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Actors and Their Roles in European Education Policy: A Mixed Methods Approach to Understanding the Bologna Process

Abstract

This research project focused on the causes of implementation of the Bologna Process and its impact across Europe. It traced the history of the Bologna Process and introduced the paradox of policymaking in Bologna's continued implementation. The latter part of the introduction presents a summary of policy coordination and the epistemic community and the notion of soft law and the open method of coordination (OMC) in European policymaking. Possible causes for changes in implementation of Bologna are investigated, as are the origins of the Bologna Process and its goals. The argument of Bologna as OMC is presented and reflects on education reform in Europe's last two decades. Mixed methods inquiry was used to investigate the emergence of the epistemic community, which, in its scientific authority and expertise, influences policymakers in Europe as it guides them to adopt reforms according to its agenda. Study findings revealed an increase in mean prevalence scores of Bologna's key themes and subthemes immediately after epistemic communities joined the decision-making process of the Bologna Process.

Document Type Dissertation

Degree Name Ph.D.

Department Quantitative Research Methods

First Advisor Antonio Olmos, Ph.D.

Second Advisor Kathy Green

Third Advisor Nicholas Cutforth

Keywords Bologna process, Epistemic community, Higher education reform, Mixed methods, Quantitization

Subject Categories

Educational Assessment, Evaluation, and Research | Educational Methods

Publication Statement

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ACTORS AND THEIR ROLES IN EUROPEAN EDUCATION POLICY—A MIXED METHODS APPROACH TO UNDERSTANDING THE BOLOGNA PROCESS

A Dissertation

Presented to

the Faculty of the Morgridge College of Education

University of Denver

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

by

Cheryl L. Wink

August 2016

Advisor: Dr. Antonio Olmos

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Author: Cheryl L. Wink Title: ACTORS AND THEIR ROLES IN EUROPEAN EDUCATION POLICY—A MIXED METHODS APPROACH TO UNDERSTANDING THE BOLOGNA PROCESS Advisor: Antonio Olmos Degree Date: August 2016

ABSTRACT

This research project focused on the causes of implementation of the Bologna Process and its impact across Europe. It traced the history of the Bologna Process and introduced the paradox of policymaking in Bologna's continued implementation. The latter part of the introduction presents a summary of policy coordination and the epistemic community and the notion of soft law and the open method of coordination (OMC) in European policymaking. Possible causes for changes in implementation of Bologna are investigated, as are the origins of the Bologna Process and its goals. The argument of Bologna as OMC is presented and reflects on education reform in Europe's last two decades. Mixed methods inquiry was used to investigate the emergence of the epistemic community, which, in its scientific authority and expertise, influences policymakers in Europe as it guides them to adopt reforms according to its agenda. Study findings revealed an increase in mean prevalence scores of Bologna's key themes and subthemes immediately after epistemic communities joined the decision-making process of the Bologna Process.

Keywords: Bologna Process, quantitization, mixed methods, repeated measures ANOVA, epistemic communities, higher education reform, European integration

ACKNOWLEDGMENTS

The process of completing a dissertation is accomplished through the collaboration and contribution of many. I thank all of you who played a role in this project's completion and particularly want to show my appreciation to a certain group of individuals.

Thanks to my darling husband, Mr. Jeremy, my rock, for your patience, fortitude, humor, and commitment to me and to this project.

To Tim for endless moral support.

To Martin and Christoph for their advice on the European Policy perspective.

To Dr. Frank Tuitt, Janet Erickson and Chaplain Gary for believing in me and keeping me on track.

Thanks to my editor, Betsy Goolsby, for her tremendous skills, her intellect, wit, humor, and now, friendship. For seeing me through this from start to finish, I thank Mr. Fido, my rambunctious little angel. Thanks to my committee, Antonio, Kathy, Nick and George, for your expertise and guidance and for your gentle encouragement. Lastly, I thank mommy and daddy Gooden for teaching me the importance of reading, of learning, of believing in myself, and of the value of education. For the sacrifices you made so that I could accomplish this and so much more, I thank you. This is for you.

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CHAPTER ONE: INTRODUCTION AND REVIEW OF THE LITERATURE

In Europe there exist sovereign state powers undergoing increased decentralization as the supranational force that is the European Union mandates legislation but is not wholly involved in its implementation. In European education, with the role of non-state actors and an increasing resonance with international cooperation in its policy formation, the process of setting agendas and creating policy is complex. The Bologna Process, a system of higher education reform in Europe, is micro-problematic in that it raises a question regarding how one gets formerly distinct actors to buy into a policy without compelling them to do so—presumably without offering some incentive. The complexity of the process requires close examination. Bologna's resilience as an intended cooperative effort mandates participation of a multiplicity of governments, international organizations, and individual actors with their own ideas and agendas, varied resources, and capabilities. How and to what extent does convergence on a certain system of principles occur given the historical implications for divergence? How is the Bologna Process implemented and what roles do varied actor groups play?

This research project was inspired by an interest in the way Europe has managed its education resource; the project was carried out through a mixed methods examination of the forces of influence and levels of agendas in policy implementation, reconciliation, and legitimization across transnational spaces, given the influence of governance systems, institutional structures, and international forces. It is the fusion of ideas—of diverse levels of representation and allegiance—that validates the importance of a policy strategy that "makes Europe work" (Héritier, 1999). In proposing legislation, the monopoly that directs the European Commission's work is prohibitive of independent action (Tömmel, 2009). Within the Bologna Process, this monopoly coexists with the ability of non-European countries that are unbound by the European Commission legislation to exercise the power of independence. Yet, considering individual actors responsive to one collective European ideal, at what cost, to what extent, and with what challenges does this coexistence occur? Lessening in importance is the individual country as the dominant level of government in Europe's education, while a multilevel system of governance proliferates in and beyond the education sector (Gornitzka, 2006). This is the sum of challenges providing context to understanding this research project on the influence of certain actors on the implementation of the Bologna Process.

In the first part of this dissertation, I present the background for an understanding of the inception and evolution of the Bologna Process. I provide a description of the epistemic community in European policy coordination, summarize how law is made in Europe, and define the epistemic community as a known actor in the Bologna Process, all as fundamental grounds for understanding Bologna's adoption. Within this section, the review of the literature explores the methodology vis-à-vis applications of content analysis, quantitization, cluster analysis, and permutation testing. Additional review was performed on what the Bologna Process is, where it came from, the body of chief actors involved in the Process, and the goals of Bologna; the review reveals any deviation of

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goals over the past 15 years from those originally issued in 1999. Following this is a brief summary of extant research on the Bologna Process. The second chapter provides a summary of the method for this study, which involves examination of policy documents from Bologna's biannual Ministerial Conferences to trace the evolution of ideas/goals across time and to compare the evolving roles of Bologna policy actors to the evolution of Bologna's goals. The final two chapters present results and a concluding discussion section.

Background of the Problem

Defining the Bologna Process and recognizing its impact. Policymaking in Europe is complex. Obstacles on some occasions actually enable rapid policy movement and at other times lead to complete deadlock. There are many actors involved in European policymaking—actors with different interests, coupled by the difference presented by a variety of cultures and regulations. In the end, European policymaking is

heavily conditioned by this fundamental variance of political, geographical, cultural, institutional and economic features ... it is this diversity that must always be taken into account when policies are shaped, making the reconciliation of unity with diversity and competition with co-operation the greatest challenges currently facing European policy-making. (Héritier, 1999, p. 2)

Within Europe, there are a few considerations that support the complexity of understanding of policymaking: 1) the influence and impact of European Union (EU) policymaking, and 2) differing modes of governance across Europe caused by the dichotomy of EU governance and the governance of the singular European nations. EU policymaking is, as a result, increasingly diversifying alongside the diverse nationally evolving process of member states, as well as the maturation of the "global European system" (Pollack, Wallace & Young, 2010). At play is the evolution of European governance on different levels, each of which is driven by different types of policymaking and politicking.

One central tenet in understanding the European policymaking process is the understanding of the "factors, process patterns and actor strategies that promote policy innovation" (Héritier, 1999, p. 3), and the rapid manner in which policy innovation takes place, given such varied levels of actors, interests, and modes of governance. The dynamics of European policymaking and the different approaches of European politics offer interesting opportunities for continued research on the topic. Looking particularly at Europe's higher education policy, the adoption of the Bologna Process brings to light one relatively new example of rapid policy movement among varied agendas and objectives.

It is useful to understand policy innovation, particularly in the European industry of education, because European policymakers recognize the role of education as critical in Europe's ability to remain competitive globally. Europe's future wealth depends on improved education outcomes, explaining the European Commission's 2020 strategy focusing on lofty education targets to decrease drop-out rates and increase the number of higher education graduates (Roth & Thum, 2010). In order to compete with China and the United States in terms of innovative potential within the workforce, Europe's education system must produce a larger number of specialized graduates.

A brief history of the Bologna Process. The Bologna Process is the term used to represent the stages of implementation of the Bologna Declaration that was initially effected in June 1999. Within a broader context, the Bologna Process is the most recent iteration of 40 years of higher education reform in Europe. Today, 17 years since its start, signatories of the Bologna Process include education ministers from 47 member states (or European nations), the European Commission, and intergovernmental organizations, as well as several nongovernmental organizations, including the Organisation of Economic Co-operation and Development (OECD) and the World Trade Organization (WTO). Also involved in the process are important decision-making groups of domain experts, among them, the epistemic community, the influential policymaking group that, in the presence of soft law and possibly of the Open Method of Coordination (OMC, described below) as a new mode of governance in Europe, has an interesting and seemingly important impact on European policymaking. The influence of the epistemic community in policymaking is the focus of this study.

In 1999, at the start of the Bologna Process in Bologna, Italy, the rectors of 29 European universities became the initial signatories of the Bologna Declaration. Today, 47 countries are signatory members of the Bologna Process and execute the action lines and goals of the Bologna Declaration throughout their nations' higher education systems.

A paradox of a policy process. The Bologna Process is micro-problematic in terms of how formally distinct actors manage to agree on a policy without any legal incentive to do so. Like European policymaking, the Process is complex. Its successful execution relies on a multiplicity of governments, international organizations, and individual actors with varying ideas, agendas, resources, and capabilities; it demands cooperation among nation states that legitimize their individual national policies in a competitive manner, therefore creating challenges to the greater European ideal. And, while inclusive of government and nongovernment entities, the Bologna Process claims to be independent of political inclination.

The Bologna Declaration was an intergovernmental arrangement with an institutional infrastructure executed within a transnational context (see Bologna Declaration, Appendix A, p. 95). The Process continues to develop, however, not just at the supranational level but also at the national level, given the cooperative aspect of the Bologna Process. Despite one of the goals of the Bologna Declaration being convergence, since Bologna's adoption, competition has increased from the need of countries to compare systems to one another in order to develop "best practices," among other goals. One continued challenge to convergence is the persistent enforcement of national policy agendas due to continued domestic national problems. In order to protect the national public good, nation states will pursue marketization policies—policies that strengthen their individual positions in the economic marketplace. It is this diversity of actor interests (here the members of the nation state) alongside the "consensus-forcing nature of European institutions" (Bologna Declaration's goals of convergence) that generate a paradox behind policymaking in Europe (Héritier, 1999) and that support the importance of this research.

Statement of the Problem

In 1999, Europe set into action an agreement that changed the way students, teachers, researchers, and other actors interact with higher education institutions, with an aim to improve educational capital in Europe and to increase Europe's overall competitiveness on a global scale. In order to accomplish this, a credit system was established from old systems of records; students and teachers were encouraged to enhance their knowledge of their discipline by engaging with institutions outside their home country; metrics defining quality (QA metrics) were enhanced; and higher education degree classifications were changed to levels that were consistent (bachelor's, master's, doctorate) and easily comparable across the new "dimension" of higher education that was also formed within and for Europe. Action lines—the six objectives of the Bologna Process—developed and increased with the evolution of the Process, adding elements that support an organized ecosystem of education in which all actors have the best opportunity to develop into valuable contributors to all sectors of the labor market. The problem is that 17 years into the process, too little has been accomplished, and new challenges that compromise the fulfillment of Bologna's objectives have arisen.

Despite some level of accomplishment such as development of a modern credit system, increasing membership by more than 30 percent, increasing national quality assurance agencies and QA metrics, and expanding the level of influence beyond Europe, there are problems. Students detailed these problems in 2012 in their *Bologna with Student Eyes* report (The National Unions of Students in Europe [ESIB], 2007) as did the European Higher Education Area (EHEA) in its 2012 report (European Quality Assurance Register for Higher Education [EQAR], 2013). Progress has been less than optimal in the fulfillment of the action lines. Different countries face different struggles, causing them to progress at varying rates. Some excel and others are left behind. Countries have also exhibited questionable commitment to the whole process and seem to choose to leverage support for areas of need or particular interest to respective country scenarios. Finally, it would seem that certain accomplishments have themselves created additional barriers to success in other Bologna objectives, such as the action lines that encourage increased mobility of students and teachers and the action line that defined a three-year bachelor's degree cycle. As students focus on the curriculum with greater efficiency than before, they are finding greater challenges in devoting a semester to study abroad. As such, for the segment of bachelor's students, the three-year degree is being accomplished at the demise of the study abroad component. Another example lies in the consideration of desired educational reform through the Bologna Process as curtailed by the sudden imposition by education ministers of new degree structures, degree names, and degree program lengths.

