

**IMPLEMENTATION OF THE BOLOGNA PROCESS IN RUSSIA:
TOMSK POLYTECHNIC UNIVERSITY
AS A CASE MODEL**

A Thesis

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ABSTRACT

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The purpose of the present study was to investigate the impact of implementing the Bologna Declaration (1999) in Russian higher education institutions (HEIs) as a consequence of Russia's signing the Declaration in 2003. The philosophy of adaptation is supposed to result in the modernization of Russian higher education (HE) and Russia's complete integration into the European HE community. A confluence of political, social, economic, and academic factors, however, has influenced the implementation of international reforms. In the present study, a single progressive provincial university was chosen as a case study, examined through the prism of six critical variables and four analytical dimensions, and then extrapolated into a wider context of Bologna-related policy formation, public debate, and local publications. The case study suggests that other HEIs were able to integrate and implement the Bologna Declaration principles successfully; that the main strategies used in Bologna process implementation are neither top-down nor bottom-up in nature, but a mixture of both models; that challenges facing reform involve issues of awareness, government support, and funding; and that the major implication of Russia's participation in the Bologna process is the increased competitiveness of Russian HEIs with the European community. These results are discussed in terms of the limitations of the present research. Predictions concerning possible policy implications are made, and the need for further research is explored, especially in the context of how Bologna process implementation in Russia compares to that in other signatory countries.

CHAPTER 1: INTRODUCTION

1.1 STUDY BACKGROUND

Over the last two decades, Russian higher education has been in a continual state of reform. The shift in political direction, collapse of the Soviet Union, crisis of economic instability, changing relationships between institutions and governments, and efforts to become integrated into the international educational community all have posed challenges to the Russian higher education (HE) system. However, national HE reforms cannot be considered in isolation from global and international trends. Entry into the post-industrial information age undeniably has caused the role of HE to be redefined worldwide. As knowledge has become viewed universally as a tool for social and economic development, international competition for the most promising academic talents, equal access to educational and financial resources, and obtaining the highest university rankings has become a reality. Similar to other countries, Russian higher education institutions (HEIs) have been caught between greater institutional autonomy, granted by the Federal Law of the Russian Federation on Higher and Postgraduate Professional Education (1996),¹ and the problem of decreasing public funding, thereby encouraging universities to seek new opportunities for entrepreneurial development, including the introduction of tuition fees and the export of educational services.

Today, many Russian universities have sufficient incentives to internationalise in terms of increasing academic mobility, realizing the cultural and academic benefits of student and staff exchanges, and the economic benefits of attracting more international fee-paying students. In line with the Bologna Declaration (1999) objectives, the leading Russian public and some private HEIs also felt the need to raise their institutional profiles internationally by means of comparing and adjusting their educational standards, quality assurance mechanisms, and curricular designs. Hence, they became the active promoters of Russia's official participation in the Bologna process (2003), which has been seen as a way to systematize these efforts and become fully integrated into the European Higher Education Area (EHEA). How the Bologna-related policy may be implemented in Russia is an issue of great personal interest, as my professional background is in the area of academic mobility management, and I worked at a university that has been in the avant-garde of implementing Bologna principles.

¹ Further referred to as the Federal Law on Higher Education (1996).

1.2 RATIONALE FOR THE STUDY

As international cooperation and integration are increasingly viewed by HEIs as a strategic way of competing globally, the need arises for in-depth knowledge of the institutional changes taking place in the course of such integration. The implications and strategies of implementing the Bologna process objectives have been widely discussed by Russian HE experts in domestic publications. For the most part, however, social research on this issue is still scarce and limited to cases drawn from larger universities in major cities such as Moscow and St. Petersburg.

To offset this lack of regional specificity and contribute to the pool of case studies, I decided to study a provincial internationally-oriented HEI—Tomsk Polytechnic University (TPU). TPU has been chosen for several reasons. First, despite its remote geographical location in Siberia, TPU is accepted as being in the vanguard of implementing and shaping internationalisation policy. The Ministry of Education and Science designated TPU as a pilot institution to improve the existing system of academic credentials recognition (as a way of enhancing academic mobility) and to adjust its quality assurance system to be in line with the Bologna process specifications (Decree No. 126, 25.04.2005). Second, TPU has been in existence for 100 years, so it has an academic tradition long enough to compare favorably with newer HEIs in larger cities throughout the Federation. Third, I am familiar with this university, as I worked there in the capacity of an academic exchange coordinator and thus have a unique perspective on the challenges and opportunities facing comparable local universities. Finally, taken in context, my experience working at TPU’s Center for Academic Mobility can be considered as a “prolonged engagement on-site” (Newman & Benz, 1998:51), which would be an asset to this research. It is hoped that this research will be valuable to the university administration and to foreign experts wishing to understand the challenges and specificities of implementing the Bologna process in Russia.

The novelty of this research is reflected in at least two aspects. On the one hand, the majority of studies on implementing the Bologna process in Russia have been represented so far by unscholarly reports and publications. Therefore, research of this kind is quite unique in the context of Russia (e.g., “Monitoring of participation of Russian HEIs in the Bologna process,” 2006). On the other hand, this study applies implementation theory perspectives, which, even though considered by other HE

researchers (Cerych & Sabatier, 1986; Enders et al., 2003; Gornitzka et al., 2005; Witte, 2006), need to be illustrated and refined in the context of the multi-actor and multi-level governance in which the Bologna process is being enacted.

1.3 RESEARCH QUESTIONS

Along with increased opportunities for academic mobility, the first positive effects of the Bologna process in Russia was a movement by administration and faculty within many HEIs to revise and evaluate their educational programs to comply with international ‘standards’; this shift to voluntary compliance fostered structural changes as well as an increased awareness of diversity in teaching modes and curricular designs. Nevertheless, as will be discussed later, the Bologna reforms in Russia have been largely based on piloting projects conducted in elite HEIs. Thus, although the main objective of this research will be to explore the implications of the Bologna process for a selected HEI in Russia (taking into account the specificity of the implementation process), the results from this HEI will be extrapolated to Russian HEIs in general, by answering the following research question:

How do Russian HEIs respond to the Bologna process?

To facilitate the exploration of this research problem, the following sub-questions have been designed:

1. What are the main strategies in Bologna process implementation in terms of the balance between top-down and bottom-up initiatives?
2. What are the major challenges faced by Russian institutions when implementing the Bologna-related structural reforms?
3. What are the possible implications of the Bologna process for Russian HEIs?

1.4 METHODOLOGY

This study employs a combination of qualitative² methods for data collection (i.e., content analysis, observation, and open-ended interviews) in order to allow for data source triangulation (Newman & Benz, 1998:52) and find a shared reality in responses to Bologna-related reforms in Russia. Initially, a single theoretical framework (i.e., hybrid approach, which synthesizes the top-down and bottom-up research perspectives) will be selected in order to analyze policy implementation in Russia; then, a list of critical variables will be defined with an objective of making predictions that concern potential policy outcomes; finally, the evidence will be collected and analyzed in accordance with the framework and the variables selected before conclusions about the process are drawn.

Although the research will be organized around a single case study, the evidence will be derived from a wide range of sources. First, open-ended interviews and personal observations will be conducted on-site, and institutional policy documents (e.g., TPU's Complex Development Program: 2006-2010) will be analyzed, in order to provide this research with empirical evidence on implementation challenges and bottom-up strategies. Second, a content analysis of national Bologna-related policy documents (as developed between 2003 and 2006) will be undertaken in order to track the legislators' initiatives related to Russia's participation in the Bologna process, highlight the role of the national government in this process, and assist in understanding the coordination mechanisms of given policy implementations. Third, a selection of internal Russian assessment reports and studies (e.g., "Monitoring of participation of Russian HEIs in the Bologna process," 2006) will be used as a secondary method of extrapolating the case study research findings; by comparing the challenges faced, as well as the implementation strategies adopted by the case study institution and other Russian HEIs, it will be possible to draw conclusions regarding the extent of Russia's participation of the Bologna process.

² The quantitative methods, such as questionnaires, have not been chosen because they are already used by the research groups monitoring the implementation of the Bologna process in Russia. Their findings, however, will be used in this research too.

1.4.1 Case study

A *case study* is often mistakenly associated with a particular research method (e.g., participant observation) or a type of evidence (e.g. qualitative), while, in fact, it represents a research strategy (cf. an experiment, a history, a simulation) that does not imply the use of any specific type of evidence or data collection method (Yin, 1981:58). The case study approach has been chosen for this research as it not only represents one of the most flexible and open-ended research designs, but also will “allow the complex phenomena of implementation to be studied in detail and context” (Winter, 2003:206). Depending on their relation to theory and the type of research outcomes, there are several major types of case studies (Keating, 1995:69-71):

- theory discovery (exploratory) – aimed at devising conceptual frameworks for analyzing new, complex, or dynamic phenomena that existing theories fail to address;
- theory illustration (descriptive) – meant to provide a deeper understanding of the significant general relationships in the subject area;
- theory specification (explanatory) – used to refine a theory by adding greater precision to theoretical constructs, or revealing the theory’s ability to illuminate new aspects of the phenomenon; and
- theory testing – aimed at confirming or falsifying a theory by investigating a hypothesis.

Some case studies may also be used to design prescriptive models, which offer solutions to practical problems or guidance for further decision making. While all these types of case studies may be interrelated, this research will be principally based on a theory-illustration case study—that is, it will aim to demonstrate the ability of selected implementation theory perspectives to illuminate the institutional response to Bologna-related policy in Russia.

One of the standard criticisms of using case studies in research is the lack of generalizability of the findings obtained. As argued by Lukka & Kasanen (1995:77), however, case study research findings may be generalized to some extent—if not contextually, then theoretically or analytically. Hence, the inability to apply the statistical generalization in case studies may be counterbalanced by the thoroughness of empirical data analysis, theoretical generalizations, or the triangulation of research

methods (Lukka & Kasanen, 1995:75). If theoretical generalizations may be made on the basis of structural similarity and logical reasoning, then case findings also may be replicable for structurally similar contexts—provided that those contexts are supported by plausible arguments (Hillebrand et al., 2001:656).

1.4.2 Interviews

Interviews are one of the most important sources of case study information. In this study, interviews were conducted with the following individuals to provide for a variety of perspectives:

- the head of HE and Research Committee, Tomsk region administration;
- the deputy vice-rector for International affairs, TPU;
- the dean of the Computer Science Faculty, TPU;
- the head of the Center for Academic Mobility, TPU;
- the head of the Quality Management Department, TPU;
- a professor at the International Management Institute, TPU, (teaching a course in “HE Management”);
- a professor at Computer Science Faculty, Tomsk State University; and
- two TPU graduates, who participated in academic exchanges as students.

The interviewees have been selected either on the basis of their involvement in implementation of the Bologna process objectives at the case study university, or among those who could throw light on the related challenges and opportunities. The selected professors and the dean, for instance, were coordinating the implementation experiments of the Bologna process principles at their faculties, so all of them had available materials (e.g., articles or presentations) summarizing the interim results and the structure of the experiments. The opinions of graduates and the persons involved in internationalisation activities and management were useful to understand the challenges related to academic mobility development and graduate employability enhancement. The interviews were recorded with the permission of the respondents.

1.5 ORGANISATION OF THE STUDY

In *Chapter 1*, I presented the study background, research question and sub-questions, and research methodology. I also explained the reasons for case study site selection. *Chapter 2* outlines the Bologna process objectives and the conditions under which it evolved, before reviewing current criticisms of the benefits of the process; presents an analysis of policy implementation to date; discusses the institutional dimensions of policy implementation; and justifies the selection of a theoretical framework and the critical variables used in the case study. *Chapter 3* discusses the rationale for Russia's participation in the Bologna process, based on public debate and an analysis of four selected HE institutional settings in Russia at the time the Bologna Declaration was adopted in Russia (2003). National policy documents, aimed at changing these institutional settings in line with Bologna Declaration principles, are explored, and then the key actors responsible for implementing policy and methods of coordination are considered. The case study and the implementers' perspective on the Bologna process effects are presented in *Chapter 4*. In *Chapter 5*, I review the implementation-related issues of the Bologna process in Russia, discuss the challenges currently affecting implementation, and then attempt to highlight potential implications of implementation for Russian HEIs. I conclude the thesis by balancing the theoretical assumptions against empirical findings obtained from the research questions. In *Chapter 6*, I highlight the limitations of this study and make suggestions for future research.

CHAPTER 2: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

In this chapter, I will discuss the key concepts and trends related to the conditions under which the Bologna process is being implemented. I will also attempt to draw a theoretical framework for analyzing change in HE induced by Bologna reforms.

2.1 OVERVIEW OF BOLOGNA PROCESS

The Bologna process is primarily seen as a response to *internationalisation* and *globalisation* challenges and is therefore shaped by two different driving forces associated with these challenges: cooperation and competition. On the one hand, it is considered a continuation of European HE internationalisation policies shaped during the 1980s, which encouraged institutional cooperation and student mobility programs, such as ERASMUS. The peculiarity of new reforms, however, was in the initial exclusion of supranational bodies (e.g. European Commission) from decision making (Kehm, 2003:3). Hence, the Bologna process was devised as an intergovernmental framework agreement that encouraged voluntary participation, while leaving the use of financial and other policy tools to the discretion of signatory nation states.

On the other hand, the Bologna process represents a response to globalisation trends because, in effect, it urges HEIs, nations, and blocks of nations to compete. In this respect, the need for HE reforms in Europe appeared because European universities (by their own admission) have lost their leading position in the world. One reason for this loss of prestige was an absence of incentives to compete in the first place. As opposed to Anglo-Saxon countries, where market mechanisms have long been in place, HE in continental Europe has been characterized by more centralized governance systems, equity of access, and predominantly tuition-free education (van der Wende, 2001:255). As argued by Haug and Kirstein (1999), the combination of tuition-free education and widely-spread one-tiered programs also have resulted in longer degree programs and times for students to complete a degree. Consequently, the knowledge students obtained during their 7-8 years of studies was partially outdated by the time they graduated. Such inefficiency of studies coupled with comparatively low national and

private expenditures on HE³ resulted in a situation where degree structures and funding mechanisms had to be reviewed.

Another important condition under which reforms are being implemented involves the changing relationship between HE and national governments. The Bologna process is an excellent example of reforms involving multilevel and multi-actor governance. As HE systems have become more massified, the trend in steering patterns also has shifted with authority and funding responsibilities being actively transferred downwards (from governments to HEIs), upwards (to supranational bodies), and outside (to independent regulatory bodies) (Beerrens, 2004; Enders, 2004).

