes' such as the interconnections of private tutors, evaluators and test creators, need more attention at the moment in order to exclude all possibilities for potential bias.

The thesis argued that the UNE design process became path dependent and the deep redesign of the system is not anticipated due to the fact that the involved actors are not ready for that at the moment. Besides, an interesting finding was highlighted that the HEIs prioritize transparency and objectivity of the process rather than their autonomy in the admission process. It should be noted that it is not representative data, however, still it is an interesting insight that some HEIs prefer the centralized admission procedure. Besides, the context of the country and the balance between risks and public goods should be analyzed carefully before making the decisions about the transformation of the system.

The thesis discussed the design process of UNE, its design types and spaces and identified the levels of government capacities in this process and its impact on tool choices. It argued that the main design types of UNE are packaging, patching and stretching. The UNE design started with packaging in 2005 and was repaired by patching multiple times in these years, with main changes in 2006, 2009, 2020 and stretched in 2019. The thesis underlined the fragmented policy-making in UNE design process and discussed that the second goal of UNE might not be completely fulfilled due to the current mandatory subjects.

The thesis suggests to address existing research gaps around UNE policy in terms of the relation of UNE and corruption, inequalities and its system challenges for future research.

Likewise, this thesis also attempted to contribute to it. Studying the shortcomings and challenges of the system and understanding the policy design process in-depth gives the possibility to sophisticate the system further in the future.

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List of Appendices

Appendix I: figures (4 in total)

Appendix II: Interview Questions

Appendix III: Interview briefs (8 in total).

Figure 1: Education system of Georgia *(source: National Center for Educational Quality Enhancement, n.d.).*
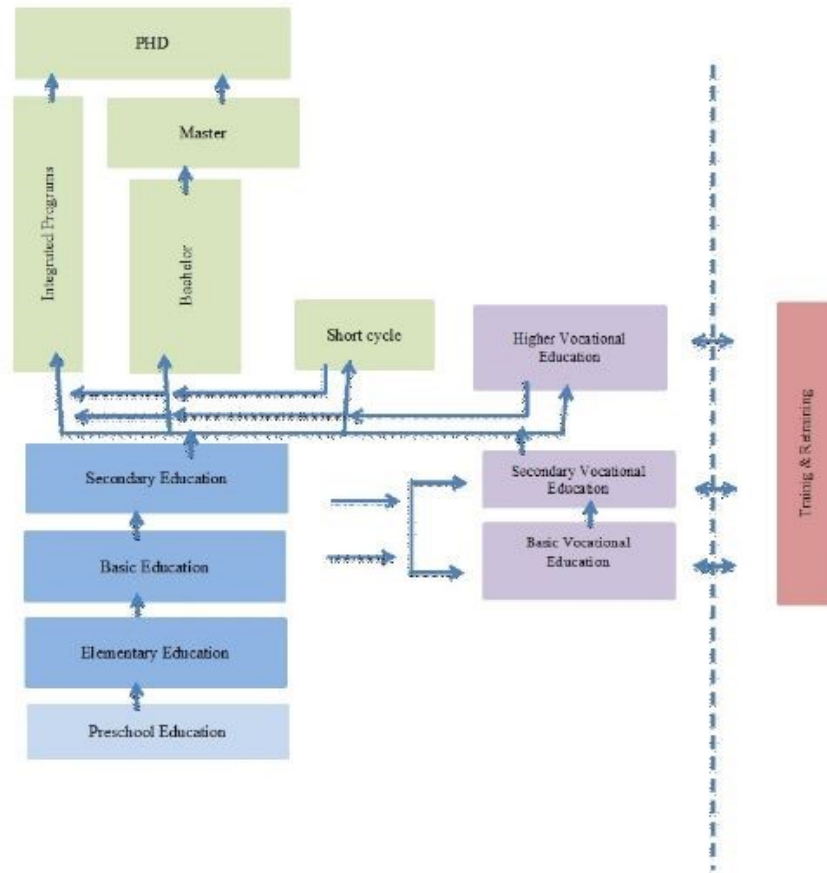
Figure 2: Number of live births in Georgia (per thousand people) *(source: Kvakhadze et. al, 2022).*
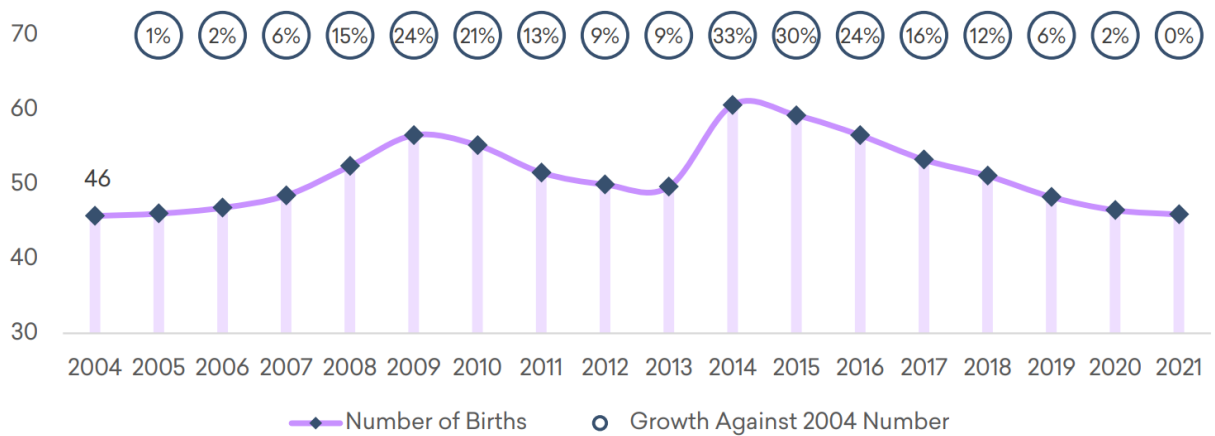
Figure 3: Number of higher education institutions *(source: National Statistics Office of Georgia, 2023).*
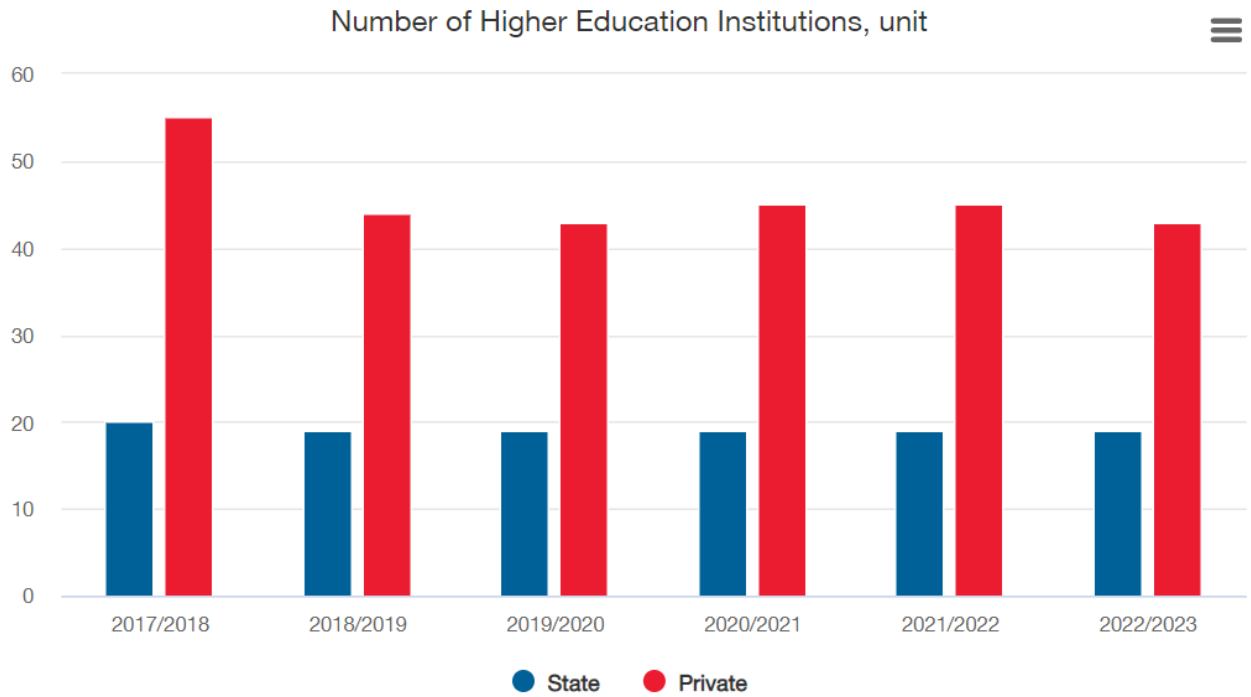
Figure 4: Government spending distribution among the main expense categories *(source: Kvakhadze et. al, 2022).*