When students published their report in 2012, it was evident that the Process was failing. As a top-down mandate of policy with no legal incentive, the resistance by students and complacency on the part of faculty provide another consideration for what had not gone well in the past 15 years. Furthermore, a failure to fully flesh out the ramifications of the new three-year bachelor's program, as one example mentioned previously, proves the contradiction of objectives within Bologna, since success of one action line causes compromise and difficulty in fulfilling another action line. Also, global recession has caused economic hardship, which has translated to less funding for reform initiatives in Europe. Finally, the central tenet of the Bologna Process was to promote harmonization and create a European Higher Education Area that reaffirms Europe's position as the premier source of education training and inroads in scientific and technological research. Nationalist sentiments in Europe bring added compromise to the

Process, which is based on European unity. To make matters even more challenging, Bologna's acceptance of countries that were part of the former Soviet Union, among others, introduces a broad stratification scale that makes overall progress daunting.

Purpose of the Study

The purpose of this study was to address the influence of epistemic communities in the adoption of the Bologna Process by applying mixed methods design to examine shifts in goals of Bologna under the influence of actor involvement using the communiqués, which are the official conference documentation of decisions and next steps, as the data. The text of the communiqués was examined using content analysis to identify themes found in the data; these themes were then transformed to numerical data through quantitization. Following this, the data were examined to discover groups of themes through cluster analysis. In order to compare the means across groups, with groups defined as pre- and post-involvement of epistemic communities, a repeated measures ANOVA was conducted.

Research Question

The research question to be answered by this mixed methods study was: As one of the mechanisms driving policy coordination in Europe, is there a quantifiable level of influence in the scope, direction, and implementation of the Bologna Process, as imposed by the epistemic community?

Hypothesis

The hypothesis was that there are statistically significant differences in the development of important constructs within the official conference documentation—the

communiqués, based on the influence of epistemic communities. This hypothesis supports the idea that epistemic communities hold crucial roles in Europe's education policy arena, as has been previously established with regard to the influence of epistemic communities in European monetary policy, agriculture, environmental policy, and drug policy (Pollack et al., 2010; Haas, 2016).

Theoretical Framework

In the philosophical context of rational knowledge and thought, constructivism has been established as a "mainstream research approach in international relations" (Adler, 2013, p. 112). It is based on the ontological standpoint that reality is socially constructed, that knowledge and actors are socially constituted (epistemological view), and that reality and knowledge are mutually supportive (Haas, 2016). The constructivist viewpoint has been applied to analyze the increasing role of interdependent actor groups and its effect of growing uncertainty within the European policy landscape based on interests, partnerships, and agendas.

As a theory of politics, [constructivism] provides a means of understanding and explaining contemporary events characterized by uncertainty and complexity. Within international relations and comparative politics, it focuses on broad questions of identity formation and collective understandings that guide choices through processes of social learning and normative deliberation. (Haas, 2016, p. 20).

Constructivism focuses on language, social narratives, and causal and normative arguments as mechanisms through which actors perceive themselves in the constructivist view of actor behavior.

Epistemic communities are understood through a constructivist lens, given that these communities play a key role as experts in the decision-making process in European policy, and constructivism frames an understanding of political and social processes along with the actors and their interactions in the modern policy landscape in Europe (Checkel, 1998; Dessler & Owen, 2005; Finnemore & Sikkink, 2001; Haas, 1992). However, in order to address the research question, the role of the epistemic community was examined by combining a constructivist epistemology and ontology with a rationalist methodology by which measurement, quantification, and hypothesis testing framed the lens applied.

Assumptions, Limitations, and Scope

The interests of this study did not extend to comparative politics, as it was not intended to be a deliberate examination of the EU. While this study drew on existing research into the Open Method of Coordination (OMC), this research is considered among other domains of interest. This research study was not dedicated to international relations theory, international political theory, or international political economy, nor will it serve as a historical treatise on the politics of education in Europe. It makes no claim as to the benefits and drawbacks of the Bologna Process, nor does it examine implementation in terms of "how it is going." It was a consideration of how public policy is sometimes made in European higher education by looking at the role of a certain body of actors in the creation of policy.

This research study examined the topic from a unique methodological lens—one based on mixed methods inquiry—rather than from an international relations lens. Despite the topic, the rationale for using a mixed method lens is the potential for new discovery based on this method. The study was limited to supporting literature and history of application of content analysis and mixed methods. The scope therefore intentionally focused both on the method and on the content.

Summary

Research on the topic to date had not been explored using a mixed methods approach applying content analysis, cluster analysis, and permutation testing, and certainly not so with a hypothesis regarding decision-making agents in European higher education policy. This research study addressed the role of the epistemic community in European education policymaking by looking at the evolution of objectives in the Bologna process, a modern policy in higher education built on agenda-setting and policy formation with the support of distinct actor groups' involvement. By first examining prevalence of initial objectives in the Bologna Process, as presented in the Bologna Declaration of 1999, changes to initial objectives will be noted, and actor group involvement mid-process will be identified. Levels of change in Bologna's objectives as further supported by a context of agenda-setting and policy formation will further confirm the impact of actor groups vis-à-vis the epistemic community in European higher education policy.

Review of the Literature

The first part of the literature review explores the methodological focus of this study through social science sources of literature on applications of content analysis, quantitization, cluster analysis, and permutation testing. The second part of the literature review covers the literature that supports an understanding of what the Bologna Process is, what it is supposed to achieve, and how its implementation is realized by the relevant policy community. This section includes an introduction to epistemic communities and an assessment of their influence in the Bologna Process. Research on the impact of the Bologna Process through degree program types was also conducted but was less central to the focus of this study.

Methods used. Neuendorf's book on content analysis (2002) provided guidance in applications of content analysis while identifying important considerations based on the advantages and disadvantages of content analysis and within different contexts of data types and objectives for understanding the data. Other publications by Moreno (2011), Hruschka, Hruschka, and Ebecken (2004), Graneheim and Lundman (2003), DeCuir-Gunby, Marshall, and McCulloch (2011), Hsieh and Shannon (2005), Scott (1955), Hopkins and King (2007), Johnson (2007), Veal (2011), and Shimp (2008) support Neuendorf's text by demonstrating applications of content analysis in a wide range of contexts. Furthermore, international policy scholars Schmidt and Radaelli (2004) state that discourse is critical to policy change and cite content analysis as relevant for carrying out an empirical analysis of discourse.

On the topic of quantitization, Collingridge (2013), Tashakkori and Teddlie (1998), Sandelowski (2001), Sandelowski, Voils, and Knafl (2009), Driscoll (2007), Onwuegbuzie (2003), and Morgan (2007) were main contributors to this research study. Research conducted on cluster analysis and repeated measures ANOVA drew from Tabachnik and Fidell (2007) and Field (2009).

A few scholars have also researched aspects of the Bologna Process using the application of mixed methods—Papadimitriou (2011), Doolan (2009), and Nagel (2007).

Others have applied content analysis of the core documents and written curricula of the Bologna Process, including Veiga and Amaral (2006), Öhlén, Furåker, Jakobsson, Bergh, & Hermansson (2011), Jakku-Sihvonen, Tissari, Ots, and Uusiautti (2012), Ursin, Huusko, Aittola, Kiviniemi, and Muhonen (2008), Chouliaraki and Fairclough (2010), Ravinet (2008), and Brookes and Huisman (2009). There are no known analyses that leveraged content analysis in the context of mixed methods and using cluster analysis of themes with repeated measures ANOVA. The existing research broadly covers progress toward Bologna's objectives; however, there is a gap in research leading to inference taken from this knowledge based on statistical techniques.

Global competitiveness of higher education. Problematic for Europe since the 1990s is the fact that it has not been competitive in its ability to maintain universities that were attractive to foreign students—certainly not more so than universities in the United States. The problem this creates is an inability to fully leverage innovation and research derived from higher education institutions—knowledge that directly leads to economic growth (van der Wende, 2009). From this dilemma came the Bologna Process and the effort to improve certain inconsistencies persistent in European education but not in the United States by transforming the system to a more unified structure, one that mirrors the three-degree bachelors, master's, and doctoral structure used in the United States. A system of harmonization among the countries in Europe participating in Bologna would further allow for alignment of one credit system (ECTS); the deliberate promotion of study, teaching, and research abroad; reform to allow for comparable degree structures; quality assurance measures that allow for the ongoing measurement and stocktaking of

progress and setbacks; and the inclusion of aspects imbued in American higher education systems previously not uniformly emphasized in Europe, like the "promotion of necessary European dimensions in higher education" (Bologna Declaration, Appendix A, p. 95). This list is fully detailed in each communiqué at the biannual ministerial summits.

Universities in Europe are expected to educate citizens that can evolve and participate in society. Based on global competitiveness in higher education and competition between Europe and the United States (Charlier & Croché, 2007), emphasis on recent education reform like Bologna has been vastly more stimulated. With a greater number of U.S. students studying in Europe (Haug, 2000) than European students studying in the United States in the 1990s, Europe responded by making necessary change in order to make their universities once again more attractive to foreign students.

By the 2010 deadline for the action program of the 1999 Bologna Declaration, Europe would be the global leader in university accomplishment, in attracting the best and brightest students and professors, and would, as a result, carry the greatest amount of prestige.

The Bologna Process

This section of the literature explored a collection of relevant critical issues in European education discussed by authors who collectively summarize milestones in European education that precede and set the stage for Bologna, given the shared goals and objectives that have pervaded European education history for the last several years.

The Bologna Process did in fact come from Bologna in Italy, where the first secretaries of education met to discuss and plan for the future of European higher education. What is known is that the initial goals of Bologna did not begin there but instead started roughly as development within education reform and European integration in 1950 (Adelman, 2008). The Maastricht Treaty of 1992 (Adelman, 2008; Buiter, Corsetti & Roubini, 1992; Cavazza, Pelanda, Molho, & Ginet, 1994) additionally propelled the beginning of Bologna, by which a level of convergence was needed in order to reconcile differences in academic credentials across European countries as they related to differing levels of career readiness. Kulesza and Reinalda (2005) disagree that Bologna is the anticipated result of education reform that came before, stating that Bologna merely represents a major change in European higher education policy. Table 1 lists milestones in Europe's higher education sector leading up to the Bologna Process.

1 able 1 European Higher Education Mileston	Table 1	European	Higher	Education	Milestone
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Year	Higher Education Milestones
1974	First meeting of the ministers of education
1976	Resolution regarding the program of action on education
1986	Single European Act
1987-1994	ERASMUS
1995	SOCRATES
1991	European Commission issues memorandum on higher education in the European community
1992	Maastricht Treaty (the treaty of the European Union)
1999	The Bologna Process
2000	Lisbon Agenda

Bologna's objectives. Also referred to as action lines, the initial goals of the Bologna Process, set to be completed in 2010, were as follows:

- 1. Adoption of a system of easily readable and comparable degrees
- Adoption of a system essentially based on two main cycles, undergraduate and graduate
- 3. Establishment of a system of credits, such as in the ECTS system
- 4. Promotion of mobility by overcoming obstacles to the effective exercise of free movement
- 5. Promotion of European cooperation in quality assurance
- 6. Promotion of the necessary European dimensions in higher education

From the Bologna Summit in 1999, the Education Secretariat sought answers to common European problems through the effort of convergence. It was thought that by coordinating efforts, reforms, compatible systems, and common action, the internal and external challenges and uncertainties in the development of education initiatives could be met. The process is not an endeavor of standardization or of uniformity within the higher education space; rather, it is one of the coordination of policies.

Ministerial summits were scheduled biannually to discuss progress and evaluate the future direction of Bologna. Summits were held in Bologna (1999), Prague (2001), Berlin (2003), Bergen (2005), London (2007), Leuven-La Neuve (2009), Budapest-Vienna (2010), and Bucharest (2012). Over time, countries progressed at unequal rates, new challenges arose, new member countries joined, new actor groups were involved and became influential over the development and implementation of Bologna, and Bologna's goals shifted.

Prague Communiqué (2001). In Prague, there was agreement to further the process through an expanded set of objectives, adding to the original six. The new objectives were lifelong learning as an essential element; involvement of universities, other higher education institutions, and students; and the promotion of European higher education as attractive worldwide.

Berlin Communiqué (2003). In Berlin, ministers considered input from several progress reports to include publications from the newly included student and higher education associations (e.g., the *Trends Reports* published by the European University Association (EUA)), as well as findings from seminars held across groups. Ministers also accepted UNECSO/CEPES as a consultative member organization.

Bergen Communiqué (2005). Toward the goal of increasing student mobility, during the Bergen summit, the framework for establishing qualifications was outlined as having three cycles with generic descriptors for each learning outcome/competency and with credit ranges for the first and second cycles. New consultant groups emerged on behalf of employers (UNICE/BUSINESSEUROPE) and of education trade unions (EDUCATION INTERNATIONAL).