Thus, in Russia and in other countries, HEIs started implementing the Bologna process objectives without waiting for governmental directives; as a result, relevant legislation is still lagging behind academic initiatives. On the other hand, the European Commission (initially excluded from the decision making) has subsequently become more involved in the Bologna process in terms of financial support for academic mobility projects with countries outside EU [e.g. Erasmus Mundus] and encouraging curricular content review (e.g., Tuning Project). “This is in part due to the fact that certain goals cannot be achieved through national initiatives alone and in part because the prior collaborative links that the Bologna Process builds on owe much to EU programs of mobility and exchange” (International Association of Universities, 2004).

2.1.1 Bologna process objectives and instruments

Although Europe has been viewed increasingly as an economic whole, the need also has arisen for the HE sector to contribute to Europe’s integration. Over time, the role of universities has been redefined from being the centers for training national elites to the centers of knowledge transfer, thereby contributing to the economic competitiveness and cultural attractiveness of the nation (Baidenko, 2002). The European HE sector, however, was so diverse that it was believed to hamper the incoming

³ “A substantial gap has opened up with the USA—1.1% of GDP for the EU compared with 2.3% for the USA. This gap stems primarily from the low level of private funding of higher education in Europe. This stands at a meager 0.2% of European GDP compared with 0.6% in Japan and 1.2% in the USA” (EC Communication, 2003). In Russia, by comparison, the total public and private expenditures for tertiary education was approximately 1.1% of GDP in 1999 (Human Development Report for Russian Federation, 2004) and is unlikely to have increased much since.

academic mobility and the free movement of labor force. Therefore, HE systems had to be made more convergent and transparent before they could start raising the international profile of Europe as a whole.

In June 1999, 29 European ministers in charge of higher education met in Bologna to lay the basis for establishing a European Higher Education Area by 2010 and promoting the European system of higher education world-wide. By the time the European Education ministers met in Bergen in 2005, 45 total European countries made a commitment towards the reform of their HE systems. In the Bologna Declaration (1999) and subsequent related documents (Prague Communiqué, 2001; Berlin Communiqué, 2003; and Bergen Communiqué, 2005), the following basic action lines and tools for implementation were agreed upon in order to facilitate greater transparency and cooperation among EU nations:

1. Adoption of a common framework of readable and comparable degrees, including the implementation of a standardized form of Diploma Supplement, which students graduating in 2005 and all years thereafter should receive automatically and free of charge.
2. Introduction of a two-level degree structure of HE (undergraduate and graduate). First- and second-cycle degrees should have different orientations and various profiles in order to accommodate a diversity of individual, academic, and labor market needs. The first-cycle degree should give access to the second-cycle degree studies and also be appropriate to the European labor market. The second cycle should give access to doctorate studies (i.e., a future third-cycle Ph.D degree program).
3. Establishment of a system of credits compatible to the European Credit Transfer System (ECTS). The credits could also be acquired in a non-university context (e.g., lifelong learning, conferences) provided that they are recognised by receiving universities.
4. Removal of obstacles to academic mobility.
5. Promotion of European collaboration in developing comparable quality assurance criteria and methodologies.
6. Promotion of the European dimension in HE.
7. Inclusion of lifelong learning strategies.
8. Involvement of HEIs and students as essential partners in the process.

9. Promotion of the attractiveness and competitiveness of the European Higher Education Area to other parts of the world (including the aspect of transnational education).
10. Doctoral studies and the synergy between the European Higher Education Area and the European Research Area.

By assuming these responsibilities, each signatory country hoped to increase international academic mobility as well as the employability of their graduates. Furthermore, it was hoped that agreement on these action lines would contribute to one important common goal expressed in the Lisbon Strategy (2000) for Europe, as a whole, to become “the most competitive and dynamic knowledge-based economy in the world” by the year 2010.

2.1.2 Criticism of the Bologna process

No one can deny the influence of the Bologna process on the national policy agendas, but the experts raise some concerns about the rationale, cost-effectiveness, and character of this influence. As argued by Amaral and Magalhães (2004), among the possible dangers associated with the Bologna process are the emergence of a new supranational HE bureaucracy, the loss of diversity (considered to be one of the major European assets in the convergence race), and commoditisation of higher education.

The goal of enhancing academic mobility is sometimes seen as being elitist; despite all the mobility programs and financial support available, the percentage of ‘mobile’ students does not exceed 3% in most European countries (UNESCO Institute for Statistics, 2004). Even though this quantity is far from the planned goal of 10% (Neave, 2002:184), the number of exchange students already goes beyond the capacity of many international offices to accommodate their needs.

The goal of increasing graduate employability is more difficult to achieve. Although Diploma Supplements provide students with more transparent qualifications and grade descriptors, thereby saving graduates some effort in translation, the Diploma Supplements do not seem to contribute much to their competitiveness. Yet, while work abroad opportunities are still accidental, the study abroad experience reflected in the diploma may add value to the graduates’ profile in the national labor market.

In the light of the above criticism, it is important to note again that the Bologna-related documents are not binding in their nature and do not impose any regulations concerning tuition fees or curricular content. The key objectives of the Bologna process—mobility, employability, competitiveness, and attractiveness—reflect the ‘noble’ character of the reforms and account for their popularity, while the seeming vagueness of the objectives was a price of compromise necessary to achieve any agreement at all.

2.2 POLICY IMPLEMENTATION ANALYSIS

Before beginning to analyze the Bologna-related policy implementation at the institutional level, an appropriate question to ask is whether the Bologna Declaration is truly a policy document. On the one hand, as discussed earlier, “The Bologna declaration has not been imposed top-down but agreed upon by several independent nation states. Thus, it can hardly be considered a policy in the classical sense” (Witte, 2004:407). On the other hand, it has all the elements of policy when it is defined as “a public statement of an objective and the kind of instruments that will be used to achieve it” (Gornitzka, 1999:14). In any event, it is true that the objectives, as stated in the Declaration, have eventually translated into national policies. And the significance of these policies is reflected in the fact that the challenges and the extent of their implementation are discussed at biannual conferences held by the signatory countries.

The objectives of this study focus on national policy formation and policy implementation; thus, the theoretical framework chosen will depend primarily on policy implementation analysis. As argued by Schofield (2001:247), the use of various implementation theories in policy research has evolved around the following functions: (1) to explain policy success or failure; (2) to predict policy outcomes; (3) to provide recommendations for future policy improvement; and (4) to design a unifying approach to studying multi-actor and inter-organisational activity within politics and administration. Given the ongoing and fluid nature of Bologna-related reforms in Russia, this research will use implementation theory perspectives and case study findings to predict the potential policy implications for Russian HEIs. In this context, it will be useful to give an overview of the three major analytic models employed

in policy implementation analysis—top-down, bottom-up, and hybrid—as well as identifying the critical implementation variables that constitute those models.

Although, over the past thirty years of policy implementation research, no overarching implementation theory has been developed (Winter, 2003:206), one of the attempts to provide an integrated policy process model is presented below in Figure 1. This model distinguishes among implementation stages, recognizes the importance of policy context for implementation success, allows for a plurality of research perspectives, and includes a number of critical variables to be analyzed.

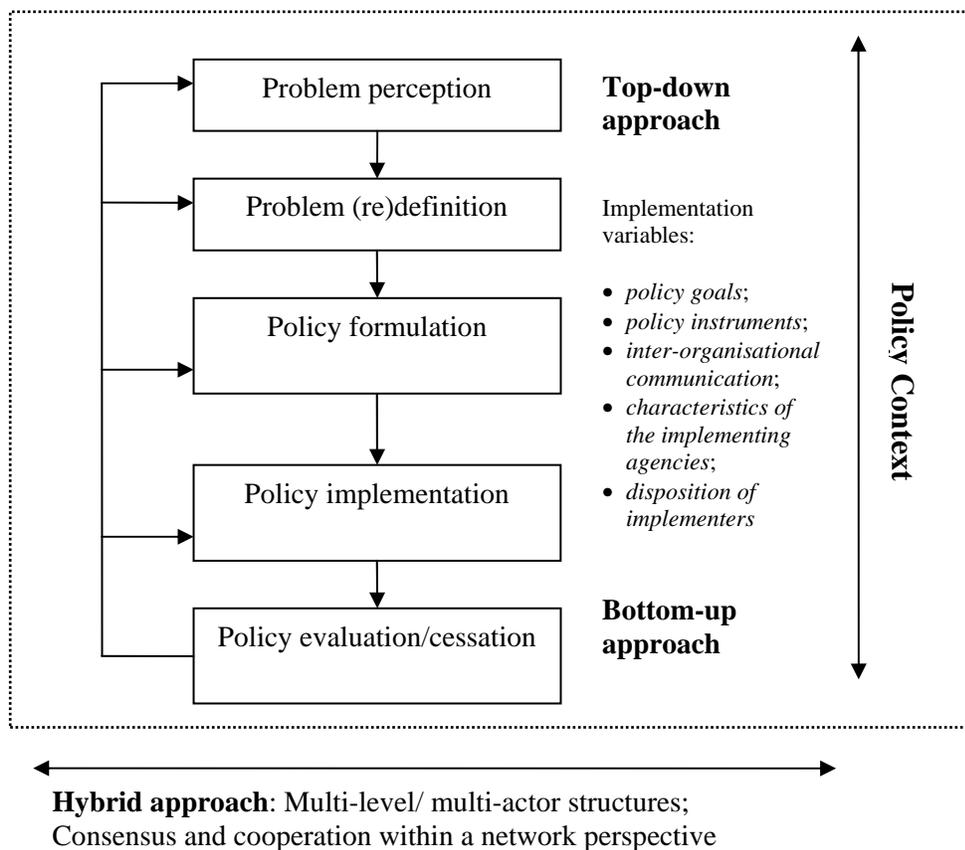


Figure 1. Policy process.

Source: Adapted from: Enders et al., 2003.

Throughout the first two thirds of the 20th century, it was assumed that decision makers drafted clear policies, which were then promptly translated into action and carried out by administrators (Hill & Hupe 2002:42). The political unrest of the 1960s brought about a breakdown of democratic processes

in the United States and throughout Europe, which, in turn, raised serious questions about the efficiency with which policies were being implemented. Evaluation analysis began as a means to focus on policy goal achievement—that is, identifying factors that contributed to the success or failure of policy implementation and offering suggestions for better policy design. Implementation studies emerged as an independent research field in 1973 with the publication of Pressman and Wildavsky's seminal work, *Implementation,* which explored reasons for the apparent mismatch between policy expectations and implementation outcomes. In fact, implementation research filled in the existing gap between two sub-fields of political science—policy analysis and public administration. Along with Pressman and Wildavsky, pioneers such as Hargrove (1975), Williams and Elmore (1976), and Bardach (1977) emerged and became the first representatives of implementation research based on a top-down strategy (Winter, 2003:205, 213).

The top-down approach characterized implementation as a “hierarchical execution of centrally-defined policy intentions” (Pülzl & Treib, 2006:1). In essence, this model assumed that central decision makers not only were capable of setting forth clear and distinct policy objectives, but also had unequivocal control of all stages of the implementation process. After all, policy formation involved setting up goals and objectives, selecting policy tools, and identifying or creating the implementing agencies. Once these initial steps were fulfilled, the implementation process was supposed to follow automatically in a fairly linear way (Schofield, 2001:250). In its simplest terms, implementation was nothing more than an “interaction between the setting of goals and actions geared to achieve them” (Pressman & Wildavsky, 1973:xv). Success of the top-down approach was, in theory, easy to measure and depended largely on the congruence between policy goals and policy outcomes. By analogy, failure of the top-down approach usually resulted because of the ‘complexity of joint action’—that is, the larger the number of decisions to be made, and the greater the number of actors involved in the policy process, the higher the risk of goals being distorted during the course of implementation (Winter, 2003:212). In short, implementation success or failure was viewed either in terms of imperfect legislation (e.g., inappropriate policy instruments) or in the failure of bureaucratic compliance (Schofield, 2001:249).

The major criticism of the top-down model was that it neglected the concept of ‘governability,’ or possible resistance to change. Top-down theorists also did not take into account policy goal ambiguity

or behavioral complexity (Schofield, 2001:251). As a result, a second model was developed in the late 1970s and early 1980s, which became known as the bottom-up approach.

The bottom-up school theorized that if policy outcomes did not match policy objectives, then the disparity must be caused by a network of actors responsible for implementing policy at the lowest levels. The bottom uppers rejected the idea of hierarchical guidance and the ultimate power of central policy makers; instead, they considered it more important to focus on the everyday decision making of ‘street-level’ bureaucrats, who were closer to actual problems than central policy makers and who possessed a great amount of discretionary power in overcoming difficulties, adjusting policies, and redefining problem-solving strategies that met common goals (Pülzl & Treib, 2006).

Table 1 compares characteristics of both models in six key areas. The major distinction between the top-down and bottom-up implementation models is that the former emphasizes responsibility while the latter underlines trust (Lane, 1993:101). Top-down theorists view society in elitist terms, where decisions are made by a few select representatives; bottom-up theorists believe that local bureaucrats and common citizens not only have a right to participate in implementation strategies, but also in how policies are formed.

Table 1

Comparison of top-down and bottom-up models

Characteristics	Top-down model	Bottom-up model
Research strategy	From central policy makers down to administrative execution	From individual ‘street-level’ bureaucrats up to administrative networks
Implementation	As an outcome / output	As a process
Analysis goal	Prediction/policy determination	Description/explanation
Policy process model	Stagist	Fusionist
Character of implementation process	Hierarchical guidance	Decentralised problem-solving
Democratic model	Elitist	Participatory

Source: Adapted from Pülzl & Treib (2006).

What is the optimal balance between these two models for successful policy implementation? Some theorists believe that the best approach is one that synthesizes both models. The resulting hybrid

approach views policy formation as an evolutionary process in which goals and objectives are continuously being defined and redefined from the top-down, while, at the same time, implementation of those policies is being analyzed from the bottom-up, with key actors identified and strategies examined for implementation. These new cooperative modes of governance allow for multiple actors and stakeholders to form mixed public/private networks, which participate in policy formation and adaptation (Mayntz, 1998). Therefore, policy implementation studies are facing one more challenge of including a ‘network perspective,’ which bridges the gap between macro and micro level of analysis by addressing coordination mechanisms and patterns of communication among the network participants.