Appendix II - Interview Questions

Questions for Representatives of HEIs

1. How would you assess the importance of UNE policy for Georgian education system?
2. According to the Georgian legislation, the goals of UNE are: to ensure objectivity and transparency of entrance procedure; to give opportunity to the applicants to reveal their skills and abilities, how do you think, are the goals of UNE reached with the current system?
3. How do you think, does the UNE promote equal accessibility to higher education?
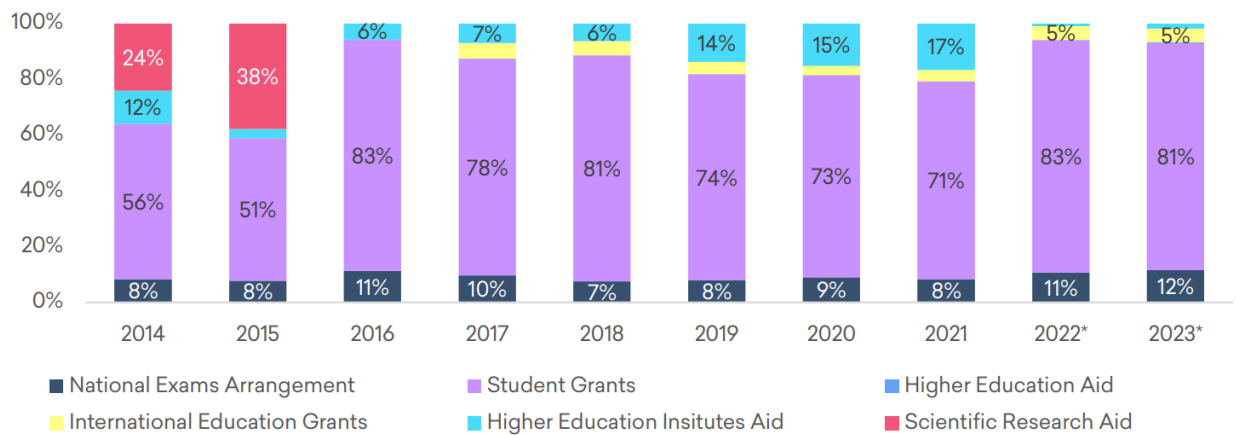4. What do you think about tutoring practices?
5. How do you think, are compulsory subjects of UNE sufficient enough for selection a right candidate for the program?
6. How often do you set additional subjects for specific programs? Why or why not?
7. Do you also set the additional requirement for specific program according to art. 13., Par. P? To which programs?
8. How do you define the quotas/number of places for each program?
9. How do you assign the coefficients to each UNE subject?
10. What do you think about the last reform of UNE?
11. Do you see any challenges in the current system?
12. Do you seen any challenges regarding the autonomy of HEIs in terms of admission procedure?
13. How should the challenges of the current system can be addressed? (if any).

Questions for Representative of NAEC

1. How would you assess the importance of UNE policy for Georgian education system?
2. Is there any internal study about the elimination of corruption?
3. What are the measures that are taken for exclusion of corruption today?
4. What are the main tasks of subject commissions/groups?
5. Are members of subject commissions regular or temporary employees?

6. Are exam evaluators regular or temporary employees?

7. Is there open competition for selection exam evaluators?

8. How many employees does the agency have? Including subject commissions and evaluators?

9. Is there any ethical code that restricts members of subject commissions evaluators to have tutoring practice?

10. What does it mean to place applicants scores to one common scale according to psychometric parameters?

11. Is there a special computer program that calculates all the scores according to this formula?

12. Is it possible to set the additional internal requirement according to article 13 par. P. to every program?

13. How the reforms of UNE are conducted? Who is the initiator and are HEIs involved?

14. What were the goals of the last reform?

15. Do you see any challenges in the current system?

16. Are you planning any reform/modification of the system in a near future?

Questions for Policy Experts

1. How would you assess the importance of UNE policy for Georgian education system?

2. According to the Georgian legislation, the goals of UNE are: to ensure objectivity and transparency of entrance procedure; to give opportunity to the applicants to reveal their skills and abilities, how do you think, are the goals of UNE reached with the current system?