London Communiqué (2007). In order to continue the alignment of quality assurance agencies, a new artefact was agreed upon in London called a Register of European Higher Education Quality Assurance Agencies (REHEQA). Its mission was to provide transparency and access for stakeholders and the general public to the objectives, strategies, and findings produced by the aligned quality assurance agencies based on the guidelines and standards supported by these agencies—guidelines and standards that were implemented at Bergen with marked success (see London Communiqué, Appendix A, p. 119). Also in London, results from the E4 Group's 2006 Forum enabled informed discussions to take place for the first time regarding progress of quality assurance objectives. Although quality assurance was a large part of the focus in London, it was an objective from the original six set forth in Bologna 1999. Priorities included the assignment of indicators for successes in mobility and the social dimension through the collection and analysis of data. London marked the first of three consecutive ministerial summits at which no new action lines were introduced.

Leuven Communiqué (2009). In Leuven, one primary shift in goals was the change in deadline for the Bologna Process's implementation from 1999 to 2012. This change in essence doubled the originally allotted time frame in which the groups included would implement their agenda. Among the chief goals reaffirmed in Belgium were lifelong learning from the Prague summit, access to higher education, employability, a new objective of data collection from the London ministerial summit, and international openness and mobility—the fourth objective of the original six action lines from the Bologna summit in 1999. At this summit, no new country signatories joined and no new action lines were introduced.

Combined with the new goal of quantifying performance metrics and goals through the collection and analysis of data introduced in London, ministers at Leuven challenged members to complete the original action line that sought the "Elimination of remaining obstacles to the free mobility of students and teachers" (see Bologna Declaration, Appendix A, p. 95) by 2020. In preparation for this new 2020 benchmark, this action line would be fulfilled if by the year 2012, 20 percent of students graduating from the European Higher Education Area (EHEA) would have spent some period of time training and/or studying abroad. For this to happen, all 46 countries participating were to have established and validated their frameworks for evaluating national qualifications by 2012. All counties were also expected to improve efforts in data collection to measure student mobility metrics.

Vienna-Budapest Communiqué (2010). In 2010, the European Higher Education Area (EHEA) was officially launched, and the dual country summit represented a celebration of this major milestone.

Goals stated in the Bucharest Communiqué (2012). In terms of data collection and transparency in the Bologna Process, discussions at Bucharest specifically addressed this objective as a way to "underpin political goals" (see Bucharest Communiqué, Appendix A, p. 134). Use of the term "politics" was new and raised questions regarding a new dimension of goal-setting. All goals at this summit were geared toward the 2015 ministerial conference in Yerevan, Armenia, in the form of a well-developed list of priorities directly stemming from the original action lines as well as the additional priorities and action lines that developed following Bologna in 1999.

European law perspective. In European policy coordination, the European Commission is the main executive body and the legal guardian of all treaties. The Council of Ministers (CoM) holds the power to adopt or reject proposals from the European Commission in concert with the European Parliament. The European Court of Justice (ECJ) rules member states according to the founding treaties and is therefore the entity that creates new laws within the European Union. All four constituents together maintain legislative powers in the making of law within the European Union. In formal designation, they are the political forces in Europe responsible for issuing directives and making law (Verweij & Thompson, 2006).

There are, however, areas where nation states retain only partial sovereignty, such as in European social policy and certain sections of employment policy. In these contexts, actors—namely the European Commission, by use of the open method of coordination (OMC) and soft law—work in a fashion that aims to circumvent the important fact that the European Union has no legislative powers. As such, any issue related to convergence is influenced laterally or transnationally by way of other countries, and from the top down or supranationally from the European Commission and others of the four agencies listed above (i.e., Council of Ministers, European Parliament, and the European Court of Justice). One example of this can be found in the progress of the Bologna Process in Bosnia and Herzegovina, where arguably the largest challenge to its implementation is said to be a result of having no law behind higher education at the state level (Education, Audiovisual and Culture Executive Agency [EACEA], 2012). In Bosnia and Herzegovina there is 1) law at the state level; 2) the Republika Srpska (RS); along with 3) the group of ten cantons within the Federation of Bosnia and Herzegovina (FBIH); and finally, 4) the Brčko District (BD). Each entity maintains a separate set of laws and regulations regarding higher education. In order for Bologna to be successful in Bosnia and

Herzegovina, however, it is stated that there must be harmonization between these entities and state law (EACEA, 2012).

One of the stakeholder groups that became involved in the Bologna Process shortly after its beginning is the European Commission. Its role is particularly interesting in that the Commission develops "networks of experts or epistemic communities," or of stakeholders and/or civil society, and accumulates technical arguments "in favour of developing a shared approach to promote modernization and innovation" (Pollack et al., 2010, p. 99). Given that the European Commission develops epistemic communities to promote innovation in policymaking, it is important to note the continued role of the Commission in education policy and in the Bologna Process. Starting with the Prague summit of 2001, the European Commission directly inspired decisions within Bologna. At this ministerial summit in Prague, the European Commission became a full voting member and was granted influence over the Bologna Process.

Historically, the European Commission already commanded control over other policy sectors in Europe such as employment and social policy as expressed in the Treaty of Maastricht, 1992. The treaty additionally asserts that with respect to education, member states retain national sovereignty, with the European Union playing a supportive role in cooperation. In employment and social policy, the European Commission was given a much stronger mandate of coordination, explicitly stated as differing from cooperation as it worked to facilitate the transition from policymaking to policy that is rooted in the European Union as a collective regime (Pollack et al., 2010). Within Bologna, the European Commission, along with certain of the national governments, has worked to apply policy proceedings and working agreements similar to those used in the European Union's Open Method of Coordination. Examples of this can be seen through their stocktaking reports and the practice of setting benchmarks (Lažetić, 2010). This is one unique but influential contribution of this actor group to an otherwise non-EU policy process.

The Open Method of Coordination (OMC). The particular manner of Bologna's development as policy without legislation has triggered the value proposition between both hard and soft law and in terms of Bologna, vis-à-vis the role of the Open Method of Coordination (OMC) in European integration, coordination, and convergence. Literature on OMC examines it as a new mode of governance pattern in Europe based on soft coordination, or soft law. OMC is defined as "[a method] that is based on mechanisms of coordination other than supranational (representing European, national and local levels) law-making" (Jacobsson & Vifell, 2003, p. 1) and is said to also be an emergent trend in European policy sectors. Scholars also remark that Bologna developed into a type of OMC process that is coordinative–diplomatic in nature and driven by dual sponsorship—"diplomatic & epistemic" of initiatives.

OMC was first presented at the Lisbon European Council in 2000 as a manner to achieve convergence toward EU goals, a method that would bring greater autonomy to member states and enable them to come to agreement and converge on new ideas in policy sectors where there typically is such a great divide that converging on these ideals at the legislative level with legal entities would be nearly impossible (Radaelli, 2008). Radaelli goes on to state that OMC was therefore presented at Lisbon as an instrument for policy learning or as a "mutual learning process."

Policy coordination in Europe. There are characteristics of policy coordination specific to European education that support the significance of the role of the epistemic community in the adoption of the Bologna Process. As such, this research study is necessary for the field of European higher education research as well as that of European policy coordination, since it leads to greater understanding of the role of the epistemic community. Scholars of international education policy transfer as a comparison, vis-à-vis levels and modes of governance, would also find this study informative. The aim of this research study, therefore, was to examine policy from the context of actor strategies (Héritier, 1999), specifically, strategies of the epistemic community (as a body of actors).

Since the 1960s, policy coordination in Europe was executed via the Organisation for Economic Co-operation and Development (OECD), whereby the OECD enabled industrialized Western member countries to coordinate their development of policy (Pollack et al., 2010). The European Commission, Council of Ministers, European Court of Justice, and European Parliament formed the constituent parts of the European Union and carried different levels of responsibility.

This system of intergovernmental influence within Europe's higher education sector began over 40 years ago (see Table 2) and continues today with adoption of the Bologna Process. Intergovernmental cooperation is now used as a manner through which education policy can achieve integration. This type of cooperation speaks mostly to the perceptions of the actors involved rather than to the underlying drivers of the Process

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(Barkholt, 2005). Hallmarks in intergovernmental cooperation in Europe's higher education sector are listed in Table 2.

Table 2 Intergovernmental Cooperation Hallmarks in Europe's Higher Education

Sector

Year	Higher Education Event
1960s	Council of Europe promotes an intergovernmental approach
Late 1960s, early 1970s	European Parliament envisions a Pan-European curricula, courses, and universities. Ministers and university administrators resist.
1976	European Commission implements cooperative action program that re-establishes trust that the EU is not working toward harmonizing European higher education
1987	A decade of strong entrepreneurship leading to ERASMUS.
1998	Education ministers of France, Italy, Germany, and the UK establish the intergovernmental agreement leading to the Sorbonne Declaration.
1999	The Sorbonne Declaration is accepted and signed by 29 education ministers in acceptance of the Bologna Declaration.

Origins of epistemic community involvement in international policy

coordination. International trends in knowledge acquisition saw an undeniable change from the late 19th to the late 20th century. The change began with a lessening of the influence of guilds in concert with an increase in expertise in the engineering field, as well as increases in research, development, and governance, and proceeded to the growth of technically trained ministers from the late 1940s to the mid-1970s in Europe and in the United States, and to the creation of economic and social regulatory agencies from 1970 to 1975. This was followed by a period where industrialized countries' governments continued to develop an interest in establishing research groups that forecast the future of economic and social life. Between 1972 and 1982, the governments of 188 countries established agencies responsible for the study of environmental and natural resources (Haas, 1995). Such was the beginning of the process of professionalization worldwide. Along with this trend, bureaucracies expanded globally. Expertise in governmental employees in the United States alone doubled and from 1973 to 1983 while

doctoral degrees grew by 51 percent, Master's degrees grew by 44 percent, government staff increased in hiring of scientists, engineers and IT specialists by 4%, as compared to a two percent increase in other personnel. By the end of the nineteenth century, scientists, engineers and IT workers formed 15% of the U.S. government's white-collar workforce as compared to 65% of the non-governmental workforce. The 15% was also an increase over the statistic of 13% of scientists, engineers and IT specialists who made up the government's white-collar workforce ten years previously. (Haas, 1992, p. 9)

This trend was named the policy role of the knowledge elite by Nelkin (1979). This trend decentralized public bureaucracies (Haas, 1992, p. 10). Despite a shared increase in the training of specialized scientists in Europe, the increase in professionalism was incongruent to that of the United States. Still, the collective thought leaned toward specialized agencies that would concentrate on technical concerns in their respective industries (Haas, 1992). Members of the scientific community through this expansion of bureaucracies therefore became authorities—knowledge keepers—and were recognized as authorities. Scientific experts and politicians then worked together in shaping policy. However, policymaking did not directly result from a causal explanation of the technical points proven by such scientists and remained based heavily upon the costs and benefits of stakeholder outcomes (Haas, 1992). In cases where, as is often the case, scientific evidence provides some uncertainty about a particular topic, the decisions made tended to solely follow political reasoning and choice. The authority of scientists and their effect on

policymaking was less than intended by the formation of bureaucracies. What Haas (1992) asserts is of interest in this phenomenon are "the patterns of policymakers' reasoning" (p. 12). This question is what fueled Haas's interest in "channels of advice" (p. 12) and the study of enhanced reliance upon epistemic communities in modern international policymaking.

Uncertainties due to the increasingly technical nature of international shared concerns (such as environmental, economic, monetary, and population issues) led to the further development of a continued increase in professional bureaucracies as a support mechanism for decision-making. Epistemic communities have since become more useful in establishing causality during crises, applying clarification of causality in events leading to inaction or new policy implementation and in defining states' self-interests or in formulating policies (Haas, 1992).

Epistemic communities in modern European decision-making. The existence and roles of actor groups involved in models of policymaking in Europe include epistemic community actor groups as addressed in Adler and Hass (1992), Adler (1992, 2005, 2013), Finnemore and Sikkink (2001), Bennett and Howlett (1992), Mintrom and Bergari (1996), Radaelli (1995), Haas (1989, 1992, 2001, 2004), Jenkins-Smith and Sabatier (1993), Schlager (1999), Checkel (1998), and Slaughter, Tulumello, and Wood (1998). Epistemic groups are commonly presented in the literature as one of several sources of influence in European policy coordination and policy convergence, as compared with other actor regimes such as advocacy coalitions, as described in Risse-Kappen (1996), Litfin (2000), Radaelli (1999), Peterson (1995), and Bennett and Howlett
(1992). Along the broader context of policy diffusion in Europe, Sabatier (1988), Weible,
Pattison, and Sabatier (2010), Hamm (1983), Hinckley (1981), Ingram (1977), Riker
(1962), Wood and Waterman (1994), and Scharpf (1997) present context for
understanding how nation states interact with one another and with mother Europe as
policy is made.