Along with the selection of a research perspective, critical variables need to be defined for a basic understanding of policy processes in different national and cultural contexts (Enders et al., 2003). The number of possible variables varies in the research literature, but, for the purposes of this study, it will be feasible only to address the following six critical ones (cf. Gornitzka et al., 2005:41-42; Van Meter & Van Horn, 1975:462-473), which integrate all three research models, help measure policy performance, and assist in making predictions:

- *Policy objectives:* In order to measure factors necessary for implementation success, the national policy objectives will be reviewed for clarity and the degree of change implied.
- *Policy instruments:* Policy instruments use ‘classical tools’ (normally associated with interventionist policy making), which include legislation, money, organization, and information (Gornitzka, 1999:19). In conditions of multi-level and multi-actor governance in which the Bologna process is being implemented, the use of ‘new policy instruments’ such as self-regulation, public participation, and voluntary agreements may prove to be justified (Enders et al., 2003:10).
- *Inter-organisational communication:* This variable studies not only the key actors involved in implementing the Bologna process objectives, but also the main modes of interaction among them. By modes of interaction (or ways to resolve conflicts), Scharpf (1997) identifies ‘mutual adjustment,’ ‘negotiation,’ or ‘hierarchical determination.’ There are also intermediate modes such as ‘negotiation in the shadow of hierarchy’—that is, although the government has the formal authority to impose a certain policy on the HE sector, it may choose to negotiate a consensus (Scharpf, 1997:72). The analysis of interaction modes among the key actors will

contribute to an understanding of the role of the government in coordinating Bologna-related reforms.

- *Characteristics of the implementing agencies:* This variable involves analyzing the characteristic features of the HEI selected for this case study.
- *Disposition of implementers:* This variable assesses implementer attitudes, which become increasingly important in situations where new policy tools are applied.
- *Economic, social, and political conditions:* In order to track the degree of implementation of the Bologna process objectives, it is useful to construct a policy context that accounts for the choice of policy tools while helping to reveal the specific challenges faced by HEIs.

To sum up, in conditions where HEIs have to respond to the multiple challenges of massification, internationalisation, and globalisation; decreased state funding; and the growing expectations of stakeholders, the policy process is inevitably changing, which requires new multi-level approaches and multi-theoretical frameworks for policy and reform studies (Gornitzka et al., 2005). While the finiteness of the policy process as well as the possibility to distinguish among its various stages has been largely debated, the major shift in policy understanding was that implementation was increasingly viewed as a learning process or evolution. This implies that policy objectives and program technologies can be adjusted based on negotiations and feedback provided by implementers (Gornitzka et al., 2005; Lane, 1993)

2.3 INSTITUTIONAL DIMENSIONS

As Russia joined the Bologna process only three years ago, and the related policy formation is still underway, we can only speak of emerging change in institutional settings. Hence, the focus of this research will not be on specific goals attained, but on the analysis of the specific challenges faced in implementing Bologna-related structural reforms, as well as emerging patterns of institutional change.

In order to analyze the adaptation of Russian HEIs to Bologna reforms (as well as the challenges related to reform), it is necessary to begin with interpreting the inherited structural and cultural peculiarities of the HE system in Russia—that is, the policy context. The choice of the analytic dimensions was determined by feasibility considerations outlined in §6.1 of this study, while also

relying on the findings of the report “Monitoring of participation of Russian HEIs in the Bologna process” (2006). Out of 101 sample institutions, the report claimed that

- 68 were involved in developing comparable quality assurance criteria and methodologies;
- 61 participated in developing two-level degree structures;
- 52 developed international joint degree programs;
- 43 introduced the ECTS-compatible credit system;
- 22 promoted mechanisms for mutual recognition of academic credentials; and
- 17 started issuing graduates a standardized Diploma Supplement.

For practical reasons, I limited the analysis of institutional settings within Russia to two specific categories, which represent the most visible measurement of Bologna process reforms:

- *National degree structures*: including degree titles and length of degree programs; percentage of students taking degrees; access requirements; program orientation (labor market, research); and
- *Curricular design*: including state educational standards and the degree of institutional autonomy in designing curricula; ways of measuring study load; exam types and grading systems; ways of organizing curricula (e.g., self-study vs. instruction); student freedom in selecting a study trajectory.

At the same time, I am intending to explore how the major Bologna process objectives are dealt with at the institutional level by investigating two further analytical dimensions:

- *Graduate employability*: that is, the role of employers in defining curricular content and setting quality criteria; demand for one-tier vs. two-tier degrees;
- *Academic mobility*: that is, the challenges and opportunities for student and staff mobility; issues of transferability of credits; the role of academic mobility in internationalisation policy.

2.4 OVERALL THEORETICAL FRAMEWORK

The aim of the theoretical framework is to understand how Russian HEIs have adapted to Bologna process reforms (primary research question). The main research topic cannot be considered in isolation, but should be balanced against a selected research approach to policy implementation study (sub-question 1), specific challenges facing implementation (sub-question 2), and possible future implications for Russian HEIs when the Bologna process is fully implemented (sub-question 3). In order to analyze the research problem, this study will construct a theoretical framework that has four main objectives: (1) to examine the policy context, based on the four analytical dimensions (see §2.3) in effect at the time Russia joined the Bologna process in 2003; (2) to track the Bologna-related policy formation with regard to the above mentioned critical variables (see §2.2); (3) to analyze the policy implementation in Russian HEIs through 2006, and (4) to make predictions concerning the policy implications for Russian HEIs. The framework considers both the legislators' and the implementers' initiatives along with the factors limiting or facilitating the implementation process, which is in line with the hybrid top-down and bottom up approach to implementation theory.

The appropriateness of using a hybrid approach is justified by assuming that the national policy into which the Bologna process is translated cannot be characterized as linear and hierarchically executed, but rather represents a policy in evolution, where “outcomes and objectives continuously interact” (Hill & Hupe, 2002:12). In the case of Russia's implementation of the Bologna process, the perceptions of the implementing institutions are viewed to be equally as important as the legislators' perspectives because the feedback provided by implementers, throughout the period of experimental implementation of the Bologna process provisions, is expected to form the basis for legislative amendments. Realizing this, HEIs and buffer organizations (e.g., the Regional Centers for Academic Mobility) will likely take a pro-active position—not only in implementing the principles of the Bologna Declaration, but also in negotiating and shaping the related policy. Based on these hypotheses, I am assuming that the degree of change relating to participation in the Bologna process, as well as the choice of implementation strategies, depends mostly on HEI administrators and other ‘street-level’ bureaucrats. Accordingly, one possible implication of such an approach is that implementation may result in increased diversity and stratification among HEIs. Thus, in the course of this study, which is based on the above theoretical

framework, I will attempt to confirm this analysis while drawing conclusions about the implications of Bologna process participation for Russian HEIs.

CHAPTER 3: BOLOGNA PROCESS IN RUSSIA

3.1 OVERVIEW

Russia has a long history of collaboration with Europe in economic, cultural, political, and academic spheres, but joint educational reforms triggered by the seminal Bologna process have presented a new opportunity for closer integration. One of the objectives of this research is to explore how the principles of the Bologna Declaration translate into national policy formulation. Russia officially joined the Bologna process by signing the Berlin Communiqué in September 2003. As a result, Russia has taken certain national responsibilities to strengthen the convergence and transparency of its HE qualification structures, to resolve the problem of transfer and weighing of academic credits, and to improve its quality assurance system, thereby increasing international academic mobility and graduate employability. However, several factors have to be taken into account before analyzing the implications of the Bologna process for HE in Russia: the geographical span of the Russian Federation, the degree of financial and legislative support available, and the difficulty of overcoming existing traditions in HE.

First, it will take a considerable amount of time to make the institutional bureaucracy aware of the Bologna Declaration principles; these principles are likely only to take root after patient training and repeated attendance at seminars, workshops, and conferences. The federal system of political governance and the geographical span of the HEIs involved do not presume that all aspects of reform will be heeded uniformly throughout the Federation. The lack of cohesive political units and differing socio-economic backgrounds of the regions are likely to slow down attempts at progress, no matter what the national State decrees.

Second, while the implementation of and research on the Bologna process in European countries have received financial support by the respective governments and supra-national bodies, most Russian HEIs have little to rely on except for enthusiasm. Only a limited number of (elite) universities receive funding from the legislature (in the form of competitive tenders) to pilot Bologna-related projects. In addition, most of the EU mobility schemes are meant only for internal use. In this context, the role of

the Russian government and existing buffer organizations (e.g., the Regional Centers for Academic Mobility) in promoting the Bologna Declaration principles will have to be explored.

Third, domestic publications seem to agree that the implementation of almost every Bologna Declaration principle will be challenging due to Russia's existing traditions in HE. In order to understand these challenges, I will begin by setting out the policy context and focus on four selected institutional dimensions in existence at the time Russia officially joined the Bologna process in 2003.

3.2 POLICY CONTEXT BY 2003

Until the late 1980s, all Russian educational institutions were public and education was free of charge. The activities of HEIs were completely regulated and controlled by the state. The collapse of the Soviet Union in 1991 and democratic changes put into effect throughout the early 1990s transformed Russia's education system as well. The Federal Law on Higher Education (1996) allowed the establishment of private educational institutions, and provided public (state-run) institutions with greater autonomy. The number of places for enrollment of students doubled over 10 years, mostly due to the new opportunity of accepting fee-paying students at both public and private universities. By 2003, the number of students enrolled in HEIs was 365 per 10,000 residents (the total number of students reaching 5,947,500).⁴ The number of HEIs in Russia has also doubled and reached 1,039, which includes 655 public and 384 private institutions⁵ [European Center for Higher Education (CEPES) statistics, 2002-2003].

Such significant massification of Russian HE, however, has raised concerns about the quality of education provided in new HEIs and triggered the establishment of a State accreditation system in 1997. Accreditation was not only used to assure academic quality, but also to determine the status of HEIs. Therefore, the following types of HE institutions in Russia have been distinguished: universities (51%), academies (28%), and institutes (21%)—the latter falling under the non-university sector, which focuses mostly on teaching (National Accreditation Agency of Russia, 2005). Bearing in mind that

⁴ Approximately 46.5 % (170 per 10,000 residents) of these students are entitled to free tuition on a competitive basis by the Federal Law on Education (1992).

⁵ Private institutions account for only 12.1 % of all students.

HEIs provide academic training in more than 400 majors, the Russian HE system may be considered quite diverse. In this perspective, domestic HEI ratings are meant to make it easier for students and other stakeholders to make their (investment) choices. Nevertheless, there is a prevailing view in the world community that Russian HE is absolutely not transparent⁶ and that the majority of HEIs either are not ready or not motivated⁷ enough to compete internationally. Perhaps this is why participation in the Bologna process is looked upon as a major tool to approach ‘international standards’ (Kuzminov et al., 2003).

3.2.1 National degree structures

Historically, Russian HE was intended to train specialists in narrow fields defined by the government that funded the training. In these conditions, a one-tier Specialist’s degree with fixed curricula and program length was most ‘convenient’ for centralized planning. As noted by an interviewee from Tomsk, there was no need for students during the Soviet period to shape their individual learning trajectories; market mechanisms were missing, and conditions were in place where collective values had a higher priority over personal ones. Furthermore, academic choice had to be made quite early—that is, upon applying to a HEI (usually at the age of 16-17)—and were irrevocable once chosen. It was not until Russia began the transition to a true market economy after 1991 when HE system reform became necessary.

A two-tier system of Bachelor degree programs and Master degree programs was introduced in Russia by the Decree of the RF Government [August 12, 1994 (No. 940)]⁸, which allowed some students to start their professional career earlier, thereby saving on HE expenditures. Nevertheless, less than one tenth of all graduates by 2003 were receiving these degrees. Through inertia, the rest of the student population was enrolled in traditional five-year programs leading to a Specialist’s degree (Smolentseva, 2003). According to Professor Kuzminov, the Rector of State University – Higher School of

⁶ I experienced this lack of transparency myself when collecting statistics and other information on Russian HE.

⁷ The lack of motivation to compete internationally can be explained by the fact that most Russian students cannot yet afford to study abroad and the admission competition is still difficult; however, HE experts express concerns about possible ‘invasion’ of the domestic educational market by foreign providers in case of Russia’s participation in the General Agreement on Trade in Services/ World Trade Organization (GATS/ WTO).

⁸ Decree “On approving the State Educational Standards in professional higher education”

Economics, the transition to a multilevel system of education was often marked by formality, without any major changes made to the curriculum structure or any attempt to distinguish between academic and applied programs (Kuzminov et al., 2003). Furthermore, the increase in vertical academic mobility between various majors has yet to be made, as Russian students typically do not opt to change majors or institutions after completing their first cycle of studies.

On a positive note, by adopting a multilevel system of education, Russia acknowledged a shift in educational attitude from ‘education for life’ to ‘education throughout life.’ Indeed, the idea of ‘education for life’ seems utopian in an environment where 5% of theoretical knowledge and 20% of professional knowledge is updated every year (Melvil et al., 2005).

Along with a discussion of national degree structures, the overall length of Bachelor degree and Master degree programs had to be evaluated. Russian secondary school education is shorter than in most European countries, constituting 10-11 years as compared to a minimum of 12 years in the EU. Thus, the appropriateness of transferring to the 3 + 2 model wide-spread in EHEA (i.e., 3 years of Bachelor’s degree study + 2 years of Master’s degree studies) entered this debate. It was argued that reducing the length of Bachelor degree programs may not suit Russian HE students, who often need an extra year of schooling to compensate for their shorter secondary school training. Therefore, for the time being, Russia chose to substitute the traditional one-tier 5 year Specialist’s degree programs with a hybrid 4+1/2/ model (see Figure 2).

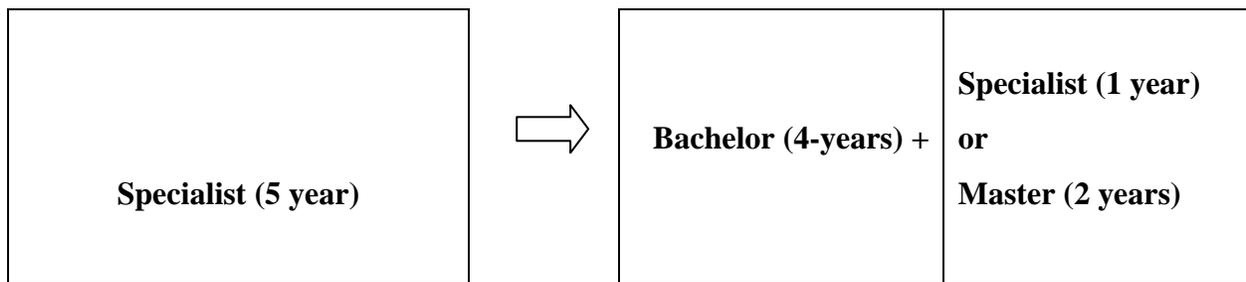


Figure 2. Shift from one-tier to two-tier degree structures in Russia in the framework of the Bologna process.