3. How do you think, are compulsory subjects of UNE sufficient enough for selection a right candidate for the program?

4. How the corruption was eliminated? Is there any concrete study/research about UNE in terms of corruption?

5. How were the professors fired from HEIs in the beginning of the reform?

6. What are the measures that are taken for exclusion of corruption today?

7. Are there any non-disclosed cases about manipulating student test results or doubts about corruptive behavior?

8. How do you think, does the UNE promote equal accessibility to higher education?

9. What do you think about tutoring practices?

10. What do you think about the last reform?

11. How was the policy-making process of UNE conducted through these years?

12. Do you see any challenges in the current system?

13. Do you seen any challenges regarding the autonomy of HEIs in terms of admission procedure?

14. How should the challenges of the current system can be addressed? (if any).

Questions for Exam Evaluator

1. In which subject have you been an evaluator and when?

2. What were your responsibilities?

3. How many evaluators were selected for this subject?

4. How have you been selected as an evaluator? What were main requirements? Was there a competition?

5. Did you have a training about evaluation schemes and criteria?

6. Were you hired temporarily as an evaluator? What is a side-job for you?

7. Was the salary based on the number of evaluated papers or worked hours?

8. How were you receiving applicants' answer sheets?

9. What were the deadlines for evaluation?

10. Was another evaluator assessing the same papers as well?

11. Was it possible to get the name of the paper's author? Or help someone anyhow?

12. Was the tutoring prohibited for you?

Appendix III - Interview Briefs

Code	Respodent
Interview 1	Representative of Agricultural University of Georgia *(small private university from capital)*
Interview 2	Representative of Free University of Tbilisi *(small private university from capital)*
Interview 3	Policy expert 1
Interview 4	Representative of Ilia State University *(big state university from capital)*
Interview 5	Policy expert 2
Interview 6	Representative of agency (NAEC)
Interview 7	Representative of Batumi Shota Rustaveli State Univeristy *(small state university from region)*
Interview 8	Exam evaluator

Interview №1

The Unified National Examination is very important for Georgian higher education. It is the same "game rules" for all HEIs that is vital for competition. The UNE also helped for elimination of corruption. This model is fair and effective and the results of students and alumni is the evidence of it. The goals of UNE is more or less reached, however, the issue might be seen in terms of mandatory subjects. The last reform is problematic and moving General Ability Test (GAT) from mandatory subjects to optional ones is critical. GAT was evaluating logical and critical thinking, therefore, the test was unique. Within the reform GAT was offered as optional subject, but the university does not require GAT or any other subjects additionally, because that would make their programs less competitive which will affect the quality as well.

The narrow specialization and division into technical and humanitarian fields according to subjects is critical as well. The required third compulsory subjects sometimes are not logically set. For instance, for architecture program third compulsory subjects are: mathematics and physics, while it is not logical to require physics at architecture program. When there are several third subjects required, the HEI has the obligation to receive applicants by all subjects, the law says – at least 10% of places comes to each subject, therefore the HEI does not have a choice here.

A Few point are considered when we decide the number of places in each program: 1) approval within authorization to whole HEI (can't exceed this number/active students number) 2) places for mobility 3) internal capacities – considering the internal resources: teachers, number of groups, rooms and etc. 4) education market trends analysis – the

choice of students (1st place, 2nd place…) 5) mobility rates also shows the demand for programs 6) results of last year's admission – after analyzing all aspects we decide the number of places to each program each year.

For determining coefficients several points are considered: 1) if the subject is essential for the field/program, 2) the third subjects should have the same coefficient, so we take into consideration not to have too high coefficient to third compulsory subjects, because sometimes the required subjects are not logically assigned to the field. The system is inflexible in this sense and making a compromise is needed, 3) considering overall results of each subject in the cohort, which helps to maximize the applicants scores and is beneficial for them. For instance, if they have better results in Georgian language, HEI gives higher coefficient to this subject. When state grant is allocated, the coefficients set by HEIs are not used in calculation. The law determines the coefficients (1 / 1.5) which is for the impartiality of the process, that grant allocation not to be based on HEIs.

The results of each subject is monitored by NAEC. The agency looks through the statistical data and if there is difference between the different tests variants and its results, it means that some variants were more difficult than others and agency calculates the average of the scores by putting them on psychometric scale. With this process the more difficult variants are brought closer to the average.

We set additional requirement according to the article 13, par. P. only to architecture program, because it is not considered as an art program and we are excluded the chance to use the admission rule of art programs. The additional requirement for architecture program is internal competition, which is mandatory, however, no coefficient is assigned to this.

GAT was test which was based on logical and critical thinking and it was giving the possibility to pass without special preparation and without tutoring. Moreover, there was a lack of tutors in this subject. When the last reform started one of the factors against GAT was that no one tried to defend in subject commissions this subject.

Some subject commissions are stronger. For instance, physics became mandatory for some programs, because there was the direct interest of members of commissions to be the subject mandatory, as well as to have more students for exam tutoring. This is just my view point that lobbying of subject experts' work, however, I don't have any direct evidence of it.

The deficit of school education and lack of quality education creates the demand for exam preparation and tutoring practices. Tutoring is replacing the school education, and there is a purely economic issue, the teachers receive more income from tutoring. The teachers have less salary at schools, tutoring is more expensive and they of course have personal interests in this.

The study shows that socially disadvantageous groups have worse results in exams. The exams are mostly based on memorizing and tutoring practices are helpful for that. But the groups that doesn't have access to private tutoring because of their economic situation are in disadvantageous condition. It was easier to be prepared for GAT for those groups than other subjects and now the equal accessibility to higher education might be questioned.

At the moment the main problem of UNE subjects is that majority of subjects doesn't contain logical/critical thinking tasks. There are some fragments in different tests but still lack of that is evident. The deficit of critical thinking is reflected in the knowledge of students when they enroll to university.

The autonomy of universities is restricted and HEIs have no discretion upon deciding which applicant will study at their programs. However, I think that centralized system is good for competition at the moment. There might be the possibility for transformation of the system but it depends on the readiness of universities and might happen after some years, not now.