Epistemic communities are thought communities made up of socially recognized knowledge-based networks, the members of which share a common understanding of a particular problem/issue or a common worldview and who seek to translate their beliefs into dominant social discourse and social practice (Antoniades, 2003). The focus on the desired outcome of the epistemic community involvement in policymaking lies in the translation of beliefs into "social discourse" as well as "social practice." This definition of epistemic communities is closely related to Haas's (1992) definition, the definition that pronounces the epistemic community not as scientifically derived communities that apply the same methodology as would natural scientists—as do Holzner and Marx (1979)—but rather as existing within a social dimension, as with Kuhn (2010), where the epistemic community is a "sociological group with a common style of thinking" (Haas, 1992, p. 3). Haas also states that members of epistemic communities possess the following characteristics:

- 1. Share inter-subjective understandings
- 2. Have a shared way of knowing
- 3. Have shared patterns of reasoning

- 4. Have a policy project drawing on shared values, shared causal beliefs, and the use of shared discursive practices
- 5. Have a shared commitment to the application and production of knowledge (Haas, 1992, p. 4)

Haas (1992) goes on to state that the gap filled by epistemic communities is caused by uncertainty within government policy decision-making that called for scientific (in certain definitions) or socially accepted networks of domain experts and specialists who can provide advice specific to a policy issue (e.g., ozone depletion or nuclear war) (Ambrus, Arts, Hey, & Raulus, 2014; Holzner & Marx, 1979; Vögtle, 2014; and Wentzel, 2011). Members of the epistemic communities, when chosen for policy advice, become responsible and accountable for decision-making.

In the literature on European social network analysis, the epistemic community is presented as an agency-based social network model in which a selection of advisors together forms collective opinion (Rouchier, Tubaro, & Emery, 2014), emerging sociotechnical regimes (Piterou & Steward, 2011), and public sector agencies arranging a process of knowledge sharing among a group of high-performing firms (White & Christopoulos, 2011).

Within the literature covering epistemic communities and their influence over the Bologna Process, Wentzel (2011) names two groups central to the mission of the Bologna Process: the European Union and the OECD as epistemic communities, responsible for the diffusion of soft policy in Europe alongside peer-group learning, international competition, and policy coercion. What is widely noted about the epistemic community is its theories of action and corresponding models of behavior, which, during times of political doubt and uncertainty, have and can serve as roadmaps to stability. Wentzel (2011) goes on to say that epistemic communities influence not only sovereign politics but also convergent state behavior.

Apart from Wentzel (2011), scholars cite this community of practice by peers as a group that helps to create, validate, and disseminate knowledge. Local agents working with the epistemic communities help to establish their credibility. Most applicable to recognizing the role of the epistemic community in Bologna is the notion of the epistemic communities and their influence, which in many ways is historical—such that it is at times taken for granted (Roaf & Bairstow, 2008).

Epistemic communities in the European education sector. Epistemic communities are particularly interesting in Europe's education sector, where, during implementation of the Bologna Process, the role and influence of this network of individuals with recognized expertise, which holds an "authoritative claim to policy relevant knowledge within that domain or issue area" (Antoniades, 2003, p. 24), is evident amidst developing goals and objectives in this new policy. Furthermore, the manner of adoption of this policy via soft law begs for an in-depth examination into the actors involved in the Bologna Process and their agendas, even more so as both agenda and actor involvement have shifted since Bologna's inception in 1999. Wentzel (2011) specifically names the Bologna Process as a likely conduit for the propagation of education policies and for decision-making born out of the theories and influence of one or more epistemic communities. Furthermore, epistemic communities have an even

greater impact in "less than politically motivated cases" (Haas, 1992, p. 16). Brunkhorst (2006) challenges the legitimacy of the Bologna Process in Europe based on the influence and impact of actor groups involved in the process and because of its implementation that enabled legal decision-making to be conducted in informal settings.

The argument therefore stands that, in the Bologna Process, the result of soft policy expertise over single country and transnational levels of policy coordination, the increase of professional organizations that support decision-making and the shared understandings, values, and modes of reasoning suggests a particular type of actor involvement.

Actor involvement in decision-making in the Bologna Process. Resulting from interviews conducted in 2009 with former and current national representatives and representative organizations that serve as consultative members in the Bologna Follow-Up Group and in Bologna's follow-up structures, the following member characteristics, trends, decision-making processes, and "modes of coordination" were identified. These data suggest criteria for selection of representatives and provide insight into characteristics of interactions among representatives at Bologna follow-up summit summits that led to the development of communiqués.

 Selection was based on expertise representing member countries (national representation) or organizations within Bologna's structures (transnational representation).

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- Bologna's openness to policy topics at the intergovernmental level attracted collaboration and influence from "political entrepreneurs" from international organizations and political organizations.
- Bologna eventually evolved to include 1) the Bologna Follow-Up Group (BFUG),
 2) the Board, and 3) the Bologna Secretariat.
- The Bologna Process is participative and therefore the implementation of actions is easier.
- Communication was informal and conducive to networking and the effective exchange of information.
- Members with skills and competencies were critical to the introduction of topics to agendas and to communiqués and tended to have more expertise and be better prepared for meetings, often times dominating discussions (Lažetić, 2010, pp. 552–553).

Per Dhima (2011), public officials and political analysts described communications and modes of coordination with one another and with the government. Holman and van der Pijl (2003) and Bradanini (2009) support this assertion with their claim that the following epistemic communities had overwhelming power in setting the European agenda, and in an interview, Hans van Baalen, a member of the European Parliament, said of ECs like the ERT: "These communities were among the most powerful defining actors of new integration strategies" and that, similar to the policy deciding on a single currency for the European Union, these epistemic communities "were among the most powerful defining actors of new integration strategies" (van Baalen, as quoted in Dhima (2011)). Dhima (2011) goes on to say that the outlook of these epistemic communities "through their strong lobbying, illustrates the extent to which transnational corporations shape EU policy" (p. 17) and that through these epistemic communities, the labor laws were deregulated and that this newly restructured higher education system [that is, the Bologna Process] increased Europe's global competitiveness. These particular epistemic communities published reports in 1994, 1998, 2000, 2001, and 2002, and the European Commission published a report written by these epistemic communities that further demonstrates their central role and impact in Europe's goals for competitiveness (Dhima, 2011). In sum, through interviews with these members, Dhima shares that they were indeed "main actors pushing for the Bologna system throughout Europe and in aspiring countries" (p. 17).

Levels of stakeholder interactions in decision-making are both formal and informal; the Process does not follow European Union structures; rather, discussions are held among its stakeholders and institutions. It is an interactive process (Sabatier, 1986) created and legitimized by the signatory countries and influenced by national governments as well as European higher education stakeholder organizations. Table 3 provides a list of the actor communities involved in Bologna policymaking and the summit at which that actor community first appeared.

	Bologna	Sorbonne	Prague	Berlin	Bergen	Leuven	London	Budapest	Bucharest
University Representatives									
Council of Europe									
Student Representatives									
EURASHE									
UNESCO/CEPES									
Employer Representatives (UNICE or BUSINESSEUROPE)									
Education Trade Unions (ED Intl)									

Table 3 Introduction of Actor Groups to the Bologna Process

Conclusion

This chapter reviewed the literature on several topics related to epistemic communities and policymaking in European higher education, namely the Bologna Process. These topics include origins and evolution of epistemic communities as decision-making bodies, European policy, "soft law," the Open Method of Coordination, and higher education reform in Europe that led up to the Bologna Process. Most of the research on epistemic communities favors the model proposed by Haas (1992), and very little research has been conducted on epistemic communities on a national level. Of course, in Haas's (1992) definition, epistemic communities tend to function within policy that crosses national and transnational boundaries. Resulting from research conducted by scholars like Wentzel (2011), epistemic community involvement in the Bologna Process is clear. With this validation, this research study aims to apply mixed methods to the communiqué documents with the goal of statistically identifying the influence of epistemic communities on the Bologna Process. Definitions of central terms and acronyms used in this study are found below.

Definitions and Acronyms

ACF	Advocacy Coalition Framework
Agglomeration Schedule	Identification of cluster combinations
BD	Brčko District, a district in Northeastern Bosnia and
	Herzegovina
BFUG	Bologna Follow-Up Group
Bologna Declaration	Documentation that marked the launch of the volunteer
	European-level "Bologna Process" in 1999, the aim of
	which is to define and establish the European Higher
	Education Area (EHEA)
BPG	Bologna Preparatory Group

BUSINESSEUROPE	The former name of the trade union now known as Union					
	of Industrial and Employers' Confederations of Europe					
	(UNICE)					
CHEPS	Center for Higher Education Policy Studies					
CEPES	Centre for Research in Higher Education Policies					
СоМ	Council of Ministers					
Deliberative Governance	A system in which the mode of discussion and consensus is					
	driven by voicing reasonable proposals and arguments that					
	are delivered by individuals with experience in the field of					
	interest. Through the presentation or arguments and the					
	ease of consensus forming in the absence of any legal					
	force, the structure is said to be "deliberative" (Jacobsson					
	& Vifell, 2003).					
EACEA	Education, Audiovisual and Culture Executive Agency					
EC	European Commission					
ECJ	European Court of Justice					
ECTS	European Credit Transfer System					
EHEA	European Higher Education Area					
EI	Education International					
ENIC	European Network of Information Centres					
ENQA	European Association for Quality Assurance in Higher					
	Education					

Epistemic Community	Thought community made up of socially recognized				
	knowledge-based networks				
EQAR	European Quality Assurance Register				
EQF	European Qualifications Framework for Lifelong Learning				
ERASMUS	European Community Action Scheme for the Mobility of				
	University				
ERA	European Research Area				
ESG	European Standards and Guidelines for Quality Assurance				
	in the European Higher Education Area				
ESIB	The National Unions of Students in Europe ¹				
ESU	European Students Union (formerly ESIB)				
EU	European Union				
EUA	European University Association				
EURASHE	European Association of Institutions in Higher Education				
EUROSTAT	Statistical Office of the European Communities				
EUROSTUDENT	Student group responsible for aggregating data on the				
	socioeconomic status of European higher education via a				
	database				
EURYDICE	The Information Network on Education in Europe				
HE	Higher education				
HEI	Higher education institution				

¹ The ESIB changed its name to the ESU in 2007. 37

HER	Higher education reform
IPE	International Political Economy
NGO	Nongovernmental organization
NQF	National Qualifications Framework
OECD	Organisation for Economic Co-operation and Development
OMC	Open Method of Coordination-method launched in the
	Lisbon Council (2000) as a manner to "spread best practice
	and achieve convergence towards EU goals in the form of a
	'transfer platform' rather than a 'law making system'"
	(Radaelli, 2003); an architecture of governance based on
	guidelines, peer review, benchmarking, learning, and
	diffusion of shared beliefs among policymakers
Qualitization	Introduction of quantitative variables to qualitative
	variables in order to inform a qualitative study
Quantitization	Assignment of numerical values to non-numeric data
REHEQA	Register of European Higher Education Quality Assurance
	Agencies
Repeated Measures ANOVA	Procedure used to test differences between several means
	over time where the same participants receive the
	experimental treatment
RS	Republika Srpska

Treaty of Maastricht	Previously known as the Treaty on the European Union;
	treaty that integrated Europe, signed February 7, 1992
UNESCO	United Nations Educational, Scientific and Cultural
	Organization
UNICE	Union of Industrial and Employers' Confederations of
	Europe ²
WTO	World Trade Organization

² UNICE changed its name to BUSINESSEUROPE in 2007. 39

CHAPTER TWO: METHODS

Description of the Research Design

Creswell in 2009 defined research design as the culmination of decisions a researcher makes in regards to a philosophical worldview—the strategies researchers select as the mode of inquiry, as well as the specific research methods that are applied to the data in the research study. Following this definition, the worldview ascribed to in this study is social constructivist. Creswell's social constructivist viewpoint is further described as follows:

Social constructivists hold assumptions that individuals seek understanding of the world in which they live and work. Individuals develop subjective meanings of their experiences—meanings directed toward certain objects or things ... The goal of the research is to rely as much as possible on the participants' views of the situation being studied. (p. 8)

This study uses the mixed methods approach, using quantitization to examine the influence of the epistemic community on the current challenges and accomplishments within the Bologna Process as a way to better understand the role of the epistemic community in other policymaking sectors in Europe and to generalize findings about policymaking or policy coordination in European policymaking more broadly. The particular mixed methods design applied to this research was the convergent parallel design (Creswell, 1999).

Mixed methods is a research approach that includes the mixing of both qualitative and quantitative data, methods, and even methodologies contained in one single research study or a group of research studies. In essence, the research studies incorporating mixed methods combine two separate studies sometimes referred to as mini-studies, one for the qualitative portion and one for the quantitative portion. In mixed methods, the focus is on deriving the most robust results by addressing the research question from a combination of perspectives in order to reduce any gaps in analysis and remove a greater amount of bias in assumptions imposed by the researcher.

A content analysis study of dominant themes was the qualitative approach used in this study, since it is a technique in which the systematic analysis of text is carried out through a literal counting of one or more aspects of content that are qualitative in order to summarize certain aspects of the content based on the subjective impression of the researcher. Weber claims that it is a method that enables the data to be manipulated in a manageable fashion that is relevant to classification of themes within textual content (Weber, 1990). Content analysis usually begins with the researcher developing an a priori designed set of coding schemes that are theoretically grounded within the research area of interest.

Reliability is tantamount to a well-executed study using content analysis when human coders code the same material consistently. Without reliability, content analysis is said to be virtually meaningless (Neuendorf, 2002). Through content analysis, a hypothesis is tested by transforming themes to numbers, followed by a statistical examination of numeric relationships, which then determines whether the hypothesis is indeed supported. Words, phrases, sentences, or themes can be evaluated in a way that allows the researcher to draw inference concerning messages contained within the text. In addition to what is revealed through a content analysis, statistical extraction of relationships was conducted in this study using cluster analysis, and the means of ratings were compared pre- and post-entry of an epistemic community actor group using permutation testing.