The HE experts express their concerns that as a result of lengthening the overall study period the government would only be able to finance 20% of Master degree students—possibly even being obliged to introduce tuition fees for this level of studies, which likely would result in the overall drop in the number of Master’s degree candidates (Belov, 2005).

3.2.2 Curricular design

Unlike countries with a decentralized HE steering model, in Russia even the selection of curriculum content is not considered ‘the business of faculty experts.’ The State Educational Standards for Russian HE programs determine the minimum requirements for the subject matter to be taught and the threshold level for learning outcomes. Unfortunately, these ‘minimum’ requirements allow little freedom for curricular design creativity at the institutional level as the obligatory federal component accounts for 70-80% of the educational content (Comparative Educational Policy portal, 2005). The resulting rigidity of the educational programs often force many students who are unsatisfied with the fixed set of courses (e.g., in engineering) to simultaneously enroll in the so-called “second higher education” in economics or in other “popular” majors in order to increase their competitiveness in the labor market. It is not surprising that the combination of full-time and part-time studies leads to a decrease in quality of learning outcomes.

Another peculiarity of the curricular designs inherited from the Soviet times is that teaching methods are traditionally characterized by vertical pedagogic relations, with lectures as the main form of instruction. According to Tomusk (1998), it is not unusual for Russian students to attend an average of 27 hours of lectures and seminars per week. When lectures are the main form of instruction the educational emphasis shifts to an inward orientation towards disciplinary content (Ensor, 2002). In this context, students are viewed as empty vessels to be filled with new knowledge, without regard to whether or not that new knowledge relates much to their previous experiences. It is logical to assume that an educational system that focuses on quantity over quality also does not provide enough time for independent studies, which scholars believe necessary to develop critical thinking skills (Tomusk, 1998).

The traditional Russian HE system measures study workload in terms of contact and self-study hours, so it causes credit recognition problems—not only for Russian students studying abroad, but for international students studying in Russia. In 2002, the Russian Ministry of Education and Science introduced an experimental academic credit system. Approximately 30 leading universities were voluntarily involved in the experimental development and implementation of a credit transfer system. The experiment showed, however, that the attempt to formally recalculate hours into credits with the help of a common denominator as recommended by the Ministry (e.g., 36 class and self-study hours = 1 credit) was largely unsuccessful, as some courses received an inadequate credit weight in the result (Melvil et al., 2005).

A few words should be said about the Russian HE grading system, which is based on a simple grading scheme. Students are evaluated by number as being ‘excellent,’ ‘good,’ ‘satisfactory,’ or ‘failing.’ From personal observations (which have been substantiated by my colleagues’ opinions), this grading system tends to yield an unjustifiably high number of excellent and good grades—especially during oral examinations. Inasmuch as oral examinations in Russia are not only widely spread, but determine which State-financed students continue to receive monthly scholarships, it is not uncommon for students to try and negotiate grades with their professors. On balance, a shift toward the ECTS distributive grading system, along with more written exams, might produce more objective student evaluations.

3.2.3 Graduate employability

In the Soviet period, the number of specialists to be trained in every major was planned centrally by the government and graduates were assigned compulsory job placements. Therefore, on the one hand, young people obtaining a university degree had a job security; on the other hand, the existing manpower approach was skewed toward military needs and generated the so-called “engineeringization”⁹ of higher education and an under-emphasis of training in the humanities and social sciences (Smolentseva, 2003).

⁹ By some estimates, 90% of Russian HE provided Engineering training before Perestroika.

After market mechanisms were unleashed during Perestroika, the mushrooming private universities and their branches made up for the lack of programs in social sciences, which lead in turn to overproduction in new ‘popular’ majors such as economics, humanities, and social sciences (see Figure 3). Apparently, the quality of such programs hastily ‘tailored’ to market needs could not match the requirements to graduates set out by employers in these fields.

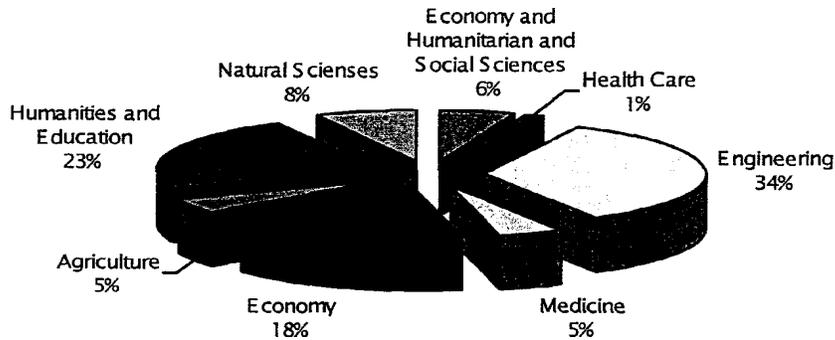


Figure 3. Distribution of full-time students by fields of science.

Source: Bologna process: National Report (2003)

In public universities, the continuous lack of correlation between educational content and labor market needs resulted in the problem of distorted motivations among students. As argued by Kuzminov (2004), up to 50% of jobs taken by graduates did not match the acquired qualifications. A possible explanation for this is that young people commonly participated in HE for the sake of obtaining a diploma, or even as a way to escape from obligatory army service (at least for young men). As graduate knowledge was mostly theoretical, practical skills had to be acquired during on-site training. Therefore, university diplomas had only a signaling function for employers—a sign that graduates possessed some general skills; as a result, employers often treated HEI graduates simply as individuals with better study skills.

Finally, while most academics and students appreciate the greater flexibility of multilevel training, Russian employers do not yet recognize a Bachelor’s degree as equivalent to a complete higher education. To regain the trust of employers in the Russian HE system, the government introduced a series of amendments in 2004 to the Federal Law on Higher Education (1996); these articles encouraged employers to participate in State accreditation of HEIs, develop State Educational

Standards, define requirements for learning outcomes, and compile their own rankings of HEIs. Beginning in 2005, the Ministry of Education and Science further submitted to the Federal Duma of the RF Federal Assembly a decree whereby representatives of employer associations were given the right to play a part in monitoring and forecasting the labor market. The Union of Industrialists and Entrepreneurs of Russia teamed with the Ministry to form a nation-wide system of qualifications, which not only established professional standards but laid the groundwork for more rigorous educational standards as well (Bologna process: National Report, 2005-2007). Throughout 2005 and 2006, government and the business community demonstrated how this new partnership could work by holding a series of ‘round tables,’ where problems in the professional development of HE could be discussed in the context of actual industry requirements.

3.2.4 Academic mobility

Prior to joining the Bologna process, the efforts of the majority of Russian HEIs to increase academic mobility were marginal and lacked systematization due to several factors, such as an underdeveloped infrastructure for integrating international students, a limited number of programs offered in English, problems with transferability of credits, and differing degree structures. Thus, Russian exchange students often had to study the courses they ‘missed’ during their period at non-Russian universities, or take additional exams upon their return, because there were no mechanisms for recognizing the courses studied abroad.

As early as 1984, the European community took steps to improve academic mobility by forming the National Academic Recognition Information Centers (NARIC), which is a network that aims to unify procedures for recognizing diplomas and study periods in member EU universities. Further provisions for assuring the quality of education in EU member universities were provided for in 1997, as part of the framework agreed upon in the Lisbon Recognition Convention¹⁰ (1997). In order to assist national authorities in developing policy, recognizing academic qualifications, and implementing the Lisbon Recognition Convention, the European Network of Information Centers (ENIC) was established; ENIC cooperates closely with the NARIC network. In 2000, Russia ratified the provisions of the Lisbon

¹⁰ Formally known as the “Convention on the Recognition of Qualifications concerning Higher Education in the European Region.”

Recognition Convention and established the National Information Center on Academic Recognition and Mobility to participate in the ENIC/NARIC network, which became an important step in the integration of Russian education with other European education systems. At this time, however, recognition procedures are carried out centrally, which makes it complicated and time consuming for international students to apply to Russian HEIs.

The elitist nature of student mobility is confirmed by statistics. No more than 1% of all Russian students study abroad; the percentage of incoming international students is about the same (Sheregi et al., 2002). With more than 1,000 institutions providing higher education in Russia, it is clear that the potential of international education and academic mobility has not yet been reached.

Unlike EU countries, it may seem that traditional academic mobility (especially those involving student and staff exchanges) in Russia has not been duly supported by the government. This lack of support occurred for several reasons. First, more urgent needs (such as the structural reform of HE) prevailed, and there were insufficient funds to invest in academic mobility programs. Second, internationally-oriented HEIs managed to develop academic mobility without governmental support. Third, the increased outgoing mobility of Russian students and faculty members was seen as a potential source of the 'brain drain'; in order to counteract this trend, the export of educational services, (i.e., by attracting more fee-paying international students to Russian HEIs) became a favored alternative goal.¹¹ Finally, new forms of academic mobility (e.g., joint-degree programs) were encouraged, as they were thought to bring more benefits (in terms of internationalised curricula) to participating HEIs than traditional student exchanges. Thus, a shift in internationalisation strategies to more attractive alternatives may be observed in Russia, and it will be interesting to track the influence of the Bologna process in this perspective.

¹¹ Still, it does not mean that international education is becoming a tradable commodity, as tuition fees were competitively low and the Russian government provided scholarships to about 10% of all international students within intergovernmental agreements (Belov, 2005: 29).

3.3 RATIONALE FOR RUSSIA'S PARTICIPATION IN THE BOLOGNA PROCESS

As discussed earlier, some of the Bologna reforms were initiated in Russia before it officially joined the Bologna process. The advantages and disadvantages of participating in the process, however, have been widely debated by HE experts and university administrators. Opinions ranged from fear at losing the treasured fundamentality of Russian HE, to general resistance to change, to grudging acceptance of the reforms as a 'necessary evil,' and, finally, to acceptance of the reforms as the 'necessary good.' The degree of awareness of the objectives and underlying principles of the Bologna process is proportional to the respondents rank in HE system—that is, the lower in rank, the less aware they are of the need for reform. In some sense, then, criticism of the Bologna process can primarily be justified by lack of awareness. One rationale behind Russia's participation in the Bologna process is explained in the following interview excerpt:

“By joining the Bologna process, Russia will remain in the common educational and academic context of Europe. It will not affect our labor market though. We can't have a common labor market with EU, we must admit—our conditions and interests differ greatly. On the other hand the quality of Russian HE will be enhanced and we will be able to export it” *I. Arzhanova, Deputy Director of the National Training Foundation* (Gazeta.ru, 2005; emphasis added).

The emphasis on the export of educational services and integration is related not only to globalization pressures urging HEIs to compete, but also can be tracked through Russia's HE internationalisation policy (as reflected in interviews with the Minister of Education and Science, A. Fursenko). The Ministry's attitude to Bologna-related reforms is not skeptical, but admittedly rather pragmatic:

“In short, competitiveness is our goal. In Russia we still believe that our education is the best, but the experience shows that Russian diplomas are not 'convertible'. Hence, primarily we should raise the quality standards for HE, applying the best practices of European HEIs” (Denisova, 2005; emphasis added).

Naturally, there exist external and internal driving forces behind Russia's participation in the Bologna process. External political motivations to raise the international profile of Russian HE and build a competitive knowledge-based economy underpin the major concerns of policy makers and university administrators, while faculty, students, and employers may be more interested in the internal and domestic aspects of educational reform. One of the general advantages for HEIs in being an active participant of the Bologna process lies in the opportunity to review not only HE structures, but also to compare and adjust the content of educational programs in closer collaboration with European partner universities. Such partnerships can be established in the framework of projects supported by the European Commission, such as TEMPUS, Tuning Project, and Erasmus Mundus. Other possible gains for HEIs, students, and graduates will be considered in subsequent chapters.

3.4 BOLOGNA-RELATED POLICY FORMATION AND COORDINATION

As acknowledged by many Russian HE experts, participation in the Bologna process was not a bureaucratic whim but a historical necessity. Indeed, the majority of Bologna process objectives coincide with national HE priorities outlined by the Russian Ministry of Education and Science in the Concept of Modernization of Russian Higher Education by 2010 (2002). If Russia chose to stay away from the ongoing pan-European integration in HE, it would doom itself to isolation and stagnation (Medvedev & Pursiainen, 2005:25). Thus, the first step on the way to HE modernization, within the framework of the Bologna process, was to study the relevant experience of foreign partners. In 2002, by the initiative of St. Petersburg State University,¹² a team was formed for this purpose, consisting of rectors from the leading Russian universities along with other international cooperation experts. The team analyzed the development of two-level degree structures and other HE trends in Russia and Europe. Their work attracted the attention of academic circles to the Bologna Declaration and clarified its significance to the public. After Russia joined the Bologna Process, the team was expanded in 2004 to become a Working Group and assist in the implementation of the Bologna principles. The group consists of 28 members, including representatives of HEIs, a number of government ministries, the

¹² An important detail for understanding the bottom-up initiatives of some universities is that the rectors of these universities also hold some posts in the Ministry of Education and Science.

Rectors' Union, and the Association of Non-Governmental Institutions. The responsibilities of the Working Group consist of the following activities (Bologna process: National Report, 2004-2005):

- conduct a survey of HE in Russia;
- present recommendations for the implementation of the Bologna principles; and
- coordinate the implementation of the Bologna process in Russia.

Each member of the group is responsible for the implementation of certain aspects of the Bologna Process in accordance with the plan finally adopted in 2005 (see Appendix 1).

Furthermore, 19 head universities were assigned (on a voluntary basis) the responsibility of piloting the implementation of the Bologna process action lines; 15 coordinating universities in 7 Federal districts were in charge of coordinating the dissemination of information and best practices in the regions through seminars, conferences, and workshops. Finally, monitoring of the Bologna process implementation has been delegated to the National Training Foundation, which is responsible for evaluating the implementation of reforms, gathering feedback from the participants on the basis of surveys, and providing recommendations for improvement.

In addition, the Ministry of Education and Science took an active role in building awareness of the objectives and mechanisms of the Bologna process in the academic community, organizing a number of international and national conferences—for example, “Bologna Process and Modernization of Russian Education: Moving in the same Direction” in 2002, and the “Integration of Russian Higher Education into the European Higher Education Area: Problems and Perspectives” in 2003.