There were nominal consultations with HEI within last reforms and mostly our suggestions were not considered. We have addressed several times in different platforms, meetings, sent official letters to Ministry but no visible action. For instance, we have sent the study within the last reform to the Ministry – "correlation of GAT scores and academic scores at HEIs", but have not received any response. The reason behind it could be that they "can't hear our voice" or don't want to hear small private university with less students and less political power.

Interview №2

First of all, everything needs to be evaluated within the context of the country. UNE in our country's context is fundamentally important and one of the positive parts of our education system. Universally, UNE is correct. There is an issue if universities should have more discretion? However, even without corruptive system in transparent model, it's better that decision is made by the student, where she/he would like to study. The decision should be made in equal competition. The UNE is the instrument for equal competition. The Universities should work on to be the best for students and not vice versa.

Corruption threats still exist. Logistically it would be difficult for universities to organize the entrance exams by themselves, especially in big universities. The process would be difficult for students as well, more stress to go to every HEI and have interview or admission process there.

The criticism still exists about the UNE, however, other alternatives include much more fundamental risks, therefore, UNE is mechanism to have merit-based process. Even Gen Z is the outcome of UNE, they learned how they can reach something by themselves, without help of parents and relatives and this is merit of UNE.

In terms of corruption, the perception is important. The Georgian society has a high trust toward UNE and no one doubts that someone knows test answers in advance or something. The system is highly trusted by the society.

The part of the initial reform was the restructuring HEIs staff. This happened in state universities. There was a surplus and inflation of professors and universities were given discretion and legal instrument to maintain people who were beneficial for their programs and fire others who don't. Also the state provided compensation fund and the fired professors were receiving academic scholarship for 3 years. The remained staff was given higher salaries. Another way would be initiation of criminal cases, however, this was not done because of numbers and political situation, it was impossible, therefore compromise was taken.

In the first version of UNE, before the fragmentation based on subject exams, the goals of UNE was fulfilling better. However, within this current model, mostly it's reached as well. The main mistake was to divide applicants into technical/humanitarian fields and we can see the evidence of it. The mobility is restricted because of third subjects as well. For instance, if you don't take history, then you can't move to another program, where history is required. This is also very bad signal to school students as well, for instance, in 8th grade I can decide to take history and never study mathematics anymore or vice versa.

I think, it would be better to have more universal exam. Ideally, I would have created the system with two session exam, which would comprise the whole secondary education (despite the field). This model would be without specific exams. I would do general ability test, and check the knowledge of some chemistry, biology, mathematics or history, every field that is taught at schools. Then if universities would like to check special skills, then they can request to pass an additional internal competition. These filters can be set by HEIs e.g. for music, arts and etc. The main selection would be made still by UNE.

The last reform in reality was the abolishment of GAT, because I only know 2-3 programs who set it as additional exam. That was not a good decision.

The centralized admission process is a matter of discretion of HEIs not autonomy. In master programs, individual interviews are more possible than in bachelors because of cohort numbers. Here is the deal between applicant's autonomy and HEIs discretion and applicant's autonomy is more valuable for me.

There are some natural weaknesses of UNE of course, it's universal and there is not any space for individual approach, which is mentioned sometimes. However, individual approach has a lot of risks and threats and the universal approach in that sense is better compromise.

One thing is that, I wouldn't do exams once a year. I would do two times a year. It would raise the costs however, it would worth.

Better would be to make UNE more universal, which is against the recent trend, also make closer to secondary education, in order to have meaningful reason to learn at schools. However, the school education needs another reforms. Today's university is the result of applicant's choice, otherwise, it would change a lot for worse.

Interview №3

There is no correct answer, there are some contexts where regulation by the state is important and some contexts where deregulation is better. If we look back when it started and why, we can say that this was an effective instrument. That time the trust to university admission process was very low. This reform was anti-corruption itself. it was said that the system wouldn't recover without corruption elimination. Corruption was the root cause.

In the system, where the policy actors have a very low level of trust by the public, such policy decisions are totally acceptable. The problems emerge afterwards, when we discuss not only the effects of this transformative reform on decision-making stage, but what is going on next, how the system is developed. During the transformation if the next development steps are considered or not or if next policy-makers think of it, what better for development or not.

These centralized decisions are made within the high deviant, high risk situations, not only in our system but in general. The military or health sector decisions are made in same situations as well. When Post-revolution government was discussing about the transformation of the system, they were working in emergency mode. It becomes problematic after that. The whole UNE system after 2004 is still based on risk averse mode / thinking mode: imagine changing now this, what disaster would happen.

Instead of this reform being an initial phase for setting down the chaotic situation and being thought about further development of recovering and reinforcing trust toward involved actors, this has not happened, has not changed. The agency thought that they would control better like this. There happens some negotiations and bargains as well. If there is not trust with other actors, then being a center of power and control is the easiest policy decision, especially in the systems which are not well-developed, it is called in social sciences institutional flux. Therefore, in countries with instable democratic institutions the policy-makers are tend to re-regulate instead of deregulation.

In the beginning it was said that first start with this and deregulate, however, the discussions about deregulation are over, because when policy-makers with visions are changing, then if the next ones are not visionary these excitements disappear. In the countries where formal rules don't work, the systems are built on individuals. Then it happens that the next minister does not listen to the previous one, is not interested what he was doing and what worked or didn't and the system has no continuity. The characteristic of such system is stagnation. The momentum that was in 2004, when the transformation has happened, this was not used afterwards. When such thing happens, changing the undesirable status quo gives the new status quo. Afterwards, this status quo needs to become resilient otherwise relapse happens, because the new status quo is fragile.

For instance, regarding GAT, in the begging there was no teacher or tutor for this subject and it was giving the real picture of applicant's abilities and readiness. It was showing the orientations of school education as well. After few years, the tutors of GAT have emerged as well. When there is such trend, that some people try to trick the system and they did so, the most capable will adapt. When there is such trend, it needs to be overviewed what didn't work.

At the moment there is no discourse on policy level, if the system should be transferred to the HEIs. The only thing is discussed is which subject should be added or omitted or which subject evaluates what. However, in this situation, there shouldn't be any transfer because there is no model discussed, risks should be evaluated first. Why should the transfer happen? The questions need to be answered first: for universities autonomy? For weakening tutoring practices? What about corruption?