Content analysis is a flexible research method that can be effective in qualitative, quantitative, and mixed methods research frameworks. It is cited as the "fastest growing technique in quantitative research" (Neuendorf, 2002, p. 1) and its applications continue to spread to various fields and modes of investigation. In the case of the Bologna Process and its implementation based on actor involvement, content analysis enables the examination of actors' interactions throughout the first years of Bologna's implementation. By using content analysis, a wide range of analytical techniques can be performed to further draw meaning from the communiqués. The process of content analysis enables direct accounting and classification and can support reliable and valid findings (Weber, 1990). In this study, content analysis was used to identify themes and then measure the prevalence of key concepts of the Bologna Process in its first 15 years.

Content analysis is the "quantitative analysis of message characteristics" (Neuendorf, 2002, p. 1) within any research context—for instance, determining the real role of the actor groups such as the epistemic community within the formation and implementation of the Bologna Process. It enables a researcher to extract quantitative data from originally qualitative data, e.g., messages, texts, and other communications, and provides newly derived data points through the development of themes that are then rated.

Through data transformation (Collingridge, 2013), the qualitative data were transformed into quantitative data, a process also known as quantitizing (Tashakkori & Teddlie, 1998). Once quantitized, the data were then analyzed using cluster analysis and single-subject designs in order to expose independent groups of thematic constructs over time, relate these to the actors involved, and then statistically test group differences.

Quantitization asserts that there are different understandings of qualitative and quantitative data and that there is a technical process for transforming the data from qualitative to quantitative. The term qualitization, conversely, refers to the process through which researchers transform quantitative data to a qualitative data format. Through quantitization, qualitative data, often in the form of interviews, participant observation, field notes, or written transcripts (Sandelowski et al., 2009) are assigned numerical values that can then be analyzed in order to draw out "or discern and show regularities or peculiarities in qualitative data [that the researcher] may not otherwise see or be able simply to communicate, or to determine that a pattern of idiosyncrasy [that the researcher] thought was there is not." (Sandelowski et al., 2009, p. 210).

Cluster analysis is an exploratory analysis method that uses several different algorithms to classify cases into categories in such a way that the grouping of cases creates homogenous clusters with maximal heterogeneity between clusters, or in other words, forms clusters of cases that share common properties. Clustering techniques essentially compare values for cases—here the themes and subthemes—across variables, which in this study are the ministerial summits. Cluster analysis tends to be applied to data where there exists no previous hypothesis or where the groups of cases are unknown.

Single-subject research design, or single-case design, is a series of designs applicable to research in which the subjects all form one single group of which the sample size is one. This set of designs studies the effects of treatments administered to the subject through measurement of behavioral change following treatment. In these designs, the subject or group of subjects exerts its own control while being administered the treatment. Results are based upon the difference in subject behavior across the nontreatment phase and the treatment phase.

Analyzing both qualitative and quantitative data yields results that are examined in order to bring a greater level of integrity to the research and also to bring more novel insights to the challenges facing Bologna than would otherwise be obtained if either type of data were analyzed solely qualitatively or the converse. Recognizing that all methods have limitations, researchers defined the mixed methods approach circa 1959 (Campbell & Fisk), with the aim of yielding increasingly valid results in psychological research. In mixed methods, approaches to data collection proved more innovative than before, and traditionally qualitative data began to be combined with quantitative data. Triangulation was developed as a way to cross-validate findings from several processes (Jick, 1979). As Creswell (2007) stated, one "method helps to develop or inform the other method" (pp. 15–16) and supports research and support of greater transformative purpose (i.e., supporting minority culture) than before (Greene, Caracelli, & Graham, 1989). Furthermore, other authors have developed theories on different ways methods can work together to derive differing levels of insight into the analyses and findings (Creswell, 1994; Mertens, 2003; Tashakkori & Teddlie, 1998). Figure 1 provides a display of the steps taken in integration of results from this study.

Phase	Procedure	Product
Qualitative data collection	• Deduction of themes and subthemes from communiqués	• Total sample
Qualitative Data analysis	 Content Analysis of Coding and thematic analysis MSExcel 	 79 item data sample Prevalence of themes across ministerial summits
Quantitization	• Transformation of text data to numerical data	 Numerical data Themes and subthemes represented by a four-point scale
Quatitative Data Analysis	 Cluster Analysis Repeated measures ANOVA Single-Subject Graphical Output SPSS quantitative software v.21 	 Four clusters of thematic groups Test for influence of EC over thematic prevalence scores Means plots for individual clusters
Integration of Qualitative & Quantitative Results	• Interpretation and explanation of qualitative and quantitative findings	 Discussion Implications Recommendations for future research

Figure 1. Data integration process.

Description of the Population

A set of meeting records in the form of nine communiqué documents, which were produced biannually from 1999 to 2012, were used for this study and can be found in Appendix A. Present at each summit and contributing to the development of the records were ministers of higher education representing the countries that were members of the Bologna Process. Meeting records included some or all of the following categories of talking points: 1) a preamble; 2) further actions following the six original objectives of the Bologna Process based on challenges and priorities; 3) a discussion of achievements and consolidation; 4) priorities for the year leading to the next ministerial summit; 5) progress toward the upcoming decade of Bologna; and 6) the organizational structure and follow-up groups and membership.

The communiqués ranged in length from two to nine pages, with a median length of five pages and an average length of 4.6 pages. Summits were generally conducted in the spring, every two years, from 1999 to 2015. Four of the nine ministerial summits were conducted during the month of May, and three others were conducted in March or April. The additional summits took place in June and September. The Bologna Process started with 29 signatory or member countries in 1999 and increased to 47 signatories by 2012.

Data Collection

The data used in this study were generated from 1999 to 2012, in the form of the Bologna Process communiqués that were developed following ministerial summits in 1999 in Bologna, 2001 in Prague, 2003 in Berlin, 2005 in Bergen, 2007 in London, 2009 in Leuven/Louvain-La Neuve, and 2012 in Bucharest. University Institutional Review Board permissions were unnecessary for the execution of this research study, since documents were all available in the public domain. Data were in the format of summit notes and available as public record through the World Wide Web and were downloaded from the official Bologna Process website.

The culmination of every ministerial summit required a formal documentation or communiqué that detailed topics discussed at the summit, new members, follow-up items, and follow-up groups assigned to follow up items. Documents were downloaded in .pdf format. Within each communiqué, the topics discussed included progress to date regarding each action item of the Bologna Process and detailed any deviation from the original list, reasons for this change, and an account of benchmarks to measure successes in meeting goals.

The data were captured in MSExcel and broken out into the 79 themes and subthemes, which formed the rows, and a rating scale of zero to four based on prevalence in the communiqués from each ministerial summit, which formed the columns; column headings were: 1) *never: 0 words*, 2) *rarely: 1 to 2 words*, 3) *occasionally/sometimes: 3 to 4 words*, and 4) *frequently: 5 or more words*. From this rating scale, the codes were developed.

Sample

Although by the date of the defense of this dissertation there exist 10 communiqué documents, the sample size was limited to nine communiqués. A ministerial summit took place in 2015 in Yerevan, Armenia; however, the respective communiqué

was not included in this analysis, given that progress on the study was substantial prior to 2015 and inclusion of the new data points from this date would have required an effort that may not have yielded additional new knowledge commensurate to the time and effort required.

Instruments

The instruments used in this research were the codebook (see Appendix B) and coding form, which were used to categorize the coding schema applied to the constructs and related themes of each communiqué. Codebooks contain codes, definitions, and examples as a guide to the study's discourse analysis. Codebooks are used to document the formal steps taken in the qualitative analysis and follow a process of iterative development. As such, codebooks may be revised as the research is conducted. It is the level of rigor applied to and level of detail included in the development of the initial codebook that best enables coders to "distinguish between codes and to determine examples from non-examples of individual codes" (DeCuir-Gunby et al., 2011, p. 138).

Qualitative Procedure

Defining units of analysis/coding. In content analysis, the data used for analysis should be represented in the collection of units rather than in the demonstration of relationships between the units (Krippendorff, 2004). White and March (2006) further add that "data must be broken into units for sampling, collecting and analysis and reporting" (p. 29).

Identifying themes and subthemes. The identification of themes and subthemes was developed through an extensive literature review, which facilitated the

transformation of the raw communiqué texts to themes and subthemes. Upon extensive review of the communiqué documents, it was discovered that the main dialogue consisted of a review of the action lines, progress to date, new membership, follow-up items in anticipation of the next summit, and an announcement of new membership, as well as an announcement of the involvement of new actor groups who played a variety of roles. Variations, however slight, were noted in the explication of the objectives of action lines, and moreover, there seemed to be development in a broader sense of what initially was stated at the outset of the Bologna Process's implementation. As such, given that these topics were consistently discussed across all summits, they offered the basis for the extraction of themes and subthemes that could be analyzed against actor involvement. The communiqués can be viewed in Appendix A. Each communiqué document was represented by rows of themes and subthemes, which were fine-tuned and further developed, taking the number of rows from approximately 34 originally to a final count of 79 rows of themes and subthemes, which are presented in Appendix C.

Rating of themes and subthemes. In this study, the sampling unit was the year of each ministerial summits and the recording unit was the rating scale from zero to three ranking each theme and subtheme on prevalence at each summit.

Threats to credibility. In order to ensure rigor in the qualitative procedures, the data and analyses were presented in a chronological ordering, which detailed the journey of the qualitative portion of the research. All details regarding the method construction—descriptions of all steps taken along the way, choices made, and the reasons why—were

incorporated into the qualitative procedure section in order to communicate openly to the reader (Chenail, 1994).

Additionally, given there was a considerable degree of reduction in the raw data—nine communiqué documents—to the themes that were quantitized, it was important to maintain credibility by grounding the data along each stage of presenting the data throughout the qualitative procedures from data generation, data collection, quantitization, and analysis.

Chapter Three, which covers the results of this research study, will mirror the structure of procedures contained in Chapter Two, where the methods are presented. By doing this, the data are laid out in a simple and concise fashion that enables the reader to follow an established pattern in the narrative and easily form comparisons across sections of the research study, which in turn enables a coherent process.

Quantitative Procedures

Testing for reliability of rating of themes. Intercoder reliability is the degree to which two or more coders agree or vary in their coding of a message or artifact when applying the same coding schema.

The intercoder reliability coefficients do not assess internal consistency among a variety of measures. Rather, they are concerned with the assessment, one measure at a time, of one or more of the following criteria: agreement, agreement beyond chance, and covariation. (Neuendorf, 2002, p. 148).

The goal of assessing these three levels of agreement across coders is to

understand how much coders align in the value each one assigns to each variable, in the

case of categorical variables with multiple ratings, as in this research study. In order to

assess the level of agreement among the scoring from both coders, the percent agreement calculation was used:

Reliability = Number of agreements / (Total number of measures)

Two coders contributed to content analysis: 1) the researcher, and 2) another doctoral student in the same department as the researcher who had a similar background in qualitative and mixed methods analysis with experience and interest in content analysis.

The researcher maintained a log of conversations and decisions made based on communications with the second coder in order to maintain a record of the chronological elements of the pilot study. A small portion of the data was first assessed using a scale of three categories: *1: approximately 5 words; 2: sentence; 3: full paragraph*. Results were used in a revision of the coding instructions by reordering the categorical scale of measurement from three categories to four categories, with an aim to improve the refinement of the coding that was conducted.

Cluster analysis. Cluster analysis was used in order to establish a means for comparing themes with actor involvement to address the research question. Cluster analysis was applicable in that it produced a discernable level of influence through the identification of differentiated groupings of emphasis among themes and subthemes across the nine summits. Clusters were formed based on the rated level of thematic prevalence within each communiqué. The goal of the cluster analysis was to maximize homogeneity within cluster groups and maximize heterogeneity between cluster groups. The first step taken in the cluster analysis was to select the variables that would be used as a way to differentiate between the themes of each ministerial summit on the basis of their adherence to and focus on the 79 themes and subthemes. The goal of the procedure was to produce clusters of themes that could be reliably differentiated from one another across summits. For the analysis, the cluster groups were limited to a range of two to eight clusters, given that the list of themes is quite large and cluster solutions larger than eight could prove difficult to analyze. Small groups of clusters are generally desired in cluster analysis in order to allow for feasible interpretation. With each cluster added, the groups can become increasingly homogenous. As such, while the smallest cluster solution may be the easiest to interpret, more precision is gained in describing the cluster group membership if the clusters are a bit larger. Cluster memberships were defined for the two-, three-, four-, five-, six-, seven-, and eight-cluster solutions.

Selecting a cluster solution. Following the hierarchical clustering method, cluster solutions were examined to interpret the clusters discovered based on a conceptual rationale and to determine what number of clusters would be used in subsequent analysis, given that the mere presence of cluster solutions does not implicate true clustering, since there is subjective thought and discernment involved in determining which cluster solutions represent truly rational clusters. Where there were instances of clusters that were shared by all ministerial summits, clusters were omitted from the selection of a solution in order to reduce any over-determination of the research structure (Macia, 2015).