The documents issued by the Ministry of Education and Science, which mention the Bologna process directly, show that Russia has adopted five of the initial action lines reflected in the Bologna Declaration (except for the promotion of a European dimension in HE) and the major goal of integrating into EHEA with one major condition—the fundamentality and the achievements of Russian HE training should be preserved. The following policy documents refer directly to the Bologna process implementation in Russia:

- “Guidelines for calculating workload in credits in the main educational programs” (Letter No. 14-52-988 in /13, 28.11.2002);
- “On launching a pilot project using a system of credits” (Decree No. 2847, 02.07.2003);
- “On Bologna follow-up group” (Decree No. 100, 25.10.2004);
- “Plan of Bologna process implementation actions for years 2005-2010” (Decree No. 40, 15.02.2005); and
- “On piloting and coordinating institutions” (Decree No. 126, 25.04.2005).

One more step made by the government was to draft a law on amendments to the legislative documents on education in part of levels of professional education. The suggested amendments state that Bachelor’s degree programs may be 3-4 years long, depending on the major, and will provide access either to employment or to Master’s studies on a competitive basis. The 5-year Specialist’s degree will be preserved for a limited number of majors. In fact, according to the Minister of Education and Science, the number of Bachelor’s and Specialist’s degree majors will be reduced by half, while the number of Master’s degree programs will be increased and become more specialized (Gazeta.ru, 2007).

Despite the above mentioned efforts made by the Ministry of Education and Science, the empirical data show that the process of implementing the Bologna principles in Russian HEIs is still rather slow because relevant legislation and financial support are perceived by the implementers as lagging behind. Therefore, major amendments to the legislation are yet to be made, in line with the recommendations worked out in the process of experimental projects. I agree, however, with the Minister of Education and Science, who declared that Russia should take its time to adjust its HE system as faster reforms may only lead to symbolic change (Gazeta.ru, 2007).

CHAPTER 4: IMPLEMENTING BOLOGNA DECLARATION OBJECTIVES: THE CASE OF TOMSK POLYTECHNIC UNIVERSITY

4.1 GENERAL DESCRIPTION OF THE UNIVERSITY

Founded in 1896 and opened in 1900, Tomsk Polytechnic University (TPU)¹³ is the first technical HEI established in the Asian part of Russia. Currently, it is educating more than 22,000 students of all modes of education (including 50.8% full-time students) in 85 majors. The number of applicants to TPU has been increasing in the past decade and in 2005 reached 4.77 people per available opening. Curiously, the largest number of applicants has been registered for the Faculty of Humanities and the Faculty of Foreign Languages (9-10 applicants per place). At present, TPU includes ten institutes, eight faculties, three research institutes, and other departments. The number of faculty members is 2,170, including 47.5 % instructors, 41.7 % associate professors, and 10.8 % full professors.

In 2005, the Ministry of Education and Science ranked TPU 11th (down from 9th in 2004 and 2003) among all technical and technological HEIs in Russia (TPU's web-site, 2007). In addition to this impressive national ranking, TPU has pursued a policy of becoming a leading international provider of engineering education. The intellectual potential of Tomsk, formed by a total of six public and a number of private HEIs and research institutes, contributes to the university's international competitiveness along with systematic efforts to keep up with international standards. Taken alone, the number of TPU units involved with internationalisation activities—more than 15—is impressive (see Appendix 2). TPU is a member of the Conference of European Schools for Advanced Engineering Education and Research (CESAER), the Consortium Linking Universities of Science and Technology for Education and Research (CLUSTER), the European University Association (EUA), and other international university associations. Fewer than 15 years ago, Tomsk was a closed city for foreigners; the fact that TPU now educates 365 international degree and exchange students, while also signing 171 international collaboration agreements, is an impressive achievement of its own. TPU's participation in the Bologna process, however, will presumably help it focus on the qualitative aspect of internationalisation and trigger experiments with new forms of the educational process organization.

¹³ Established as a Technological Institute, it was renamed as Siberian Technological Institute in 1923, Siberian Industrial Institute in 1934, and finally as Tomsk Polytechnic Institute in 1944. It did not obtain the status of University until 1991.

In this chapter, I will discuss the initiatives taken by TPU to implement the Bologna process principles in the same four policy context categories identified in §2.3 (i.e., national degree structures, curricular design, graduate employability, and academic mobility). The data used for building the case-study narrative are mostly based on personal interviews and TPU's policy documents, such as the Complex Development Program for 2006-2010 (which includes the projects and indicators directly related to the Bologna process implementation).

4.2 MEASURES TAKEN TO IMPLEMENT THE BOLOGNA PROCESS OBJECTIVES

4.2.1 Development of the two-tier degree structure

Technically, the transition from one-tier to multilevel educational programs at TPU and other Russian HEIs began more than a decade ago with the Federation's transition to a new market economy. According to my interviewees, the introduction of the Anglo-Saxon model was associated with an attempt by foreign competitors to undermine the Russian HE system (R1, R2).¹⁴ The process was described in terms of imposed 'overnight re-tailoring' of the academic programs. A different perspective, as expressed by the Minister of Education and Science (A. Fursenko), is that the elite Russian HEIs provided multilevel training even within one-tier programs, including three years of basic (general) training and two years of specialization at the students' choice. The negative perception of reform can be understood in the light of over-dependence of Russian HEIs on State Educational Standards. The fact that the latter were not adjusted accordingly in a timely manner (or did not provide enough distinctions between the qualifications in terms of competences) caused confusion among curricula designers and led to a formal splitting of one-tier Specialist's degree programs in two levels. Nevertheless, I would not support the statement that the transition to two-level programs was *imposed* from the top; rather, Bachelor's and Master's degree programs were *legitimized* and could coexist together with traditional one-tier Specialist's degree programs.

¹⁴ The quoted answers of the respondents are coded and referred to in this study as R1-R9.

Given the lack of legislative and information support in the process of transferring to two-level degree structures, the university administrators and the academic community realized the need to take an active position in revising the functions, purposes, and the benefits of the new programs. In the currently existing hybrid scheme of qualifications with Bachelor's study programs meant to accommodate the growing demand for general HE, it was challenging to make a distinction between the functions of the second-cycle degrees. One of the arguments made by HE experts is that Master's degree programs should be meant for those who intend to pursue an academic career, or the career of a top manager (Mitiaeva, 2006). On the other hand, Specialist's degree studies either could be offered in some applied sciences or in those majors that could not be legitimately broken into two cycles, such as medicine. In reality, it was not possible to make this functional distinction fast enough to avoid some disappointment on the part of students who fairly considered that the Specialist's program was simply stretched in some cases into two years to form that of a Master's program (R7).

Table 2

Improvement of study structures in accordance with international trends

Forecast structure of TPU graduates	Current	Projected				
	2005	2006	2007	2008	2009	2010
• Bachelor	7.4%	7.3%	7.2%	7.1%	7.0%	7.0%
• Specialist	90.0%	90.0%	90.0%	87.9%	73.0%	60.0%
• Master	2.6%	2.7%	2.8%	5.0%	20%	33%
Planned admission to Master degree programs (student no.)	----	189	350	640	900	1,500
Planned number of new Master degree programs per year (total)	--- (57)	6 (63)	7 (70)	10 (80)	10 (90)	10 (100)

Source: Adapted from TPU's Complex Development Program: 2006-2010 (2005).

As seen in Table 2, TPU's long-term position regarding two-level study structures is to preserve a low percentage of students graduating at the Bachelor's level; reduce the number of Specialist graduates by one third; and increase the number of Master's programs, as well as the number of students enrolled in such programs. The low expected percentage of graduates with a Bachelor's degree reflects, on the one hand, the inertia of student choices and a growing student perception that a Bachelor's degree is not sufficient for a successful career. On the other hand, the projected decrease in Bachelor-level graduates

also confirms the elitist nature of a university that invests in the development of advanced level programs at the expense of traditional undergraduate courses. It will be interesting to see how perceptions will change (if at all) by the year 2010.

The following issues have been mentioned by interviewees when discussing the development of two-level degree structures in Russia:

“The Anglo-Saxon system has ‘won,’ why should we deprive our students of the benefits [it provides]? The education is becoming more massified, hence the need to diversify it by level and number of study places available.” (R3)

“When large enterprises have been replaced by smaller ones they could not afford to hire the graduates with narrow specialization any more, that’s where the need for Bachelor’s degree graduates with broader competencies, emerged. There exist, however, a danger that such graduates will be under-trained, given the shorter study period and that most of them are doing part-time jobs during their studies...” (R1)

Another respondent pointed out that even the part-time employment of students may be viewed from a positive perspective:

“Most of our 4th-year students doing part-time jobs are employed in jobs matching their qualification, which is a sign of their employability. So, we should not be afraid that the employers will see the Bachelor’s degree as inadequate. Even though the above statement is primarily true for engineering and technical students, in a broader sense there is a cost-reduction benefit for any self-financed student who may now get their first degree faster.” (R5)

Thus, despite existing concerns about the adequacy of Bachelor’s level training, it is possible to observe a major shift related to the development of the multilevel system of HE in Russia—the role HEIs played in this country changed from supplying experts for all sectors of the national economy to providing more flexible shorter programs of training, thereby allowing students to adjust their

educational trajectory in accordance with their preferences and abilities, and in response to labor market needs.

4.2.2 Transition to curricular design based on an ECTS-compatible credit system

Followed by an extensive analysis of the existing credit systems for measuring study load, TPU began to experiment with introducing a credit system of its own. At the moment, three TPU academic units are involved in the experiment:

1. Institute of Electrical Engineering, since September 1, 2003;
2. Faculty of Computer Science and Engineering, since September 1, 2005; and
3. Faculty of Electro-physics and Electronic Equipment, since September 1, 2006

The experiment implementation is regulated by the guidelines¹⁵ developed at TPU in 2005 based on ministerial recommendations. The essence of the experiment lies in the transition from a traditional linear educational process (with students following a fixed set of courses in a defined study group) to an asynchronous one (where students have the relative freedom to shape their individual educational trajectory with the help of academic advisors/tutors). In this experimental design, students may choose an individual sequence of courses (provided the prerequisite courses have been satisfied); select lecturers; and even ‘vote with their feet’ by changing lecturers, so long as the change is requested within two weeks after classes start.

Among other underlying innovations, which are believed to follow logically from the transition to TPU’s new system of academic credits, the experiment participants focused on the following ones:

- shifting from discipline-based to modularized course designs;
- building integrated curricula with unified requirements for similar courses taught at different faculties;
- increasing the role of self-study work undertaken by students; and
- replacing oral exams with written ones, and inviting external examiners.

¹⁵ “Temporary guidelines for organization of the academic process based on the system of credits and rating-points for measuring learning outcomes.”

Let us consider the perceived benefits and challenges of such changes in more detail. Among some advantages resulting from the transition to asynchronous curricular design is that students will no longer be treated as the objects of the study process, but will become active participants (or ‘subjects’) in the process—enjoying full rights and taking greater responsibility for what and how to study, which seems to be especially important for self-financed students. Given a more transparent, structured, and modularized curriculum, they will also have an opportunity to choose the degree of immersing into the course. The integration of curricula for similar courses taught at different faculties (e.g., Natural Sciences) will allow students to adjust their studies around their own schedules—attending courses in other faculties, thus, encouraging closer collaboration among them.

During the transition to a new credit system, it was discovered that little attention was being paid to students’ self-study time. As lecturers’ salaries depended on the number of class hours taught, courses tended to be optimized so as to provide as many formal lectures as possible (Melvil et al., 2005). According to one interviewee, instructors were more used to a regimen of giving lectures and administering one final exam than they were in monitoring students’ progress, or in designing regular self-study assignments (R5). As a consequence, students assumed the role of passive learners, who would only begin to study before exams. In order to counteract this trend, TPU devised a strategy for turning students into more independent and active learners, as shown in Table 3.

Table 3

Self-study indicators for TPU students

Increase in the minimum number of course paper assignments	Current	Projected				
	2005	2006	2007	2008	2009	2010
• Bachelor (4 years)	3	5	6	7	8	9
• Specialist (5 to 5.5 years)	5	6	8	9	10	11
• Master (2 years)	1	1	2	3	4	4
Correlation for 4 th year (Bachelor) study & 5 th year (Specialist/Master) study						
• Contact hours	---	23	21	21	21	19
• Self-study hours	---	31	33	33	33	35

Source: Adapted from TPU’s Complex Development Program: 2006-2010 (2005).

Over a five-year period, TPU plans to encourage more student self-study hours by reducing the number of in-class hours while increasing the minimum required number of course papers and projects to be completed during the normative study period. By 2010, for example, Bachelor and Specialist candidates will have about twice as many course paper assignments as in 2006, while their contact hours will have decreased by approximately 17.9% during that same period. This shift in approach will require students to adjust their learning strategies and instructors to reconsider their teaching techniques.

Another innovation arose when it was agreed that the assessment of learning outcomes had to become more objective. To achieve this goal, oral exams were largely replaced by written tests that were coded and evaluated by an external examiner. The effectiveness of this change was immediately apparent, as the percentage of students who passed their exams dropped by 22% and 10% in comparison with the two previous academic years (2003-2004 and 2004-2005 respectively). Although students' attempts at negotiating a better grade at oral exams were eliminated, the problem of cheating during written exams arose (R3). One possible solution might be to use a system of continuous assessment, where an overall course grade does not depend solely on performance at the end of a semester exam, but is assessed cumulatively through several individual or group assignments, including class participation (Melvil et al., 2005).

The experiment participants at TPU currently use three grading systems to evaluate academic progress: (1) the traditional numeric grading system discussed before (see §3.2.2); (2) a ten-point grading system compatible with the one suggested by ECTS; and (3) a system of student rating, which is based on a maximum of 100 points per course. The use of rating points partially solves the problem of ongoing assessment as the acquired points add up and motivate students to work consistently in order to be granted access to the exam.¹⁶ While encouraging some students to compete with each other, the rating points do not influence the final course grade.

Related to the issue of grading is the problem of drop-outs—a problem that is especially acute among self-financed students. Under current restrictions, students who fail to pass three exams have to be expelled from the university. This tradition does not appear to be in line with the idea of credit accumulation; instead, this practice highlights the clash between existing and new educational

¹⁶ At present, the minimum points required to take an exam is 60 points.

philosophies. The challenge in striking an equitable balance between strict academic standards and principles of fairness is acknowledged through the controversial questions posed by interviewees:

“What shall we do about the students who failed an exam and have to repeat a course when there are no developed procedures for charging fees per credits? Shall the program length and the number of minimum credits per year be fixed? What shall we do with students whose studies are financed by the State if they did not acquire enough credits in one year—transfer them to the self-financed studies at once?” (R3)

Thus, there are a number of challenges related to the introduction of the ECTS-compatible credit system. First, the answers to the above questions (often involving financial issues) are not yet provided in HE legal documents, so HEIs do not feel authorized to solve them at their own discretion. Second, the use of ECTS does not only imply the technical recalculation of hours into credits, but also involves ranking the courses according to their significance and ‘weight’ in the curriculum, as well as expressing credits in terms of acquired competences. All this requires thorough methodological work in collaboration among faculties, universities, and governmental bodies (Scherbakov, 2004:10). Third, the transition to the asynchronous mode of curricular design and individualized education trajectories requires a high level of automation and, consequently, additional human and financial resources. Personally, I believe that these efforts are worth making in order to make the educational process more transparent, and, in the long run, increase academic mobility and the recognition of Russian HE programs by international accreditation agencies.