Firstly, the UNE scheme was well-developed and the people who were working on it were so much devoted to their work. Therefore, this excluded chances for corruption, however, there is always a possibility for bad behavior. But the devoted people never do something bad in their job. The mechanism of UNE is difficult to be cracked. Today it's partially based on computer and someone would need to break the software to get the exam questions. However, this is very difficult. We would have known such cases it would become scandal. The answer sheets are paper-based still in order to maintain anonymity.

Reorganization of state universities and merging of institutions was part of the reform. Besides, qualifications framework has been created and the staff was re-evaluated, some people were fired afterwards. Establishment of quality assurance mechanisms were one of the foundations of this process to harmonize the staff with authorization/accreditation requirements.

Inequality is persistent in the system even in terms of disabled people.

The changing of subjects was either political or uninformed decision. There was a huge debate about it and even NAEC's viewpoints were not taken into consideration, therefore, this decision-making process was less professional.

There are not connections between different levels of education, there are issues within each level and they develop separately, therefore, here is no harmonization between levels. The systemic problems are persistent and it is matter of path dependency. Policy decisions are not related to the effectiveness of educational system it is connected to other things: e.g. elections. Even the education as a general policy area is not connected/tied to anything in formal documents. It is not involved in general policy area. Therefore, the consequence is the fragmented policy-making.

Interview №4

One thing I can say the goal that this system had initially, the elimination of corruption, has been fulfilled and still it is fulfilled at the moment. Because at this level, it is important not to have corruption threats and have equal opportunities to everyone. Unfortunately, the latter challenge still exists. However, in terms of policy content, there are still problems. The representatives of HEIs are often discussing that the applicants are not ready to the specific field and for instance, with history exam they are allocated to totally different field program. Therefore, this is one challenge.

In general, I think that when in the system there is no secondary education exams, or there is no trust to this system, the UNE plays a crucial role in admission process. Otherwise, if there is trust to secondary education exams and this can be administered as equal procedure for everyone, it would be possible to receive students according to these exams to higher

education programs. Ideally, universities can also have their internal requirements and knowledge check, however, this won't work in Georgian context.

The corruption schemes can't be eliminated totally, however, before there was a huge scale of corruption and this has been definitely minimized within the UNE. That time every HEIs was conducted the admission by themselves and the exam commissions were not trusted. There were accepting applicants through corruption. The UNE reduced that and one of the mechanisms of that was the coding of answer sheets. This is the universal approach and if someone does not know the name of concrete applicant, it would be very difficult to manipulate the system, I think that the rate of such cases would be very low. Additionally, the supportive argument would be that in the most successful and prestigious universities mostly the applicants, who don't have much financial background are entered.

However, current system still has complex problems. The financial support for students from the state is less and the universities sometimes are obliged to receive the students in order to have some financial income. If we let the universities to manage the whole admission process now, it wouldn't be the same as before 2005, however, still there will be security issues.

The first goal is more fulfilled than second one. I think that every system needs to be reviewed and renewed after some time. The new approaches need to be implemented. Something that worked in 2005, doesn't mean that it's enough now. Therefore, it is possible to modify the system now.

I don't know on which research it was based, but GAT was removed from mandatory subjects. I don't know what was the reasoning behind it or on what research and study was the reform founded. Because the main goal of GAT was to check general skills that every person should have. Maybe same type tasks are now included in Georgian or English or History and mathematics exams, however, observing the process the outcomes have not really changed.

Nowadays when we have almost 20 years' experience of UNE, I don't think so that it's right decision-making process without comprehensive analytical study of results and whole process and without involvement of wider public. To be honest, this country has not had a minister for a long time, who is capable of decision-making in education policy. There were a few who tried or did it during these 18 years, however, mostly it was not like that. The reforms should be based on educational policy decision-making, which we don't have in most of the cases.

There were some communications to HEIs within the last reform, however, it was not a memorable. For example, I remember, when the UNE was created in 2005, the messages that were communicated from the state that time, I still remember those messages. Therefore, this is very important during communication between state and HEIs. In 2005 the communication was much effective and intensive. The minister that time was able to make decisions in education policy.

There is problem with third compulsory subjects, sometimes the mandatory subjects are not related to study field. Besides, a few years ago we added GAT as an additional exam to our program (then we had civic education and literature as well as additional exams), however, the result was that applicants try to use the easiest ways to admission, so it didn't

have any important impact. So this system has mainly the general competition goal. While the other additional subjects were not added by other HEIs still the competition was within the three subjects and our additional fourth subject didn't impact the admission process much further.

The inequality issue exists in the country without the UNE. Because there is a gap in school education, the capital and rural schools are very different, even within the capital, central districts' and other districts' schools are different. Therefore, inequality in general exists. Of course, there is an issue of financial resources as well. GAT was the subject that didn't require any special preparation and the applicant's general competence was assessed, I have not done any special study of it, but I think so.

In general, the autonomy of HEIs might be a question. However, this is not mainly related to autonomy. In this particular system, maybe giving equal opportunities to everyone and elimination of corruption is a much more valuable public interest/public good, then giving universities the possibility to choose students by themselves. If we would have different system, with higher quality education or higher financial support of education, then yes, it might be discussed. However, at the moment the matter is the reconciliation and balance between those public good. In general, I think that we need to look at education system in systemic way: admission exams, school education, teacher, students and etc. and then talk about the reforms.

Interview №5

The UNE is important for various reasons: first of all, it is a central instrument for allocating seats at HEIs and state funding. Secondly, it has a huge impact on applicants' future and HEIs, their programs and school education. Additionally, it has societal significance as well, these exams give belief to society that the fairness exists. The part of society beliefs as well this is merit-based instrument and meritocracy is a value that could be a foundation of education system.

The first goal of UNE has been more fulfilled, however, if we compare it to the previous system before 2005. However, objectively is not transparent or objective either. When this documents were creating they meant to create more transparent and objective system. However, it is impossible to have absolutely transparent or objective system. With the second goal we have a problem, it measures and compares to each other, however, it doesn't evaluate applicants' readiness for higher educational programs. However, the society believes that it measures this readiness as well. The society believes that, however, when I explain that this evaluation instrument and methodology is only for selection and it is impossible to really measure readiness or skills, they do not understand it.