Repeated measures ANOVAs were used to test for pre- and post-epistemic community influence. Following the cluster analysis, a repeated measures ANOVA was

performed on the number of clusters selected based on the final cluster solution in order to test for differences in average scores of thematic prevalence for each summit, based on the participation of epistemic community groups. From Chapter One, we know that epistemic community members entered the Bologna Process at three distinct points in time as represented through the communiqué documents: Prague, Berlin, and Bergen. In order to measure the effects of these groups on the prevalence of themes and subthemes within the communiqué documents, a repeated measures ANOVA was performed. Repeated measures ANOVA allows for the measurement of change in mean scores across points of analysis based on participants taking part in all of an experiment's conditions. For this study, the means of the prevalence scores for the biannual summits were compared across ministerial summits while examining the level of variance as influenced by epistemic communities. However, repeated measures ANOVA relies for power on a sufficiently large sample size; in this case, each cluster represented a case thus severely limiting the sample size and, in turn, statistical power. Thus, in addition to the repeated measures ANOVA, which is sensitive to the averages of thematic prevalence but lack adequate power, a single-subject graphical analysis was also performed in order to visually examine effects of the epistemic communities for each individual cluster. The repeated measures ANOVA was conducted using IBM SPSS.

CHAPTER THREE: ANALYSIS AND FINDINGS

The purpose of this study was to examine communiqué documents collected in the first 10 years of the Bologna Process by assessing actor influence over the implementation, reconciliation, and legitimization of this education policy given that it affects nation states—individual countries—some within the European Union and some outside the European Union. As such, the process is influenced by different governance systems, institutional structures, and international forces. Actor involvement is key in the diffusion of this policy, and this study sought to examine the role of a particular actor group—the epistemic community—that is instrumental in decision-making in European policy that is described as soft law and which is defined by the Open Method of Coordination. The research question was: As one of the mechanisms driving policy coordination in Europe, is there a quantifiable level of influence triggered by epistemic communities in the implementation of the Bologna Process? The study was completed in order to examine the topic from a new methodological lens-mixed methods inquiry-in order to validate qualitative findings and open the potential for new discovery based on this method.

In this chapter are results of the qualitative analysis of the data, results of the intercoder reliability appraisal, and results of the quantitative analysis results from the cluster analysis and repeated measures ANOVA results.

Qualitative Analysis Findings

Identifying themes and subthemes. The qualitative analysis used to examine the communiqué documents was content analysis. The total pilot subsample of text consisted of five pages, all within the Bucharest communiqué, representing 10 percent of the total data set, which contains 48 pages. The second coder, a fellow PhD candidate in the University of Denver Department of Research Methods and Information Science, assisted the researcher with coding. Both researchers coded the first two pages of the Bucharest communiqué based on a scale of three categories: 1: approximately 5 words; 2: sentence; 3: full paragraph. Upon discussing preferences in approach and applicability to the particular study, as well as clarification of the subject matter, the scale was altered to four points ranging from zero to three. Both coders then took the next procedural step to code a second subsample of text consisting of two pages of within the Bucharest communiqué. At that point, intercoder reliability was reached between the two coders and the researcher alone continued to code the remainder of the data set. The samples were again coded based on themes derived from several iterations of thematic selection and testing, first between the researcher and the department faculty expert in content analysis. Themes were consistently aligned with aspects of the action lines and represented a continuous thread of development throughout all of Bologna's biannual meetings.

One important goal in this process was to keep the test sample small so that coders could examine manageable portions of the data and understand the results quickly yet substantially enough to represent potential for variation in the level of intercoder agreement. Another decision from the coder discussion was to code the "children" of each topic but not code the "parent"—a process that would potentially lead to double counting. The decision was also made to code themes and subthemes simultaneously per Saldaña (2015), an authority on the topic of coding.

The subsequent independent coding of the full data set involved themes being scored on the zero-to-four rating scale and all scores based on this scale being reviewed to understand the relationships among variables that correspond to known changes in the discourse contained in the communiqué goals and objectives. The most common search terms were first located using a manual search of the terms and related variables, meaning that the physically printed communiqué documents were searched page by page for themes. Upon completing this precursory search, themes were then searched by searching the electronic copies of the documents to confirm findings from the manual evaluation. As an example, there were themes that, based on a contextual understanding of the text, the mode of writing and communication styles among Europeans and more broadly, by humans, would not be detected by pointed searches on the computer. As an example, in searches for faculty—e.g., *faculty credentials* or *mobility among faculty*, the search terms of *faculty*, *teacher*, and *credentials* were applied as keywords to locate a broader range of any reference to these themes when searching the electronic documentation to confirm code counts.

Care was also taken when using the electronic search methods for word count to include not only the U.S. system of spelling but also the British system of spelling, which is what is used throughout the communiqué documents. Among examples of this are terms like *labour, globalisation, organisation, programmes, internationalisation,* and *realising*.

Next, themes and subthemes were assigned a prevalence score based on the total number of words representing each theme and subtheme within communiqués for each ministerial summit per a four-point rating scale of: 1) *never: 0 words*, 2) *rarely: 1 to 2 words*, 3) *occasionally/sometimes: 3 to 4 words*, and 4) *frequently: 5 or more words*. Following this exercise, the coding frequencies were converted to a total communiqué prevalence score for each of the ministerial summits. Themes and subthemes that did not relate directly to a category within the Coding Form were not captured and were not utilized for the analysis.

Findings from the rating of themes and subthemes. Across the summits, *mobility, recognize social dimension of HE, adoption cycles, quality assurance, lifelong learning*, and *follow-up steps* were the most prevalently scored themes and subthemes from the coding of the data.

Referring to the six original action lines, the theme of *mobility* refers to the freedom for faculty, students, researchers as well as administrative staff from universities to travel to other Bologna member states in order to enrich the learning process and leverage the opportunity for *"lifelong learning"* in the case of researchers and staff members, a criteria important for economic growth not only in Europe but worldwide.

Mobility represents the fourth action line, which aims to promote mobility and overcome any obstacles that may prohibit free movement across borders.

Another continuously prevalent theme was that of the *social dimension*, which is a theme that supports the sixth action line to "Promote the necessary European dimensions in higher education" given that the implementation of the Bologna Process supports the initial goal of establishing a European Higher Education Area and harmonizing education in Europe—a goal which aligns with the overall goal of Europeanization.

Adoption cycles as another of the most prevalent themes and subthemes is a representation of the second action line. It refers to the criteria for bachelor's and master's/doctoral degree programs. The aim here is to align these processes more to the time frames required at higher education institutions in the United States, in order to increase graduation rates for master's and especially doctoral students.

Quality assurance is a component of the fifth action line, which aims for cooperation in quality assurance in education at the European level, as well as *Lifelong learning*, which represents the third action line concerned with the establishment of a system of credits.

Most revealing is that the prevalence of the theme *follow-up steps* was also consistent. As compared to the others in this result, however, follow-up steps was not stated as a component of the original six action lines. Follow-up steps was rather the process at each ministerial summit that incorporated the consultation and participation of epistemic group members. The Bologna Follow-Up Group (BFUG) prepares the next ministerial summit, adopts the Bologna Process work plan, elects the BFUG Board, creates official working groups, adopts the terms of reference for the working groups and the Secretariat, organizes Bologna seminars, [and] discusses major initiatives, (Lažetić, 2010, p. 551)

to name a few of their responsibilities and duties. BFUG was responsible for crafting the follow-up steps and seeing to their implementation monitoring and measurement and met at least twice each year.

Per Lažetić (2010), the "key to understand Bologna as a higher education policy process should be to understand the interactions between policy actors in the multi-level policy arena," and that one of these arenas is the Bologna Follow-Up Group, "which brings together more than 50 representatives of national governments and European higher education stakeholder organisations and is created and legitimized by the signatory States as the main political forum of the policy process" (p. 550). The Bologna Follow-Up Group was not a part of the initial Bologna initiative that involved education ministers and minimal influence from the European Commission. As Bologna evolved, the BFUG came together to drive decision-making, and through the BFUG, epistemic community groups found their entrance into the process. So in greater detail, who are the education stakeholders and national governments that make up the Bologna Follow-Up Group?

Based on interviews with Bologna Follow-Up Group representatives—interviews whose data supported his 2010 article—Lažetić goes on to further identify the actors as "members of signatory countries the European Commission and consultative members which includes the EUA, EURASHE, ESU, ENQA, Council of Europe, UNESCO-CEPES, Education International and Business Europe" (Lažetić, p. 551). The identification of prevalence among the theme of follow-up steps, therefore, is key to this study, in that it legitimizes the hypothesis that epistemic community members did join the process and carried a high level of influence over the decisions that were made in the process. It is distinguishable given that it is the only prevalent theme that does not define the action lines of Bologna.

Findings from testing for reliability of rating of themes. Reliability was measured as the number of agreements divided by the total number of measures. From the pilot sample, the result is as follows:

Reliability = 162/183 = .89

Results from the clustering of themes. The first step of the hierarchical cluster analysis using Ward's (1963) method produced an agglomeration schedule and dendrogram that showed no suggestion of a clear breaking point between cluster solutions. In order to choose the best number of cluster solutions to analyze, one way between-groups analysis of variance (ANOVA) was then conducted on two-, three-, four-, five-, six-, seven-, and eight-cluster solutions. Among the clusters for each summit's thematic content, statistical significance was detected in all mean scores between all groups for the five-, six-, and seven-cluster solutions. Statistical significance was detected in the mean scores between all but Bucharest for the two- and three-cluster solutions and for all but Prague for the four-cluster solution. Output revealed from the ANOVA procedure in the cluster analysis showed which clusters were significantly different from one another:

Table 4

ANOVA Table from Two-Cluster Soli	uti	on
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	Cluster		Error		F	Sig.
	Mean	df	Mean	df		
	Square		Square			
Bologna	17 590	1	837	77	21 136	< 001
Rating	17.370		.052		21.150	<.001
Prague	15 213	1	1 01/	77	7 9/18	006
Rating	15.215		1.714		7.740	.000
Berlin	43 071	1	1 3/2	77	32 103	< 001
Rating	+3.071		1.542		52.105	<.001
Bergen	72 034	1	334	77	215 716	< 001
Rating	72.034		.554		213.710	<.001
London	88 881	1	115	77	771 949	< 001
Rating	00.001		.115		//1./4/	<.001
Leuven	37 776	1	1 325	77	28 512	< 001
Rating	57.770		1.525		20.312	<.001
Budapest	14.060	1	505	77	27 8/17	< 001
Rating	14.000		.505		21.041	<.001
Bucharest	5 062	1	1 703	77	2 072	080
Rating	5.002		1.705		2.912	.089

From the above ANOVA table (Table 4), the two clusters are most significantly different from one another between the Bergen and London summits.

Table 5

_	Cluster		Error	Error		
	Mean	df	Mean	df		
_	Square		Square			
Bologna	10 510	2	709	76	12 170	< 001
Rating	10.510		.798		15.170	<.001
Prague Rating	71.305	2	.263	76	270.983	<.001
Berlin Rating	26.153	2	1.238	76	21.129	<.001
Bergen Rating	36.210	2	.333	76	108.657	<.001
London Rating	44.534	2	.114	76	389.994	<.001
Leuven Rating	18.900	2	1.342	76	14.082	<.001
Budapest	7 200	2	505	76	14 444	< 001
Rating	7.290		.505		14.444	<.001
Bucharest	2762	2	1 710	76	1 607	207
Rating	2.762		1./19		1.607	.207

ANOVA Table from Three-Cluster Solution

From the above ANOVA table (Table 5), the three clusters are most significantly different from one another between the Prague, Bergen, and London summits.
Table 6

	Cluster		Error	Error		Sig.
	Mean	df	Mean	df		
	Square		Square			
Bologna Rating	9.135	3	.724	75	12.626	<.001
Prague Rating	7.791	3	1.856	75	4.197	.008
Berlin Rating	11.430	3	1.495	75	7.648	<.001
Bergen Rating	29.698	3	.115	75	257.38 0	<.001
London Rating	24.794	3	.312	75	79.585	<.001
Leuven Rating	19.453	3	1.086	75	17.915	<.001
Budapest Rating	7.890	3	.390	75	20.221	<.001
Bucharest Rating	30.257	3	.605	75	49.976	<.001

ANOVA Table from Four-Cluster Solution

From the above ANOVA table (Table 6), the four clusters are most significantly different from one another between the Bergen, London, Budapest, and Bucharest summits.

Table 7

ANOVA Table from Five-Cluster Solution

	Cluster		Error		F	Sig.
_	Mean	df	Mean	df		
	Square		Square			
Bologna Rating	7.088	4	.721	74	9.838	<.001
Prague Rating	11.000	4	1.603	74	6.863	<.001
Berlin Rating	28.316	4	.447	74	63.279	<.001
Bergen Rating	22.360	4	.112	74	199.168	<.001
London Rating	18.942	4	.297	74	63.768	<.001
Leuven Rating	18.108	4	.910	74	19.892	<.001
Budapest Rating	6.133	4	.384	74	15.978	<.001
Bucharest Rating	13.544	4	1.108	74	12.222	<.001

By interpreting the ANOVA tables from the solutions based on five, six, seven, and eight clusters (See Tables 7 through 10), the most significant differences across summits seem more difficult to interpret.