4.2.3 Activities aimed at enhancing graduate employability

Even in a university like TPU, where the demand for graduates is greater than the supply, only 55% of graduates in 2006 chose jobs matching their qualifications (see Table 4). How does TPU enhance graduate employability and increase their ‘fitness’ for the labor market? It is necessary to emphasize here that the focus on employability enhancement activities is generally directed at the local labor market, as the international focus of the efforts would admittedly aggravate the ‘brain drain’ problem.

Several interviewees agreed that employers are not yet ready to recognize a Bachelor’s degree as a full HE qualification. At present, the existing system of compulsory industrial internships helps students

gain necessary practical skills during their study period that otherwise could not be achieved through traditional academic means. In order to broaden industrial partnerships, TPU is committed over the next five years to encouraging industrial internships in other regions of Russia as well as abroad (see Table 4). Furthermore, in order to obtain better information for future planning, TPU’s quality management units developed questionnaires that were intended to ascertain what specific competences and skills employers expect graduates to possess (R9). By taking such proactive steps now, TPU hopes to better match graduates to careers and increase the number of graduates who select qualifying jobs to 75% by 2010.

Table 4

Graduate employability enhancement strategies at TPU

Planned expansion of the % of internships taken as part of an individual study program	Current	Projected				
	2005	2006	2007	2008	2009	2010
• at TPU	24%	23%	22%	21%	20%	19%
• other regions of Russia	19%	20%	22%	25%	27%	30%
• abroad	0.2%	0.2%	0.5%	1.0%	2.0%	2.0%
Number of graduates hired in jobs matching their qualification within one year after graduation	---	55%	60%	65%	70%	75%

Source: TPU’s Complex Development Program: 2006-2010 (2005).

TPU is also in the vanguard of universities concerned about the training of exceptional students. One program aimed at training elite researchers, project managers, and entrepreneurs in parallel with their regular studies is called the “Elite Training” project. Within this training program, the best students are selected on a competitive basis from different faculties and asked to pursue two years of advanced evening courses in Physics and Mathematics, followed by problem-based and project-oriented team training to solve authentic challenges posed by employers. The program is very competitive, as students ranking in the lowest 10% of their group at the end of the 2nd and 3rd semesters are asked to leave, thereby giving a chance to new students who have the highest rankings in regular training programs to join this ‘elite group.’ By the end of the 4th semester, only 100 students out of 170 are selected to continue training. Those students are awarded scholarships provided by employers,

participate in summer and winter schools in Natural Sciences, study two foreign languages, and are given priority when applying to international academic exchange programs.

In one sense, the question of graduate employability is an anomaly. As illustrated in Table 2, only 7.3% of all graduates leave TPU with a Bachelor's degree and pose significant training problems for employers; the remaining 92.7% of graduates pursue advanced degrees, through programs monitored by State Educational Standards that currently provide more freedom for HEIs to perform regular updates and make them more relevant to labor market needs. In fact, these advanced students have claimed in interviews that they did not encounter any problems finding suitable employment. As the university administration also finds ways to financially support their most promising researchers, it is reasonable to assert that TPU does its best to enhance graduate employability on all levels.

4.2.4 Development of academic mobility

TPU positions itself as an innovative university with a strategic goal of becoming an internationally-recognized leader in engineering education. Therefore, it has long been involved in a broad range of international activities such as intensive foreign language training, internationalisation of curriculum, development of joint-degree international programs, enhancement of academic mobility, and international accreditation of educational programs.

In this perspective, TPU welcomed Russia's official participation in the Bologna process as an opportunity to contribute to the fulfillment of its internationalisation objectives. These objectives include the following quantitative indicators, stated in TPU's Complex Development Program: 2006-2010 (2005):

- to increase the percentage of international students studying at TPU to 5% (i.e., from 395 students currently to about 500 students);
- to set the percentage of TPU faculty and students who participate in international academic exchanges at 20% and 30%, respectively;
- to ensure that 30% of faculty members and 40% of students at TPU have a mastery of the English language, at the level of the First Certificate in English (FCE, Cambridge exam);

- to develop and realize 19 international educational programs at TPU; and
- to issue all TPU students the standardized Diploma Supplement by 2010.

Even though these objectives may seem ambitious for a provincial university, some of them have already been reached (e.g., the percentage of international students is close to the target), while others are substantially complete (e.g., approximately 17 of the 19 proposed international educational programs either have been developed or are fully realized). This progress is due largely to adequate funding allotted by the university, within the framework of TPU's Complex Development Program projects, as well as participation in international and governmental grant programs.

For example, TPU was one of the first universities in Russia to start issuing standardized Diploma Supplements in English (with translation into Russian upon student request). As a result, some students have already had a chance to use them when applying to international scholarship programs. In order to start issuing the Diploma Supplements to all students, a number of problems have yet to be solved, such as hiring additional staff members (or expanding current staff responsibilities), monitoring the quality of translation, and fixing software problems.

The Center for Academic Mobility (CAM), which was created in 1998, has been administering academic exchanges on the basis of the procedures developed for ERASMUS mobility programs in the EU as well as participating in Bologna-related projects. Even though TPU invests in academic mobility enhancement, there are still some obstacles to overcome. From personal experience, I can say that it was not always easy to make students submit all the necessary documents related to the exchange program in a timely manner. The prevailing opinion of students and faculty members was that all efforts to provide for legitimate recognition of credits earned abroad were nothing more than unnecessary bureaucracy. While it is a common practice in some universities to let students spend a year studying abroad, and then repeat a year of studies at home, such was not TPU's formal policy at the time I was there.

Another complicating issue was that students first had to select the university they wanted to study at, and then make a preliminary choice of courses, which had to correspond to their study plan for the next semester. This was a challenge in itself, given the lack of information on university web-sites as well as

practical problems of how to substitute classes within a fixed set of courses. Once those hurdles were overcome, prospective candidates had to compete for places in the exchange program by passing a foreign language test, submitting academic transcripts from TPU, and obtaining suitable references from faculty. Ultimately, successful candidates were obliged to develop, in partnership with an academic supervisor, individual study plans for their entire periods of study—a daunting challenge indeed.

Although TPU tries to financially support its exchange students, the number of scholarships available in the framework of bilateral agreements with partner universities is very limited. In some sense, outgoing exchange students are treated as if they are going on a business trip. They are given a task and have to account for it. Apart from sending to their home university a signed Learning Agreement and an ECTS Academic Transcript, TPU's exchange students are also expected to bring some 'benefit' to their university from the period of exchange. Such benefits may include marketing TPU abroad; bringing course catalogues, or even text books from the receiving university; doing part of their research assignments abroad, thus, contributing to the establishment of new research collaboration links; and writing a report on the experience as an international student in a partner university (R6). Report feedback is often used by CAM staff to improve their work. Through my interviews, I found that exchange students did not report any problems during the exchange program, or with recognition of study abroad periods at TPU; their concerns seemed to be limited to language barriers encountered during the initial period of the program (R7, R8).

If the country background of incoming international students at TPU is reviewed (Figure 4), we see a certain geographical imbalance in student distribution. The type of mobility differs as well; while most outgoing students go to European universities for an exchange, about 89% (169/190) of incoming students who study for a degree at TPU come from non-European countries.

Even though this situation may be favorable for TPU, in the long run it is accepted that TPU will have to attract more students from European countries in order to remain competitive. The interviewees hope that it will be possible to achieve this goal by developing joint-degree programs in the framework of the Erasmus Mundus–External Cooperation Window, which aims to support organization and

implementation of academic mobility flows between EU and third-countries. Meanwhile, incoming exchange students enjoy an individualized approach.

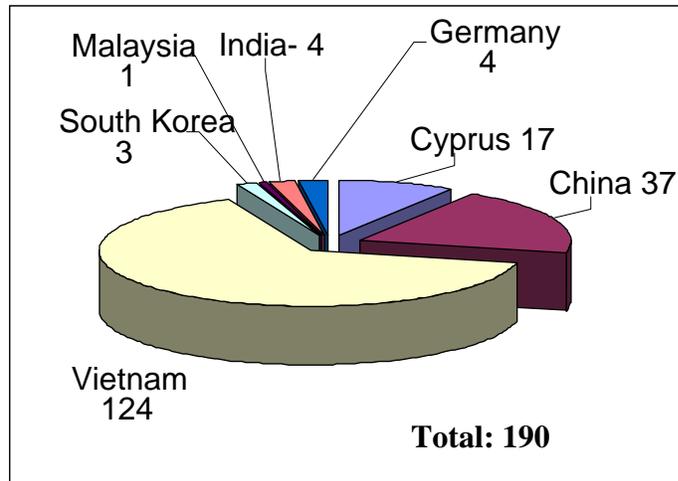


Figure 4. Country background of international degree and exchange students at TPU in 2004.

Source: TPU's web-site (2007)

One final concern is the recognition of academic credentials previously held by students applying to TPU's degree programs. Until recently, the recognition procedure has been solely carried out by the Ministry of Education and Science in Moscow. The process of recognition originally took anywhere from two to six months. In an effort to expedite this process, several experimental centers have been opened around Russia that make a preliminary analysis of all educational documents and then send them to the national ENIC/NARIC center located in Moscow for further recognition. The recognition process now takes about three weeks and is two times less expensive; however, universities are still burdened with the choice whether to lose a potential international student or to accept him/her on the basis of preliminary credential evaluation—completing the procedure only after the student begins studying.

As shown above, the HEIs remain free to choose their implementation strategies and their degree of participation in the Bologna process. However, in line with the Trends IV report prepared by the European University Association (Reichart & Tauch, 2005), the implementation of the Bologna process may be more efficient if HEIs were given greater functional autonomy supported by the appropriate legislation. The obstacles preventing smoother integration into EHEA are discussed in the next chapter.

CHAPTER 5: ANALYSIS OF BOLOGNA REFORMS IMPLEMENTATION IN RUSSIA

5.1 OVERVIEW OF IMPLEMENTATION VARIABLES

In general, public policy is defined as “a system of laws, regulatory measures, courses of action, and funding priorities concerning a given topic promulgated by a governmental entity or its representatives” (Kilpatrick, 2000). Public policies are developed by governmental bodies and actors who identify a matter of concern and then establish a course of action to deal with the problem; in that sense, public policies are about means and ends that have a relationship to each other (Hill & Hupe, 2002:5). Although the Bologna Declaration (1999) is not a policy document in a traditional sense, it contains policy elements because it consists of objectives and proposed means to reach them (Gornitzka, 1999:14). The objectives set forth in the Declaration have been ratified by signatory countries and translated into national policies, while the extent of implementation is continually being monitored at biannual conferences held by the signatory countries.

The policy type is typically defined by a level of change aimed at, which may include changing, adjusting, or maintaining behavior. The aims of the Bologna Declaration were innovative when initially proposed, in the sense that changes in degree structures, formation of academic credit systems, graduate employability, and academic mobility required significant adjustments to existing educational procedures. For Russia, however, the extent of innovation is no longer an issue, as changes in HE began before the Declaration was signed in 2003 and existing policy (as decreed by the Ministry of Education and Science) has taken the form of a voluntary ‘social experiment’ among 34 piloting and coordinating institutions.

As discussed earlier, critical variables provide a fundamental understanding of policy processes and are used to help measure policy performance and assist in making predictions. This study adopted a theoretical framework and identified six variables that were feasible for study within the context of this research. Each variable will now be discussed in turn.

Implementation study requires that *policy objectives* be identified in order to assess success or failure. Successful policy implementation implies that policy goals should be clearly stated, obtain a high

degree of support and consensus from decision makers, and involve moderate degrees of change to existing conditions (Van Meter & Van Horn, 1975:450, 460). While the rationale for joining the Bologna process has been widely discussed by Russian legislators, HE experts, and university administrators, no official goals seem to be attached to the existing policy documents. Furthermore, it took the Russian government two years to develop a plan of action for implementing the Bologna Declaration objectives. Thus, there are no formal objectives in place, and the goals that do exist (e.g., to enhance the international competitiveness of HE services) are vague and immeasurable.

Traditional *policy instruments* involve legislation, money, organization, and information (Gornitzka, 1999:19). In Russia, it is universally acknowledged that existing legislation lags far behind current needs, or is not being followed, while money to initiate and sustain Bologna reforms is only available for a few piloting HEIs. The National Training Foundation (along with a network of coordinating institutions) has been established to monitor policy changes, so an organizational structure is in place; however, the flow of information to all interested parties is still lacking, as participants are waiting for the Ministry of Education and Science to assign responsibilities and allocate additional money for the dissemination of results and best experiences (Recommendations to the Ministry of Education and Science, 2006). In addition, Russia's lack of transparency hinders the free flow of information necessary to satisfy this variable. As empirical evidence suggests, the Bologna process also inspired the application of 'new policy instruments,' such as self-regulation, public participation, and voluntary agreements (Enders et al., 2003). As witnessed by TPU's experience, the leading HEIs have used the advantages of increased autonomy to rely more on self-regulation mechanisms than on government control in implementing the Bologna process principles. HEIs build partnerships with foreign universities to apply to international grant programs aimed at improving curricular design (e.g., TEMPUS, Tuning Project), or to develop joint educational programs designed to increase academic mobility (e.g., Erasmus Mundus). At the same time, the government encourages greater involvement by some stakeholders (i.e., employers) by granting them additional rights in HEI management, such as allowing them to participate in State accreditation of HEIs as well as input in developing State Educational Standards.

Overall, *inter-organisational communication* involves not only identifying the key actors responsible for implementing the Bologna process objectives, but also the methods of interaction among them. The

key participants associated with this variable have been defined as the Ministry of Education and Science (including its executive agencies) and HEIs (including university administrators, faculty members, and students). In Russia, communication among agencies was primarily unilateral—based primarily on power and dependence on financial resources. The collapse of the Soviet Union in 1991 opened the way for decentralization in governance style as well as momentum toward reform, which was partially accelerated after signing the Bologna Declaration in 2003. Nevertheless, although Bologna process implementation certainly has contributed to a more open dialogue and increased transparency in Russian policy process, the modes of interaction among the key actors may be characterized as ‘negotiation in the shadow of hierarchy’. Taking into account the long history of centralized planning, this mode of inter-organisational communication might be the only one acceptable to the Russian HE community at the moment.