Why it is not transparent and objective? No one knows why those topics and task are included in the exams. It ambiguous answer that this is based on national curriculum. However, in reality, if you look at it in depth, how the decisions are made, this is unknown. The topics of exams are restricted only to specific books, but this is not known to public. Therefore, the society believes that the exam topics might by anything that is in national curriculum and they think that need the help of the tutor in exam preparation. However, in

reality the topics are only based to specific books, where all of those topics might not be covered. This is one example of non-transparency.

Another example is that accountability to the society is quite restricted. The agency publishes some reports, however, it this reports we can see that in some cases the tests are created methodologically not correct, however, no one is accountable for that. If we check the distribution of scores in previous years, we can detect that the distribution is not normal. For instance, in physics the distribution is skewed and it shows that the test is much more difficult than methodologically planned. However, nothing changes.

Another example of non-transparency is that the society doesn't know what are the mechanisms that excludes the possibility for some groups to have access to the tests. There are always some doubts that some people might have the information about the topics of exams. The mechanism how it is protected is not explained to the public. This trust from the public to UNE system is based on the fact that there is no evidence of some cases. However, if you ask me, I think that there were some cases even, where the threats were not analyzed properly at different levels. There were some 'holes' in the system that might be used by some groups, maybe it was used even but we don't know.

There were some cases which were not publicly known, for instance, at the exams different person was writing exam on behalf of someone and they were arrested. But there might be other cases that were not even caught. There were more problematic issues as well. For instance, about the grant allocation there were mistakes in the system and the grant for one student was paid several times to the HEI, or the amount was mistake, instead of 30%, 70% was paid. There was an inspection, but those cases were hidden because of political reasons. If there are such mistakes, there is no guarantee that there are no other mistakes as well.

A few years ago, there was a problem as well, when the ministry published a press release that they would publish scanned answer sheets before the evaluation/scores would be published. The reasoning behind it was that to minimize the appeal cases. That time I was working at the ministry and when I talked to some people, they didn't know about it that it would create a threat to anonymity. Publishing answer sheets beforehand would create a hole that some applicant could give a copy of his answer sheet to the evaluator and then evaluator could assess his answer sheet. Nowadays it doesn't happen.

The problem is that evaluators know that some questions are repeated and they are also having tutoring practice. There is no ethical code that would restrict them tutoring. Therefore, I think that it's a problem.

The problem is also transparency of decision-making process, not only internally but externally as well. There is no explanation why the agency has this amount of financial funding or why not another amount. There are no public discussions why the decisions are made. Often the decisions are made when the registration process is already started and applicant receives the new information after registration and there might a new barrier for them the new format, which was not known before.

Another problem is that, before the agency was purposefully hindering the disclosure of data to interested groups and journalists. Today it happens rarely. The reasons were that this is personal data or we don't provide such data and etc. Therefore, there is only just a

few studies around UNE, because of unavailability of data not much research was done about the reality of this system. There are not much studies about the inequalities of this system. The promise was that there would be less inequality, however, if we look at the bigger scale, the same social group is passing the exams and this inequality still exists.

They try to minimize the open questions, which requires assessment by the human. The idea was that to have a great calibration between to evaluators and the involvement of third evaluator would be necessary in exceptions. However, as I have information the third evaluator is involved pretty often.

The agency has a quite big budget. Considering that school exams has been abolished and they still have approximately the same budget, I don't think so that they have problems with capacities or budget.

Lobbying happens internally and externally. Internal lobbying example was that the 4 subjects became compulsory, in the beginning it was only 3. When it started, initially the 4th subject was elective by the student, then by the HEI and then it became compulsory and it was an example of bureaucratic lobbying. Those groups whose tests were not taken that often, for instance, natural sciences, that time quite a few people were passing those exams. Those groups learned that they would lose a job and they lobbied 4th subject to become compulsory. There were different factors as well, that the funding of HEIs was related to the students, so HEIs decided to receive easily as much as students as possible.

When there were discussions about the 4th subject, some HEIs came to the ministry and claiming that they needed 4th subject as well. But to the question why they answered that it was said by the NAEC that it was already decided and they were claiming just formally. 4 subject is more difficult for disadvantageous groups in terms of tutoring and financial resources. As well as inequalities are between different ethnic minorities, who don't speak Georgian language well.

There were multiple school exams reform. And then there was any idea of 8+1, which meant 8 school exam and + GAT for selection. It was planned that this model would replace the UNE exams, however, when the government has changed, people has changed in the agency as well and the reform ideas changed as well. 8 school exams were maintained with UNE exams. Then group in agency has changed again and the school exams were abolished and only 3 exams are left in UNE. It is very difficult to change the system now, still little things are changed.

In 2019, when reform was planning, there were some consultations with HEIs, when school exams was abolished, they offered to HEIs to take some exams on their responsibility, however, they were not ready and didn't agree. They refused their autonomy for selection. Because financially UNE is better for HEIs and as well as for their reputation.

GAT exam was not popular in the society. This subject is not taught is t schools, that was a reason. It was related to tutoring as well – it was the most expensive subject. They wanted to minimize the subjects and the less painful was GAT. Because with other subjects some groups might become angry (third subject groups). In reality the foreign language is the most problematic at the moment, regarding teaching or applicants pass even without knowing the language and it doesn't create the interest to learn a language.

I would make less subjects, but more diverse selective criteria with the involvement of HEIs. There is a problem as well, when sometimes there are more seats than applicants and what's the aim of competition in this case? Even minimum threshold of exams is a political percentage, it doesn't really measure anything.

In the end all the decisions are related politics not policy. What will be less problematic for governing party, this decides how the reforms will be. For example, in the beginning historians were protesting and writing articles in the newspapers, why the history should be mandatory in UNE system and then Prime-minister that time said, let's do this.

The UNE also provides the prestige of universities, the more subjects are there required, the more difficult is the process and it's better for their prestige. Even though they might want to get students easily in terms of finances.

Also universities don't want to have internal admission on bachelor programs, because they have the difficulty to create the transparent internal measures. When there is hybrid selection for Master program, in bachelor programs – there are more applicants and they are claiming, they will bother by the calls from the relatives and family members of the applicants. Therefore, they prefer centralized system.

There was a discussion as well that accreditation of internal admission procedure could be also included in quality assurance mechanisms. This current system might also restrict the international HEIs to invest and come in the country.