Table 8

ANOVA Table from Six-Cluster Solution

	Cluster		Error	Error		Sig.
	Mean	df	Mean	df		
_	Square		Square			
Bologna Rating	6.684	5	.661	73	10.113	<.001
Prague Rating	28.327	5	.287	73	98.592	<.001
Berlin Rating	8.746	5	1.406	73	6.220	<.001
Bergen Rating	17.949	5	.110	73	163.788	<.001
London Rating	16.039	5	.240	73	66.716	<.001
Leuven Rating	22.957	5	.343	73	66.996	<.001
Budapest	4 921	5	205	73	12 205	< 001
Rating	4.021		.393		12.203	<.001
Bucharest	6716	5	1 405	73	1 770	001
Rating	0.710		1.403		4.779	.001

Table 9

ANOVA Table from Seven-Cluster Solution

	Cluster		Error		F	Sig.
	Mean	df	Mean	df		
	Square		Square			
Bologna Rating	8.125	6	.457	72	17.770	<.001
Prague Rating	20.914	6	.516	72	40.566	<.001
Berlin Rating	14.215	6	.848	72	16.755	<.001
Bergen Rating	13.333	6	.247	72	54.082	<.001
London Rating	15.166	6	.094	72	161.772	<.001
Leuven Rating	9.615	6	1.140	72	8.432	<.001
Budapest	5 704	6	260	72	21 044	< 001
Rating	5.704		.200		21.944	<.001
Bucharest	7 345	6	1 279	72	5 742	< 001
Rating	7.545		1.279		5.742	<.001

Table 10

ANOVA Table from Eight-Cluster Solution

	Cluster		Error		F	Sig.
	Mean	df	Mean	df		
	Square		Square			
Bologna Rating	9.688	7	.195	71	49.650	<.001
Prague Rating	20.784	7	.241	71	86.203	<.001
Berlin Rating	6.826	7	1.389	71	4.915	<.001
Bergen Rating	12.770	7	.118	71	108.490	<.001
London Rating	11.778	7	.215	71	54.657	<.001
Leuven Rating	10.164	7	.967	71	10.511	<.001
Budapest	2714	7	170	71	5 670	< 001
Rating	2./14		.478		5.078	<.001
Bucharest	11 007	7	150	71	22 066	< 001
Rating	14.887		.450		33.000	<.001

Results from the selection of a cluster solution. In interpreting results from the cluster analysis, it seemed that with the four-cluster solution, underlying clusters emerged and remained consistent throughout this group of solutions. The cluster solution that was decided upon was the four-cluster solution for three reasons: 1) the results appeared more interpretable than the other solutions; 2) after examining the themes and subthemes that formed each cluster, the four-cluster solution carried the strongest theoretical rationale; and 3) the number of clusters in each group within the four-cluster solution seemed to contribute to the most manageable interpretation:

Table 11

Number of Cases in Each Cluster

Cluster	1	4.000
	2	8.000
	3	41.000
	4	26.000
Valid		79.000

Of the 79 themes and subthemes, Cluster Group One, Defining Bologna, contained four themes; Cluster Group Two, Major Action Lines, contained eight; Cluster Group Three, Faculty & Follow-Up Group, contained 41; and Cluster Group Four, Economic & Social Growth, contained 26. After examining the actual themes clustered in each group, the decision was made to drop certain cases from clusters—cases that appeared to be outliers and not homogeneous with the rest of the themes within that cluster.

Cluster One, Defining Bologna, contained four cases: *adoption of a system*, *characteristics of system*, *graduate degree cycles*, and *support for the mobility of*

researchers. Cluster Two, Major Action Lines, contained eight cases: recognize social dimension of higher education, adoption cycles (broadly), uniform quality assurance system, mobility (broadly), support for mobility of students, quality assurance, lifelong learning, and follow-up steps. Cluster Three, Faculty & Follow-Up Group, contained 41 cases, and Cluster Four, Economic & Social Growth, contained 26 cases. The full list of all cases associated with each cluster is provided in Appendix D.

Another researcher may have chosen a different cluster solution or simply selected the original three-cluster solution for the analysis. To determine which choice would be the best choice with clustering solutions is tricky in that there are lines of vagueness in terms of the heterogeneity of the cluster groups of themes and the consideration of where those lines truly can and should be drawn; however, given this analysis is exploratory in nature, the researcher is left to make a somewhat subjective choice.

Results of repeated measures ANOVA for pre- and post-epistemic

community influence. The main effect of epistemic communities was not statistically significant, indicating that there were no differences in means across clusters by summit, or stated differently, that the entrance of epistemic communities to the process resulted in no statistically significant difference in cluster mean rating, F(7,21) = 1.17, p = .36.

Results of single-subject graphical analysis. What follows are means plots for the four clusters indicating the change in means across ministerial summits. By using the percentage of non-overlapping data (PND) calculations and the percentage of all nonoverlapping data (PAND) calculations to identify any effects from the single-subject design, no significant effect was identified, corresponding to the result of the repeated measures ANOVA.

Changes in mean prevalence scores after the summit in Prague. Among the four means plots below, drop lines were labeled at the points along the x-axis where epistemic groups joined the Bologna Process. From the graphs, among Clusters One, Two, and Four, there was a spike in average prevalence scores after the summit at Prague where the European Commission (EC), European University Association (EUA), the European Association of Institutions in Higher Education (EURASHE), the National Unions of Students in Europe (ESIB), and the Council of Europe (CoE) joined the process as consultative members.

Changes in mean prevalence scores after the summit in Berlin. From the four graphs, there was a spike in prevalence scores after the summit in Berlin where UNESCO/CEPES joined as a consultative member. Among the graphs representing Clusters Two and Four, there was a decrease in prevalence scores, whereas in the graph representing Cluster Three, there was no change in scores.

Changes in mean prevalence scores after the summit in Bergen. The themes and subthemes within Cluster One, Defining Bologna, totaled the fewest cases of the four clusters. They were *adoption of a system, characteristics of system, graduate level degree cycles, and researcher mobility. Follow-up steps* and any reference to the output of epistemic group members is not contained in Defining Bologna. Given this, representation by Education International (EI), the European Association for Quality Assurance in Higher Education (ENQA), and the Union of Industrial and Employers' Confederations of Europe (UNICE) as consultative members does show an overall increase in mean scores with the exception of scores following the summit in Bergen. An increase in score prevalence following two of the three summits where epistemic community groups entered the process is a strong finding and suggests that these groups do have impact over the decision-making process.



Figure 2. Cluster One, Defining Bologna—Mean scores of themes.

There were eight cases in Cluster Two, Major Action Lines. Included in these cases is the prevalence of *follow-up steps*. Interpreting the means plot in Figure 2 below shows a similar pattern of an increase in mean prevalence scores following the initial involvement of epistemic community groups as was found in Defining Bologna, with the difference of a decrease in mean prevalence scores after the Berlin summit and no change following the Bergen summit.



Figure 2. Cluster Two, Major Action Lines—Mean scores of themes.

The third cluster in this four-cluster solution, Faculty & Follow-Up Group, contained 41 cases. What stands out from this cluster solution is the grouping of themes related to the follow-up steps to include: *accept new members, shepherd preparatory members, consult HE organizations, specific progress areas, review the issues.* Interestingly, despite representation of the Bologna Follow-Up Group's chief initiatives being grouped in this cluster, results of mean prevalence scores for themes remains unchanged following each point in time marking the introduction of epistemic community group members to the discussion and discourse leading to Bologna's implementation.



Figure 3. Cluster Three, Faculty & Follow-Up Group—Mean scores of themes.

Finally, the fourth cluster in the four-cluster solution, Economic & Social Growth, contained 26 cases, and two of the three points of epistemic community actor group involvement showed increases in mean prevalence scores of themes and subthemes.



Figure 4. Cluster Four, Economic and Social Growth-Mean scores of themes.

When examining the mean prevalence scores of the themes and subthemes represented in the four-cluster solution, there was indeed a marked shift (increase) in prevalence scores 75 percent of the time and only at the initial introduction of these groups to the process. The exception is with Cluster Three where there was no increase in mean scores following the Prague meeting. What this suggests is that perhaps there is a case of diminishing returns on the impact of epistemic group membership or that the effect occurred only once either due to the political strength and voice of the particular groups that entered the Process during the Prague summit or possibly because the issues raised were acted upon. It is possible that at Prague the level of influence was greater than at Berlin or Bergen, causing variance in levels of change in mean scores after the Berlin and Bergen summits. It can also be supposed that in a multi-level multi-actor policy such as Bologna (Kehm, 2009; Witte, 2006) variance among actor groups is less impactful than the mere presence of actor groups supporting this "shared approach to promoting modernization and innovation" (Haas, 1992, p. 4). Recall that in Chapter 1 the literature set out epistemic communities as sharing inter-subjective understandings; having a shared way of knowing; having shared patterns of reasoning; having policy projects draw on shared values, shared causal beliefs, and the used of shared discursive practices; and having a shared commitment to the application and production of knowledge (Haas) and that this particular type of actor involvement in European policy relies precisely on shared understanding, value systems, and ways of reasoning. Given this, the results of the variance in means of clustered groups of themes on the presence of epistemic communities should look as is demonstrated by the means plots presented above. The notable change following the first summit suggests that the influence of this actor group was indeed impactful based on visual analysis, though not on parametric statistical analysis.

Testing the hypothesis. The hypothesis of this research study was that there are statistically significant differences in the development of Bologna's key constructs (themes and subthemes) within the official conference documentation—the communiqués—based on the influence of epistemic communities. Support of the hypothesis lay less in the actuality of the findings than in the success of innovative applications of research methods and statistics to the topic. Findings explained a marked shift in thematic prevalence once epistemic community group members were introduced into the Bologna Process. Methodologically, the study sets forward a new path for applying particular methodologies to qualitative data and is an important first step in this direction. Quantitative tests and measurements show changes in prevalence mean scores

that corresponded to the inclusion of actor groups, although the particular significance tests that were conducted were unable to establish a strong effect of the actor group inclusion.

CHAPTER FOUR: DISCUSSION

This chapter presents a discussion of the answer to the research question and conclusions from the qualitative and quantitative analyses. The chapter concludes with recommendations for future research. The conclusions that follow, as well as answers to the research question, are based upon the rationalist methodology or theory that states "the criterion for truth is not sensory but intellectual and deductive" (Bourke, 1962, p. 263). In validating evidence relevant to the diffusion of policy in Europe, statistical information was generated. The exact type of statistical insight derived from this study positions this research as a whole as a cutting-edge 21st-century approach to understanding and applying methodology to data. Tantamount to revealing novel approaches in statistics and research methods, this study revealed, through this innovative research, new modes to understanding Mother Europe and its patterns of change in the 21st century.

This mixed method analysis explored decision-making in European policy through actor influence. The constructivist theoretical framework proposed that "actors' understanding of the world and the formulation of alternative actions are shaped by their belief systems, operational codes and cognitive maps" (Haas, 2016, p. 28), and the rationalist methodology proposed that knowledge that is consensual may indeed contribute to policy coordination, among other types of politics. Although the mixture of constructivist epistemology with rationalist methodology was helpful in guiding the study procedures, the convergence of the theoretical positions was trickier than the application of quantitization to merge the synthesis of qualitative and quantitative analyses. To what degree was this work tricky, and what does this mean in terms of the value of the work?

Applying content analysis, quantitization, repeated measures ANOVA, and single-subject testing does introduce a wholly unique and new perspective to understanding what mixed methods research design can produce for research; however, that is not all. The contextual focus of this research project is on European education and policymaking; however, the major contribution of this work to the community of research is indeed the application of research methods and statistics to the topic.

The data, firstly, was qualitative, and the consideration of applying repeated measures ANOVA to understanding differences between related mean scores for themes, instead of the typically used numeric data, is relatively unheard of in the community of research. This newness of thought introduces a vastly different approach to the standard applications of statistical models to types of measurement of data.

Secondly, the application of quantitative research methods to the topic of policy convergence in European policy is also relatively unheard of, as mentioned in Chapter One, where the literature reviewed cites articles that applied content analysis and discourse analysis, but never multivariate statistics. Again, the body of research will evolve given this new method of treatment of the specific context of data.

The critical value of this research is further evidenced through the inclusion of the single-subject design, which was used to further analyze behavior—here the behavior of

policy actors. Among the possible set of methods within single-subject design, two methods using non-regression-based approaches and that measure "level of overlap" were applied in this research project—PND and PAND. PND measured the percentage of nonoverlapping data between the baseline data and intervention scores, while PAND measured the percentage of the total score of non-overlapping intervention data points that are higher than the baseline score. Results from these yielded no substantial effect size whatsoever, suggesting that in future applications of these methods, two different methods should be applied, more than two methods should be applied, or a researcher should try all of the available methods in order to derive a positive effect size or a better understanding of the effect size through a comparison of results from all methods applied.

For all of these reasons, this work was indeed tricky. It serves as a pioneering approach to research design and statistical analysis and can be repeated and hopefully improved upon by future researchers.