The *characteristics of the implementing agency* within this study involve analyzing the key features of the HEI selected for the case study. Apart from the formal characteristics of TPU described in §4.1, the observations show that TPU takes an active role in implementing the Bologna process, which is primarily promoted by university leadership, within a bureaucratic structure, and enhanced by strategic management. The Complex Development Program allows each unit to choose a project to participate in (including Bologna-related projects), which is supported financially by institutional budgets, money earned from research, and funds obtained through competition for government grants. The strong focus on internationalisation development helped the university to incorporate the Bologna process objectives into its strategic goals.

The variable, *disposition of implementers*, assesses attitudes of the implementers, which become increasingly important in situations where new policy tools are applied. Notwithstanding the challenges faced by Russian HEIs, and the variety of responses obtained, the majority of HEI representatives feel positive about the significance and the impact of the Bologna process.

Finally, the last critical variable assesses *economic, social, and political conditions* that affect policy implementation, and accounts for the choice of policy tools while helping to reveal the specific challenges faced by HEIs. In Russia, the single most important economic condition facing policy makers since 1991 has been the transition to a market economy. By extension, it may be argued that

Russia's participation in the Bologna process is motivated by the economic aspects involved in competing internationally for students and grant funding; as Russian HE has been obliged to compete on an international stage, so too have HEIs within Russia been forced to compete on a national level in order to survive. Adding to this situation are low teacher salaries; as faculty members are not interested in doing extra work for which they will not be remunerated, the lack of proper financial compensation contributes to a minimal work ethic. Social conditions also favor a traditional and hierarchical way of doing things; the HE system is still centralized, so the impetus is not toward policies that produce change, but rather to those methods that reinforce the status quo. Politically, Russia is a Federal State with 86 separate Subjects (i.e., districts, or regions), each with its own agenda and points of view on education, which the central government has to listen to and contend with. Aside from coordinating the needs of different regions, there is a corollary problem associated with Russia's integration with the European community—that is, some HEIs in the European part of Russia will have more opportunities to integrate into EHEA (due to their geographic proximity to EU) than universities in other remote districts, including the university used in this case study.

As this analysis suggests, the critical variables integrate all three implementation study models, help measure policy performance, and assist in making predictions. In the context of this research, the critical variables the critical variables help understand the challenges of implementation, which will be discussed in the next section.

5.2 CHALLENGES OF IMPLEMENTING THE BOLOGNA PROCESS **IN RUSSIA: TPU vis-à-vis OTHER RUSSIAN HEIs**

According to the report on “Monitoring of participation of Russian HEIs in the Bologna process” (2006), 80% of the 101 HEIs sampled are involved in implementing anywhere from one to six of the ten action lines associated with the Bologna process. Admittedly, however, this statistic may be skewed slightly toward painting a better picture of implementation, as the sample includes 21 institutions responsible either for piloting or coordinating the Bologna process in Russia. Similarly, empirical data shows that only a limited number of units at the institutional level may be involved in experimental implementation of the reforms. Although the degree of institutional involvement in the Bologna process may differ, in this chapter I will give a general overview of the challenges currently affecting

implementation of the Bologna process in Russia. I also will discuss how TPU fares in comparison to other Russian HEIs, based on information available in the monitoring report referenced above.

Figure 5 shows that the dynamics of the transition to a *tiered-degree structure* in Russian HEIs has been quite slow. The Specialist’s degree remains the most ‘popular’ academic option, with approximately 82% of all students selecting such a program since 2003. At TPU, the percentage of graduates leaving with a Bachelor’s degree is smaller than the average in reported institutions (7.4%; see Table 2), while the percentage of graduates leaving with a Master’s degree is somewhat higher (90.0%; see Table 2); these statistical differences may be attributed to Tomsk’s leading position in the field of education and research within Siberia.

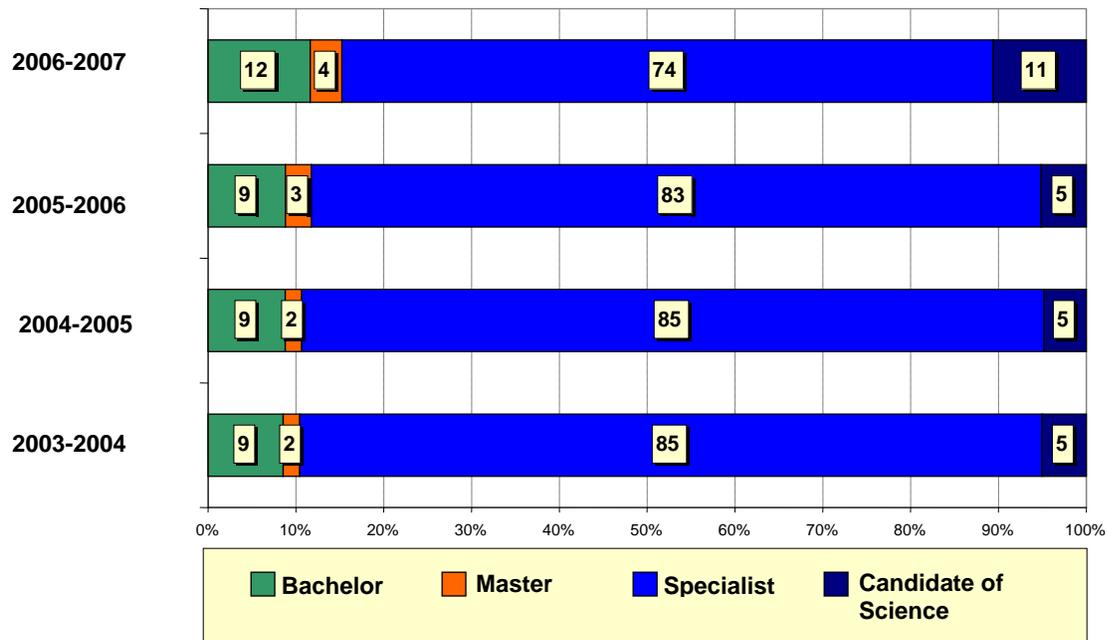


Figure 5. The average percentage of graduates by degree type and academic year.

Source: Monitoring of participation of Russian HEIs in the Bologna process (2006).

Although 43% of all respondents in the monitoring project (2006) admitted that the quality of education has significantly improved as a result of implementing this action line (see §2.1.2), the following challenges associated with the development of the two-tier degree structure still exist:

- Insufficient legislative support (44%);
- Lack of relevant experience (38%);
- Lack of financial resources (27%); and
- Lack of enthusiasm on the part of faculty members (19%).

TPU respondents identified the first challenge as being the most relevant, as many felt that legislative support was lagging behind the need for reform. Thus, it is important to emphasize that the idea of developing tiered-degree structures is not opposed, as such, but concerns remain as to the adequateness of traditional policy tools discussed in §5.1 in bringing this idea to fruition. Although the use of government control as a policy tool has become more lenient over time (e.g., in particular, with respect to introducing new Master's degree programs), the long history of relying on traditional policy tools over alternative methods explains why implementers not only still expect a certain degree of support from the government, but also fear governmental inertia.

The *ECTS-compatible system* of credit transfer is currently used as a mobility tool in 43% of HEIs participating in the monitoring project; however, only one fourth of educational programs in these institutions are designed in accordance with the principles of academic credit accumulation. This limited participation in the process may be explained by considering three factors:

- 1) *The experimental character of implementing the given action line:* The monitoring project reported that when academic credit systems were introduced, one third of HEIs developed their own guidelines for organizing the educational process and assigning credit value to courses, one third use the recommendations provided by the Ministry of Education and Science, and one third were unable to conceptualize the shift to curricular design based on student workload. As a pilot institution, TPU took the initiative in devising its own academic credit system.
- 2) *The novelty of the 'educational trajectory' (or 'learning path') concept in Russia:* According to the monitoring project, only 30% of HEIs used individual study plans, student-centered learning concepts, or credit accumulating systems such as ECTS; the remaining 70% of HEIs provided training in accordance with fixed curricula containing a limited number of electives. Although TPU uses individual study plans for academic exchange students, only three faculties to date have been involved with introducing an experimental system of academic credits; thus, it is

apparent that the idea of the entire university transferring to an ‘asynchronous’ (modular) system of curricula design seems to be challenging (R4).

- 3) *The existing vagueness about what a credit system includes:* Although the monitoring project indicates some awareness of the value of a credit system in Russia, the exact nature of that system is still in doubt. Kehm and Teichler (2006:275) observe that, within the framework of the Bologna process, the only consistent understanding about a credit system is that it should involve a calculation of student load. TPU, however, took the lead in introducing an asynchronous educational process, pursuing written exams over oral exams, decreasing contact hours, and increasing the amount of self-study hours (see Table 3).

In terms of *academic mobility* enhancement, 50% of HEIs reported that they had, on average, seven programs jointly developed with international partner universities that consist of mechanisms for supporting academic mobility of students and staff. In only 37% of HEIs, the study abroad period is recognised on the basis of academic transcripts; in other cases, students have to pass the scheduled exams in their home university in order to receive credit for the exchange. The major challenge facing successful mobility expansion (as reported by 60% of all respondents) was the lack of financial resources available; as a consequence of limited funding, only one fourth of all HEIs stated that they provided any financial support for academic mobility programs.¹⁷ Among other issues named as obstacles to academic mobility were the lack of regulatory documents (43%), lack of information on available study abroad opportunities (33%), legislative issues (28%), and ‘overloaded’ curricula (20%).

Finally, within the framework of the Bologna process, issues relating to the *employability of graduates* were considered by respondents to face the fewest challenges to implementation. A few key indicators are summarized below:

- 80% of HEIs ask employers to participate in curricula design;
- 71% of HEIs invite representatives of the industry to give lectures;
- 96% of HEIs have a system of graduate employment support; and

¹⁷ By comparison, TPU occupies an advantageous position in this regard as student exchange programs are supported both in terms of funding and overall recognition issues. Once TPU receives additional State funding as a university providing “innovative educational programs,” staff mobility is also expected to increase dramatically.

- 90% of HEIs educate future specialists in accordance with the demand of enterprises.

As argued by one of the interviewees, “the employability enhancement would have been the major concern of HEIs with or without the Bologna process” (R3).

On balance, the case of TPU may be considered representative of about 30%–50%¹⁸ of the 101 Russian HEIs participating in the monitoring project. Given that the study included the 21 piloting and coordinating HEIs that are actively involved in the implementation of the Bologna process, the representative value of the case study may be significantly lower when all Russian HEIs are considered. Nevertheless, based on the results of the monitoring project, the major challenges on the way to successful implementation of the Bologna process seem to be (1) insufficient awareness about the essence of the ongoing reforms, and the resulting low interest in implementation on the part of students and faculty members (see Table 5); (2) inadequateness of legislation to motivate changes in traditional educational structures; and (3) a lack of funding to support all the action lines adopted.

Table 5

Awareness and interest in Bologna process implementation among key participants (n = 413)

	Bologna process action line			
	Two cycles	ECTS	QA	Mobility
Awareness				
<i>...all participants</i>	73%	50%	42%	35%
Interested in implementation				
<i>...students</i>	38%	42%	28%	69%
<i>...faculty</i>	16%	23%	47%	42%
<i>...administrators</i>	50%	48%	74%	49%

Source: Adapted from “Monitoring of participation of Russian HEIs in the Bologna process” (2006).

The case study findings showed, however, that a university administration may effectively compensate both for the lack of information and a general absence of funding so long as the Bologna process objectives are interwoven in the strategic goals of the university. On the other hand, there seems not to be similar compensation on the part of HEIs when it comes to dealing with the inadequateness of

¹⁸ This figure, of course, depends on the action line under consideration.

suitable legislation; thus, for implementation to become a reality, the role of government in the process has to be accounted for on some level.

5.3 POTENTIAL IMPLICATIONS OF THE BOLOGNA PROCESS **IMPLEMENTATION FOR RUSSIAN HEIs**

As it is still too early to speak about policy outcomes, I will try to analyze here the potential implications of Russia's participation in the Bologna process. The key participants believe that the main benefit from participation will be the increased competitiveness of Russian HEI graduates in the European labor market. On the other hand, according to opinion poll results conducted by the Moscow State Institute of International Relations (MGIMO), there is a concern that this same benefit will accelerate the existing problem of brain drain (MGIMO's web-site, 2007). The research findings suggest that the fear of more brain drain is not substantiated, as HEIs not only seem to be proud that their graduates are building careers abroad, but that counterbalancing mechanisms are already in place aimed at enhancing *local market* employability. Thus, what appears more important is a problem of structural unemployment—that is, the existing mismatch between qualifications obtained and jobs taken.

The introduction of shorter, two-cycle degree (3-4 year Bachelor degree + 1-2 year Master degree) programs is viewed as a possible solution to this problem, as shorter programs are, by definition, more flexible and easier to adjust in accordance with labor market requirements. Although the Russian government is planning to legitimize 3-year Bachelor programs by amending the Federal Law on Higher Education this year, the introduction of these new programs will require extending the period of secondary school education beyond the 10th and 11th years. Meanwhile, the traditional Specialist's degree, which was redesigned from a one-tier five-year program to a 4+1 model, remains popular among students and will not likely be abolished by 2010.

The introduction of an academic credit system will encourage extensive revision of the Russian curricula, thereby leading to greater awareness of the diversity in curricular designs as well as more creativity among faculty members. A formal credit system also will benefit students by giving them greater learning freedom as well as an opportunity to choose and adjust their learning paths. As HEIs

develop ECTS information packages, containing not only data on course credit values but also detailed course descriptions (including course goals, assessment criteria, competencies to be acquired), students will be able to make more informed choices about specific degree programs. While the benefit of implementing this action line is more evident for students, some opinion poll respondents fear that the modularization of curricula will lead to faculty downsizing (MGIMO's web-site, 2007). In reality, these fears may be overblown; the introduction of an academic credit system may result in some students choosing not to take certain modules, thereby decreasing overall professor contact hours, but this freed time will allow professors to pursue more research while granting students more time for self-study.

Unlike European countries, where a decrease in academic mobility is feared due to the transition to a shorter and more intense period of study, academic mobility in Russia likely will be enhanced thanks to the European Commission's sponsorship of new mobility programs that are designed for third-country nationals. Government and university administrations are also expected to invest more funds into support of academic mobility on a competitive basis. Thus, the opportunity to take part in academic mobility programs may be a good incentive for students as well as for academics to perform better; certainly it is possible that the lure of mobility programs may prove to be decisive for prospective students in selecting a university.