The reform in 2005 was the most important than the modifications of this system was happening. In different times, there were different initiators of reforms. In 2005, political part and ministry were the initiators. When NAEC and member of parliament were trying to postpone reform implementation for a year, and there were some personal interests as well. NAEC was claiming that it was not feasible technically that year. There was a huge fight different groups that time around the UNE policy. Also discredit the UNE was so common and some groups were claiming that the policy-makers that time were fighting against Georgian values. Then mostly NAEC was initiator of other system modifications. With external initiatives, there were sometimes problems with NAEC. There was a huge disagreement with National Curriculum Center and NAEC about the topics of exams, they have different point of views about the education.

The inequality between region and capital and between different schools is evident. Equal accessibility is a problem, because the pre-conditions are not considered: not only financial resources, but also cultural and psychological differences, that people from regions choose non-prestigious programs, for instance.

Ideal model would be hybrid model. It is not mandatory to have one model, maybe using different models by different HEIs would be better: centralized or internal criteria according the HEIs choice. In the current model, you can't select students and have high quality programs.

I think diversity of criteria is important. We can have German or English model (based on school) and funding related to programs would be better. The systemic reform is necessary to these fields: admission, accreditation and quality assurance. The jump to new system is now impossible – no one is ready for this. However, the state can encourage to implement

and test different models. Now the last year of school is fully dedicated to admission examination by the students and they can do something else more interesting instead of doing whole year tutoring if we have diverse admission criteria.

Interview №6

In my point of view, the UNE is the most successful educational reform. Since its beginning from 2002, establishment of agency and implementation in 2005, the UNE has promoted and reinforced the fair and equal admission mechanisms and until today it continues to be successful.

The corruption issue is not tied to the agency. The elimination of corruption was the side effect of UNE, not the main goal. Therefore, the fact that corruption does not exist anymore, is the outcome of centralized system in general, not only the UNE. However, the agency does not fight directly against the corruption, there are other institutions for this. Our main goal is to select adequate and skillful persons for the programs, who are accepted at the programs with 'healthy' competition.

The exams are monitored through video recording. The tests are not printed anymore for a few years already, the exams are held in hybrid format: electronic tasks/tests and paper-based answer sheets. Since we don't print tests anymore, the exceptional security measures are not needed anymore, however, we have security measures for answer sheets. The tests are secured electronically. There is special program which has privacy mechanisms for this. The tests are placed in a computer which doesn't have an internet connection and only a few people have access to it, around 1-2 people. Only at the start of the exam, simultaneously the tests are sent to exam centers through this software.

Moving to fully electronic model is not only depended on the agency. This require to have IT resources in every school throughout the country. If IT skills are not taught at schools, it wouldn't be fair to require applicants to pass exams fully electronically. The school format is mostly based on hand-writing, therefore, first of all, the school format needs to change. The speed of writing is also considerable in that sense.

The answer sheets are evaluated by no less than two evaluators and they have about 1 month's period. It's about 24 working days so might be more than a calendar month.

The subject commissions are working on test tasks. The agency conducts many other types of exams, such as: teachers' examination, school Olympiads, master examinations, vocational examinations and might also have private projects as well. Therefore, subject commissions are working on all of those examinations. We have 2-3-4-5 employees in each subject commission (not many), who work on tests and then work with evaluators as well. They select evaluators, conduct training for them, provide evaluation schemes and etc. It depends commission members sometimes are regular employees, sometimes not. Some subject tests might not take a whole year to be created. The evaluators are temporary employees. The subject commissions and evaluators collaborate together in creating evaluation schemes. The public competition for selecting evaluators is not mandatory by

the law. The subject commissions decide how would they collaborate with evaluators. Sometimes, it happens rotation of evaluators in different subject groups and sometimes there is a competition with multiple selective criteria and steps. In some groups, there is also a big experience with collaboration with evaluators, so they work on improvements. Also the results of previous year evaluations are considered, the analysis of which evaluators; evaluations was changed after the appeal and based on that they decide to continue collaboration or not. Therefore, there is not always an open public competition. Sometimes there is open competitions for rotation, but sometimes it might not happen, the subject group decides it according to necessities.

The members of subject commissions and evaluators are prohibited to have any tutoring practice. There is no ethical code, but the respective clauses are presented in their contracts and in internal regulations. They are not restricted to teach at schools, while it's even advantageous if a person teaches at school, knows the curriculum in practice and school materials, therefore, the tests are not detached from school education.

We have a psychometric group, philologists and mathematicians who worked on scaling formula. The equalization of scores happens in different test variants, if any of them was more difficult. Scaling scores procedure is used because minimum and maximum scores are different in different subjects. For instance, in Georgian language 80 scores out of 80 and in English – 80 out of 100, doesn't equal to each other and it wouldn't be fair to sum up this together. Therefore, scaling by psychometric parameters helps to have a fair procedure. All scores are placed on one scale for instance, 200 scale and it is defined by the special formula that 80 in Georgian language exam equals to 200 on this scale and 80 in English equals to – 160. All of this is calculated by the computer software, several groups are working on that and they compare to each other the results.

The additional internal requirement can be set by the HEI for any program. This entitles HEIs to be more active in their autonomy despite the centralized system. They use this possibility very actively in architecture programs. The results of this internal competition is considered in coefficient ranking document as well.

The reforms of UNE has been initiated by the agency or ministry or HEIs. It depends. Some of the changes has been initiated by agency or ministry and we have examples of HEI initiatives as well. The main policy-maker is ministry. Technically, according to law the reforms are initiated by the agency, however, its agreed with the ministry before sending officially. Before that the discussions are with ministry and very often with HEIs and other stakeholders as well.

GAT has not abolished, but it moved to additional subjects and now HEI can decide by themselves that its mandatory to their program. The main reason was the study of GAT Validity of predictability toward later academic achievements and also other tests format has changed. Now other subjects are checking the general skills, for instance, history checks the logical thinking as well. This subject was not taught at school, therefore, it shouldn't be mandatory for admission, while it requires additional tutoring. The person, who want to become pianist, should not be obliged to take GAT, the minimum logical thinking, necessary for his profession can be checked through Georgian language exam for instance. I have not been actively involved in this reform, however, the study might be published on our website as well.

We are working on system improvements on daily basis and different ideas might exist how UNE can be sophisticated. The agency is planning to launch centralized assessment scheme in schools in near future.