As argued by Kehm and Teichler (2006), structural reforms alone do not increase academic mobility or enhance the relevance of qualifications in the labor market. Instead, the Bologna process allows governments to assign greater autonomy to HEIs in areas such as curricula design, quality assurance, and the recognition of foreign academic credentials. The evidence shows that implementation of the Bologna process may coincide with increased competition—if not at the international level, then certainly at the national level. So, while only about 3-5% of the top universities may choose to compete internationally, it can be predicted that national competition among HEIs for funding and students will be promoted by the State, as a tool to improve academic quality and the efficiency of HEI functioning in general. Although respondent concerns may be valid about the decrease of government control over HE and the associated decrease in funding, these concerns refer more to a general trend in HE governance than to participation in the Bologna process in particular.

5.4 CONCLUDING REMARKS ON IMPLEMENTATION

In accordance with the theoretical framework described earlier in §2.2, there are three major research approaches to the study of policy implementation: top-down, bottom-up, and hybrid models. I have approached this research with the assumption that the top-down and bottom-up research perspectives are equally important and cannot reasonably be separated from a framework incorporating both models within a hybrid perspective. Furthermore, the input of key participants in interpreting policy cannot be treated in isolation from the strategies used to implement those policies. Therefore, I found it important to assess the balance between initiatives undertaken by policy ‘formulators’ and policy ‘implementers’ in order to understand the characteristic features involved in implementing the Bologna process in Russia.

Currently, the approach to Bologna process implementation may be characterized as a ‘social experiment,’ with a number of pilot projects funded by the State and HEI administrations set against a fundamental belief that “successful practices will be replicated” (R3). In this context, the role of HEIs’ leadership has proven to be decisive in pushing through and supporting Bologna-related changes.

The key participants in this process have been defined as the Ministry of Education and Science (including its executive agencies) and HEIs (including university administrators, faculty members, and students). It is important to note here that the distinction between policy ‘formulators’ and policy ‘implementers’ is evident on the surface, but not irrevocably fixed. According to Bologna-related national policy documents, the Ministry of Education and Science takes on the dual role of both policy ‘formulator’ and policy ‘implementer’ (because the Ministry is obligated to ‘report’ to the Bologna Follow-Up Group), while HEIs provide feedback that may lead to policy reformulation. Thus, the emerging relationship between both key participants is quite new to Russia, as it is a relationship founded on trust as well as responsibility—negotiations and cooperation, instead of a previous and long-standing interaction based primarily on power and resource dependency. This shift towards decentralization in governance style should not be attributed solely to participation in the Bologna process, but rather as part of the reforms begun after the collapse of the Soviet Union. Nevertheless, implementation of the Bologna process certainly has contributed to a more open dialogue and increased transparency in Russian policy process.

As discussed earlier, the strategy used by the Ministry of Education and Science followed a traditional top-down strategy to policy enactment: the Ministry constructed a plan of action intended to implement the Bologna process objectives, and then assigned piloting and coordinating HEIs to carry out the details of the plan in an experimental mode. One important difference from a strict top-down approach, however, was that institutions volunteered to participate in these piloting projects. Furthermore, prior to the implementation stage, there was also an element of competition in assigning various research projects to pilot institutions. The larger and more prominent HEIs took a more active part in the process, while smaller HEIs exhibited signs of partial conceptualization. As reflected in the monitoring project report (2006), the 21 piloting and coordinating institutions proved to be more successful in integrating within their development strategies those Bologna process objectives that coincided with their own goals and interests. For those HEIs, the major incentive for participation in Bologna-related reforms was to become more competitive in the international HE markets. Thus, as the empirical data suggests, the leading HEIs developed a bottom-up strategy of policy implementation and defined their own indicators for success or failure. Nevertheless, even in those institutions, concerns have been expressed as to the adequateness of support by the Ministry of Education and Science. HEI administrators responsible for implementing any action lines of the Bologna-process have acknowledged that relevant legislation is lagging behind, thereby hindering the efficiency and the speed of implementation.

In light of this implementation analysis, Russia has to address several major problems. First, although the matter of trust on the part of the government is not an issue in implementing the Bologna process in Russia, the responsibilities of the implementers are not perceived to be well defined. Second, taking into account the discretion of the administration in adopting Bologna reforms, sufficient incentives do not exist for students and academics to take an active part in the process. Third, while joining the Bologna process was a political goal designed to achieve integration into EHEA, the majority of Russian HEIs do not accept the European dimension as an imperative criterion for change. Finally, although overall funding levels have improved, many smaller HEIs still remain reluctant to get more involved in the Bologna process until financial support is as readily available to them as it is to piloting and coordinating institutions. These dilemmas have yet to be solved, although (at the moment) a

reasonable balance appears to be observed between the top-down/bottom-up initiatives as practiced by the government and HEI administrations.

CHAPTER 6: CONCLUSIONS

6.1 GENERAL CONCLUSIONS

This study has attempted to answer the following research question on the basis of a single case-study: *How do Russian HEIs respond to the Bologna process?* This problem has been explored through a set of sub-questions that will be revisited in this chapter:

1. What are the main strategies in Bologna process implementation in terms of the balance between top-down and bottom-up initiatives?
2. What are the major challenges faced by Russian institutions when implementing the Bologna-related structural reforms?
3. What are the possible implications of the Bologna process for Russian HEIs?

Some Bologna reforms were initiated in Russia before it officially joined the Bologna process. Although Russia's participation in the process was formalized in 2003, this research has suggested that the response of Russian HEIs to Bologna reforms has been determined largely by the need to compete internationally and thus avoid isolation and stagnation. At the moment, implementation of the Bologna reforms is still an experimental work in progress, with only selected piloting and coordinating HEIs actively participating in the process.

This study has found that the main strategies used in Bologna process implementation are neither top-down nor bottom-up in nature, but a fluid mix of both initiatives. The so-called hybrid approach adopted by Russian policy makers recognizes that the policy process is continually evolving—that a balance has to be struck whereby multiple actors and stakeholders cooperate to form public/private networks and participate in policy formation and adaptation.

Russian HEIs face an array of challenges in implementing Bologna-related structural reforms. In general, these challenges include pressures of internationalisation and globalisation; decreased state funding; and the growing expectations of stakeholders (employers and students) in influencing the process. More specifically, this research has shown that perceived challenges to reform involve (1)

insufficient awareness about the essence of the ongoing reforms; (2) inadequate legislative support from the central government to motivate changes in traditional educational structures; and (3) a lack of funding to support all the Bologna action lines adopted.

Finally, this research has suggested that the major possible implication of Russia's participation in the Bologna process is the increased competitiveness of Russian HE through integration into the EHEA. For all practical purposes, implementation of the Bologna process in Russia involves the development of a two-cycle national degree system (which will lead to greater flexibility of academic programs, as well as training better suited to the labor market); changes to curricular design, with an aim of introducing an ECTS-compatible system of academic credits in Russian HEIs (which will lead to a revision of existing curricula to match international standards); improved recognition procedures for academic credentials and study abroad periods (which will encourage academic mobility); and better local graduate employability (which may become a solution to the problem of brain drain).

6.2 LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTURE RESEARCH

As with any study, this research project was framed by certain contextual boundaries, as well as by limitations of the selected research methods. First, given the multiplicity and ambiguity of the Bologna process objectives, it was not possible to explore the implementation of all related action lines in Russia within the framework of this study. Therefore, I chose to focus my research on the most evident implications for Russian HE associated with the Bologna process. These implications included changes in degree structures, curricular design, and the related issues of graduate employability and academic mobility. Although questions involving adjustments in the quality assurance system and third-cycle degrees are equally important, these specific issues have not been considered as a proper treatment would involve an independent study each. In addition, it was not the purpose of this research to explore the extent to which the social dimension in Russia is enhanced within the framework of the Bologna process; however, the European dimension has been considered in relation to the academic mobility discussion and the overall national objectives for participating in the reforms.

Another possible pitfall of this study lies in the fact that, in many ways, the Bologna Declaration has institutionalized the trends already present in different systems (Neave, 2002). Thus, it was challenging to estimate the value added by the Bologna process in cases where related reforms started before the Bologna Declaration was signed in 2003. Bearing this in mind, I attempted to analyze the state of HE institutional settings by the time the Declaration was adopted, in order to analyze any subsequent policy changes in the timeframe from 2003 to 2006.

Finally, Russia is too immense geographically and too diverse on a socio-economic scale to be able to generalize the qualitative findings from a single case study and several interviews. To compensate for the lack of contextual generalizability, I tried to place the chosen case study in a wider context of Bologna-related policy formation, public debate, local publications, and conducted surveys. Also, the use of in-depth descriptors made it possible for the specific case study findings to be transferred to other similar cases (Newman & Benz, 1998).

Russia only has passed through its first stage of implementation, as marked by conclusions obtained from the monitoring project report (2006). As policy formation continues, still more research will be required on

- policy lessons and subsequent policy change within the framework of the Bologna process;
- the significance and impact of the transition to two-cycle degrees (e.g., the acceptance of new first-cycle qualifications in society, the extent to which these new qualifications meet the needs of the labor market, and the implications of a pedagogical shift to student-centered learning); and
- how Bologna process implementation in Russia compares to that in other signatory countries.

Only after further research has been completed will Russia's true role in implementing Bologna-process reforms be understood clearly.

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APPENDIX 1

Activities planned by the Ministry of Education and Science to implement Bologna process objectives in Russia (2005-2010)

Objectives ¹⁹	Activities/ Outcomes	Deadlines	Implementer within Russia
1	2	3	4
1) Development of HE professional programs based on two-level degree structures	Draft amendments to the Federal Law on Higher Education in the articles concerning two levels of professional HE.	2005	Ministry of Education and Science
	Draft amendments to the legislation acts of the Russian Federation concerning the rights of <u>employers</u> ' associations to participate in State Educational Standards development, forecasting and monitoring the changes in the labor market, formation of the list of majors, and becoming involved in HE quality assurance procedures.	2005	Ministry of Education and Science
	Develop models of Bachelors' and Masters' programs of training, taking into account relevant profile peculiarities.	2005–2006	Ministry of Education and Science
	Development of the list of HE majors in accordance with Russian and international labor market needs.	2005–2006	Ministry of Education and Science
	Defining HE profiles with respect to life-long learning.	2006	Ministry of Education and Science
	Develop, approve, and operationalize the 3 rd -generation State Educational Standards, based upon competency approach and use of an academic credit system.	2007–2008	Ministry of Education and Science

¹⁹ Of HE system development in line with Bologna process principles.

Objectives¹⁹	Activities/ Outcomes	Deadlines	Implementer within Russia
	Create an information database of methodological and analytical resources concerning the two-level degree structures for the Internet portal on Bologna process implementation.	2005–2010	Federal Agency on Education, RF
2) Analysis and introduction of ECTS-compatible system	Prepare information materials for HEIs, introducing the system of academic credits based on results of the piloting projects.	2005–2010	Ministry of Education and Science
	Analyze and summarize the experience of HEIs already implementing the system of academic credits.	2005–2006	Federal Agency on Education, RF
	Dissemination of best practice.		
	Expand the innovation activities of HEIs related to the introduction of the academic credit system: <ul style="list-style-type: none"> ➤ expand the introduction of academic credit system in Russian HEIs; ➤ develop recommendation for transferring to “asynchronous” (modular) organization of the educational process; and ➤ introduce modularized curricula 	2005 2006 2005–2007	Federal Agency on Education, RF
	Develop methodological basis for a system of credit accumulation.	2005–2006	Ministry of Education and Science
	Create and maintain web pages, providing information on the system of academic credits and the experience of its introduction for the Internet portal on Bologna process.	2005–2010	Federal Agency on Education, RF
Transition to the use of academic credit system in HEIs.	2008	Ministry of Education and Science	

Objectives ¹⁹	Activities/ Outcomes	Deadlines	Implementer within Russia
3) Introduction of the Diploma Supplement, compatible with the standardized one developed within the framework of Bologna process	<p>Develop sample Diploma Supplement relevant for Russian HE.</p> <p>Develop classification of HE programs.</p> <p>Translate and publish names of courses in the Federal component of State Educational Standards.</p> <p>Prepare recommendations for filling out Diploma Supplements.</p>	2005–2006	Ministry of Education and Science
	<p>Create and maintain web pages providing information on Diploma Supplement for the Internet portal on Bologna process.</p>	2005–2008	Federal Agency on Education, RF
	<p>Begin mass issuing of Diploma Supplements to HEI graduates.</p>	2008 г.	Federal Agency on Education, RF
4) Creation of the system of recognition of credentials between the Russian Federation and other signatory countries of the Bologna Declaration	<p>Solve problems related to the recognition of academic documents issued by signatory countries of the Bologna Declaration.</p> <p>Develop methodological recommendations on academic and professional recognition of Russian credentials in Bologna process participating countries.</p> <p>Improve the system of foreign credential recognition in Russia.</p>	2005–2006 гг.	Department for monitoring in HE and Science
	<p>Create a system of training specialists in the field of foreign educational documents recognition in Russia.</p>	2005–2007 гг.	<p>Department for monitoring in HE and Science</p> <p>Federal Agency on Education, RF</p>
5) Development of comparable quality assurance mechanisms and criteria	[omitted as not covered by this study]	2005–2007	Department for monitoring in HE and Science

Objectives¹⁹	Activities/ Outcomes	Deadlines	Implementer within Russia
6) Enhancing academic mobility of students, faculty, and staff	Develop mechanisms of legislative support for realizing academic mobility programs.	2005	Ministry of Education and Science
	Set-up a system of institutional and individual grants to foster academic mobility within Russia and with other European countries.	2006–2008	Ministry of Education and Science Federal Agency on Education, RF

APPENDIX 2

TPU units involved in internationalisation activities:

- International Relations Management Department;
- Institute for International Education;
- Center for Academic Mobility;
- Russian-American Centre;
- Russian-German Centre;
- Russian-French Centre;
- Asian and Pacific Centre;
- Central Asia Centre for Engineering Education (CACEE);
- International Scientific Relations Department;
- International Activities Department of the Institute of Languages and Communication;
- Cyprus Institute of Marketing;
- Representative Office in Karlsruhe (Germany);
- Branch in Prague (Czech Republic);
- Representative Office in Nicosia (Cyprus);
- Heriot-Watt Petroleum Engineering Approved Support Center;
- International MBA Center;
- German Language Center (partner of Goethe Institute)