Interview №7

The UNE has been an excellent policy. That time it was necessary to conduct a reform. However, later we have learned that the reform has started from top to down. Firstly, it would be better to reform secondary school system and then later admission process to higher education. I understand that we had to start from somewhere and of course, it has been an excellent step. It gave to everyone the equal possibilities. I have experienced the inequality of admission process before this system in my life and the financial background mattered that time even though intellectual abilities. Therefore, the society needed modernization and education was a crucial part of it. However, I think it would be better to had simultaneous reforms in secondary education as well. The UNE has been successful for its purposes.

This is just my view points and it's might not be an expert opinion, however, I think that the goals of UNE was reached much better with the previous model. GAT was a very important instrument for giving opportunity to the applicants to reveal their skills and abilities. It was a tool for demonstrating the general and transferable skills. It was a possibility to check how the applicant was using the general knowledge. In this test, there was a language component integrated, mathematics component, physics, logic component and so on.

Why I mentioned that it was very bad that reform started from higher education? Because the school was not preparing the students with applicable skills, who would pass this exam with their knowledge. In the beginning, the tests were also very easy, I looked through all parts and it was very easy for higher education admission. The only filter between students with high academic achievement and low achievements was GAT exam. This exam was proportional to academic abilities and achievements. Now when we don't have GAT exam anymore and only specific subjects are left, here we have a problem that universities became 'social ministries' and rescues some contingent. Universities now have more social function than educational.

I think that minimum competence thresholds are primitive for higher education. The UNE reform has been good, however the instruments of it needs to be sophisticated.

Third subject is not elective for universities. The group of subjects are offered by the law and for instance, for social sciences there is one group, for law programs another group and etc. The university is accepting students based on this group of subjects, all of them are considered in place quotas.

I would change the system like that: for instance, two main subjects: Georgian and foreign languages and group of third subjects or GAT – the selective option to HEIs. Because now when 3 subjects are compulsory and universities has to receive applicants based on third compulsory subject group, then adding fourth subjects on top of it is not a good idea. GAT had a crucial purpose, however, with this reform this was lost.

In decision making the HEIs have autonomy to choose the subjects: have 4, 3 or so on. This is the part of the autonomy.

We allocate coefficients in a pragmatic way – school does not give the special skills to applicant, so I said that priority is Georgian and foreign language (for international relations programs). Also we set threshold for English exam – 40+ score.

The number of quotas on each program is based on academic staff, material resources, library and etc. According to program goals and results. For instance, if history is more important for the program study field the more quotas comes to this subject. E.g. civil education is easy to pass, we set less quotas for this subject. We don't set any other additional internal requirements or additional subjects.

The best thing of UNE was that corruption has been excluded. I have experienced both systems. UNE is the victory of our state. I have not heard any corruption cases after establishment of UNE. It gave equal chances to everyone.

GAT had a Georgian language component as well and it was showing the details that the school education wan not teaching in Georgian. Therefore, it should had analyzed and used in school education as well. GAT was tool to observe all of that and then this observation could be used for teaching Georgian language, mathematics, logic and etc. in schools.

The problem was that the reforms were not harmonized. Therefore, the goals were not fully reached. The UNE itself separately was an excellent and ideal reform, however, for harmonization with other fields, only this was not enough. Now higher education is separately, school education is separately as well, far away from each other and they are not harmonized together. There should be collaboration between these two. For instance, I don't like the methods how history is taught at school because it lacks the critical thinking component. And this is not discussed with higher education representatives what methods would be better to use in secondary education. GAT was helpful for improvement of critical thinking skills, now the school materials don't include this part. Lack of critical thinking is evident in any subject at school and GAT was an indicator for detecting this.

I don't agree with the argument that test format has been modified and other subjects have included critical thinking parts. I have looked through the tests and I don't see these components in other exam tests. GAT was giving several instruments that was crucial from critical and logical thinking.

Interview №8

I was an evaluator in English exams during 2021-2022. The evaluators have temporary contract. Each task has its own evaluators. I was evaluating essays. There are other tasks, such as open-ended questions or letter, they have different evaluators. There are three evaluators. I was a first evaluator, second one was evaluator with more experience and the third one team lead. Two evaluators were assessing paper independently and then team lead was comparing their assessment. If there was less than 2 points difference, team lead

was writing the score, which was the highest. If there was more than 2 points difference, then team lead evaluating the paper third times and she was giving the score. There were about 150 or 200 evaluators for just English exam. The evaluation criteria are publicly available on the website.

There was a restriction that maximum number of papers we could evaluate for a day was 60. It was prohibited to evaluated more than 60 during 24 hours. For instance, they were giving 400 papers and 10 days' deadline for this. Each essay requires averagely 3 or 4-5 min for evaluation. There were cases when blank papers were sent (some applicants might not write essay), even though the blank papers, you were not allowed to exceed 60 papers per day. All the answers sheets were scanned and sent via special software, that we could access with our username and password. The only identification sign was 5-digit number, but there was no name or surname of the applicant on the paper. If there was any identification sign on the paper or doubt about it, we were sending it to the 'problematic group' and those kind of papers were reviewed separately.

There was a competition when I was hired as an evaluator. There was a multiple step competition: firstly, we wrote essays, then we evaluated essays and they have checked how we were evaluating. They required bachelor and master degrees and also language certificates, I think the minimum requirement was C1 level. My generation and people before me as well, were hired by competition, but maybe older evaluators were not in the beginning. There was a training every year before the evaluation process. It doesn't matter how much experience you have, the training is mandatory and it was practical training, we were evaluating papers together and then comparing that we had a same score. The appealed cases were evaluated by the different group, not us.

The salary was based on the number of evaluated papers. The job itself was temporary only for summer. There were mentioning that you shouldn't be working that time or be on vacation, you should spend all time on this. Also the restriction was that, if the applicant that year was your child or family member, that year you were not able to work as an evaluator. I know one woman, whose daughter was applicant that year and she was not allowed to work that year. It was defined in the contract. I don't know if it was prohibited by the law. There were saying that it's desirable not to work, but I don't know if it's prohibited directly by some law.

Tutoring was not restricted, I think everyone had students, I don't remember if it was mentioned in the contract, but everyone had students and it would be impossible to find evaluators without tutoring practice. However, it was impossible to help your student for instance, because the answer sheets are barcoded and you don't know whose paper you are evaluating. Therefore, there was no chance to help your student, even you wished for.