Regarding the substantive results of the research, the literature review implied that consultative groups have indeed been influential over the shift in action lines—in objectives guiding the implementation of the Bologna Process—and have especially impacted follow-up agenda-setting and decision-making, which is revealed in the crafting of communiqué documents. The data, however—through the parsing of homogenous clusters of prevalent themes related to each ministerial summit—implied vagueness in thematic group formation in terms of the cases that loaded in each of the cluster solutions examined prior to choosing the four-cluster solution. Continuing the quantitative analysis with the three-cluster solution may have yielded three sets of homogenous themes and subthemes; however, it is doubtful. Given the larger number of themes and subthemes (79 total), the different numbers of themes for each main construct, and the fact that themes and subthemes were not discrete in nature, the trickiness may not be avoided using themes within the communiqués as the data.

The data further implied that mean scores of clustered themes did change following the treatment of the actors involved in the Prague ministerial summit, despite lack of support from parametric tests. Changes in mean scores of clustered themes were identified via single-subject analysis.

Regarding the interpretation of prevalence scores over time as displayed in the four cluster graphs in Chapter Four, it is important to recognize that a change in scores for clusters of themes and subthemes suggests, rather, that based on the presence of additional consultative group members, themes were deemed more or less central to the particular meeting's discussions, and, perhaps equally importantly, a decision was made to represent any such centrality of thematic content in the represented resulting meeting communiqué. Any deviation in thematic relevance within meetings could have been caused, however unexclusively, by a number of influences such as the treatment variable of actor group involvement in the meetings over time.

For subsequent leadership implementation and actions. By providing increased analysis of the implementation of the Bologna Process, education stakeholders draw value from the work; however, given the strength of the application of statistics and research methods, technical scholars and researchers should also find value in the work and findings. In terms of policy and academic leaders and researchers, the research

hopefully provides learnings on major reconstruction in higher education and considers the impact of massive changes implemented in this manner with the levels of support of the actors involved and within multi-levels of governance. Certainly the important aim of this policy decision has implications for global competitiveness.

Suggestions for future research. Performing cluster analysis with repeated measures ANOVA using single-subject graphical design is an interesting step for future researchers, one that can be further explored by the application of different tools or statistical models. Cluster analysis, in particular, proved to be a novel and valuable method that enabled an understanding of how quantitized themes and subthemes found in European education policy may be grouped. Repeated measures ANOVA, on the other hand, was less valuable for finding significant differences in prevalence scored based on the introduction of actor groups as the treatment variable, over time. Researchers may consider permutation testing and the graphical output from such tests for the examination of pre- and post-epistemic community influence on the prevalence of themes within Bologna. Permutation testing is a different type of nonparametric test that has potential to yield stronger results than the repeated measures ANOVA following the performance of a cluster analysis.

Beyond recommendations for the methodological approach and models applied to the study's data, future researchers may also consider comparing the prevalence of Bologna's themes among EU and non-EU countries or among different European universities within separate Bologna member states as such an approach may also yield interesting results. Given the influence of epistemic communities is prevalent within other sectors of European policy—"international political economy, international security, and the environment" (Haas, 1992, p. 5)—researchers may also apply the mixed methods approach to validating the influence of this group in sectors beyond European higher education. Researchers have also implemented the EAR instrument to examine the impact of epistemic communities—an instrument that applies data, methodology, theory, and triangulation to examine actor roles.

What these findings mean for the larger sphere of policymaking, education, internationalization, and global economic competition is a vast and multi-faceted topic. In the discussion that follows, certain of these topics will be discussed in terms of what they mean in these areas and how different stakeholders and other persons of interest can rationalize and hopefully apply the findings from this study.

Challenges that have faced education stakeholders in Europe and country nationals based on the difficulty of meeting Bologna's objectives raised questions as to how the Bologna Process was adopted, and has subsequently resulted in reactions that were not all positive. The fact that a single phenomenon occurred among 47 different states with different politics, different histories of education reform, and different education structures is fascinating, as are the varying political structures inside and outside the European Union. In this study, forces of influence were examined by looking at the influence of epistemic communities; however, equally important to wrapping one's head around this complex process is the consideration of different countries' approaches to implementation of the process as well as their processes of legitimization. Epistemic communities exist even beyond the European policymaking arena. In fact, a doctoral dissertation was completed at Kent State University in 2009 on the role of epistemic communities in the making of the No Child Left Behind Act, although it may be one of few research studies on epistemic communities in the United States and certainly so within U.S. education policy. Additionally, Adler (1992) has examined the role of the epistemic community within U.S. nuclear arms control, while Sauvé and Watts (2003) researched a group's role in the Treaty on Plant Genetic Resources for Food and Agriculture. There are others.

Several actors that played a role in epistemic communities engaged in the Bologna Process are also national representatives of their countries' education systems. This point raises yet another point of interest regarding theories that drive the conflicting nature of their state-centric interests, as well as interests aimed at supporting the European Union, or Europe, more broadly.

I invite more scholars to recognize the value of introducing quantitative research methods to the analysis of thematic data and the analysis of discourse within the Bologna Process. This massive undertaking to restructure Europe's education system has garnered a vast amount of attention in the literature. Continued research on the influence of actors like epistemic communities helps to clarify the specific details of Bologna's implementation and, based on that, to better understand the impressive relationship between actor groups, modes of coordination, and policy outcomes.

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APPENDIX A: COMMUNIQUÉ DOCUMENTS

Sorbonne Joint Declaration

Joint declaration on harmonisation of the architecture of the European higher education system

by the four Ministers in charge for France, Germany, Italy and the United Kingdom

Paris, the Sorbonne, May 25 1998

The European process has very recently moved some extremely important steps ahead. Relevant as they are, they should not make one forget that Europe is not only that of the Euro, of the banks and the economy: it must be a Europe of knowledge as well. We must strengthen and build upon the intellectual, cultural, social and technical dimensions of our continent. These have to a large extent been shaped by its universities, which continue to play a pivotal role for their development.

Universities were born in Europe, some three-quarters of a millenium ago. Our four countries boast some of the oldest, who are celebrating important anniversaries around now, as the University of Paris is doing today. In those times, students and academics would freely circulate and rapidly disseminate knowledge throughout the continent. Nowadays, too many of our students still graduate without having had the benefit of a study period outside of national boundaries.

We are heading for a period of major change in education and working conditions, to a diversification of courses of professional careers with education and training throughout life becoming a clear obligation. We owe our students, and our society at large, a higher education system in which they are given the best opportunities to seek and find their own area of excellence.

An open European area for higher learning carries a wealth of positive perspectives, of course respecting our diversities, but requires on the other hand continuous efforts to remove barriers and to develop a framework for teaching and learning, which would enhance mobility and an ever closer cooperation.

The international recognition and attractive potential of our systems are directly related to their external and internal readabilities. A system, in which two main
cycles, undergraduate and graduate, should be recognized for international comparison and equivalence, seems to emerge.

Much of the originality and flexibility in this system will be achieved through the use of credits (such as in the ECTS scheme) and semesters. This will allow for validation of these acquired credits for those who choose initial or continued education in different European universities and wish to be able to acquire degrees in due time throughout life. Indeed, students should be able to enter the academic world at any time in their professional life and from diverse backgrounds.

Undergraduates should have access to a diversity of programmes, including opportunities for multidisciplinary studies, development of a proficiency in languages and the ability to use new information technologies.

International recognition of the first cycle degree as an appropriate level of qualification is important for the success of this endeavour, in which we wish to make our higher education schemes clear to all.

In the graduate cycle there would be a choice between a shorter master's degree and a longer doctor's degree, with possibilities to transfer from one to the other. In both graduate degrees, appropriate emphasis would be placed on research and autonomous work.

At both undergraduate and graduate level, students would be encouraged to spend at least one semester in universities outside their own country. At the same time, more teaching and research staff should be working in European countries other than their own. The fast growing support of the European Union, for the mobility of students and teachers should be employed to the full.

Most countries, not only within Europe, have become fully conscious of the need to foster such evolution. The conferences of European rectors, University presidents, and groups of experts and academics in our respective countries have engaged in widespread thinking along these lines.

A convention, recognising higher education qualifications in the academic field within Europe, was agreed on last year in Lisbon. The convention set a number of basic requirements and acknowledged that individual countries could engage in an even more constructive scheme. Standing by these conclusions, one can build on them and go further. There is already much common ground for the mutual recognition of higher education degrees for professional purposes through the respective directives of the European Union.

Our governments, nevertheless, continue to have a significant role to play to these ends, by encouraging ways in which acquired knowledge can be validated and respective degrees can be better recognised. We expect this to promote further inter-university agreements. Progressive harmonisation of the overall framework of our degrees and cycles can be achieved through strengthening of already existing experience, joint diplomas, pilot initiatives, and dialogue with all concerned.

We hereby commit ourselves to encouraging a common frame of reference, aimed at improving external recognition and facilitating student mobility as well as employability. The anniversary of the University of Paris, today here in the Sorbonne, offers us a solemn opportunity to engage in the endeavour to create a European area of higher education, where national identities and common interests can interact and strengthen each other for the benefit of Europe, of its students, and more generally of its citizens. We call on other Member States of the Union and other European countries to join us in this objective and on all European Universities to consolidate Europe's standing in the world through continuously improved and updated education for its citizens.

Claude ALLEGRE

Minister for National Education, Research and Technology (France)

Minister for Public Instruction, University and

Research (Italy)

BERLINGUER

Luigi

Tessa BLACKSTONE

Minister for Higher Education (United Kingdom)

Jürgen RÜTTGERS

Minister for Education, Sciences, Research and Technology (Germany)

The Bologna Declaration of 19 June 1999

Joint declaration of the European Ministers of Education

The European process, thanks to the extraordinary achievements of the last few years, has become an increasingly concrete and relevant reality for the Union and its citizens. Enlargement prospects together with deepening relations with other European countries, provide even wider dimensions to that reality. Meanwhile, we are witnessing a growing awareness in large parts of the political and academic world and in public opinion of the need to establish a more complete and far-reaching Europe, in particular building upon and strengthening its intellectual, cultural, social and scientific and technological dimensions.

A Europe of Knowledge is now widely recognised as an irreplaceable factor for social and human growth and as an indispensable component to consolidate and enrich the European citizenship, capable of giving its citizens the necessary competences to face the challenges of the new millennium, together with an awareness of shared values and belonging to a common social and cultural space.

The importance of education and educational co-operation in the development and strengthening of stable, peaceful and democratic societies is universally acknowledged as paramount, the more so in view of the situation in South East Europe.

The Sorbonne declaration of 25th of May 1998, which was underpinned by these considerations, stressed the Universities' central role in developing European cultural dimensions. It emphasised the creation of the European area of higher education as a key way to promote citizens' mobility and employability and the

THE EUROPEAN HIGHER EDUCATION AREA

Continent's overall development.

Several European countries have accepted the invitation to commit themselves to achieving the objectives set out in the declaration, by signing it or expressing their agreement in principle. The direction taken by several higher education reforms launched in the meantime in Europe has proved many Governments' determination to act.

European higher education institutions, for their part, have accepted the challenge and taken up a main role in constructing the European area of higher education, also in the wake of the fundamental principles laid down in the Bologna Magna Charta Universitatum of 1988. This is of the highest importance, given that Universities' independence and autonomy ensure that higher education and research systems continuously adapt to changing needs, society's demands and advances in scientific knowledge.

The course has been set in the right direction and with meaningful purpose. The achievement of greater compatibility and comparability of the systems of higher education nevertheless requires continual momentum in order to be fully accomplished. We need to support it through promoting concrete measures to achieve tangible forward steps. The 18th June meeting saw participation by authoritative experts and scholars from all our countries and provides us with very useful suggestions on the initiatives to be taken.

We must in particular look at the objective of increasing the international competitiveness of the European system of higher education. The vitality and efficiency of any civilisation can be measured by the appeal that its culture has for other countries. We need to ensure that the European higher education system acquires a world-wide degree of attraction equal to our extraordinary

cultural and scientific traditions.

While affirming our support to the general principles laid down in the Sorbonne declaration, we engage in co-ordinating our policies to reach in the short term, and in any case within the first decade of the third millennium, the following objectives, which we consider to be of primary relevance in order to establish the European area of higher education and to promote the European system of higher education world-wide:

Adoption of a system of **easily readable and comparable degrees**, also through the implementation of the Diploma Supplement, in order to promote European citizens employability and the international competitiveness of the European higher education system

Adoption of a system essentially based on **two main cycles**, undergraduate and graduate. Access to the second cycle shall require successful completion of first cycle studies, lasting a minimum of three years. The degree awarded after the first cycle shall also be relevant to the European labour market as an appropriate level of qualification. The second cycle should lead to the master and/or doctorate degree as in many European countries.

Establishment of a **system of credits** - such as in the ECTS system - as a proper means of promoting the most widespread student mobility. Credits could also be acquired in non-higher education contexts, including lifelong learning, provided they are recognised by receiving Universities concerned.

Promotion of **mobility** by overcoming obstacles to the effective exercise of free movement with particular attention to:

 for students, access to study and training opportunities and to related services • for teachers, researchers and administrative staff, recognition and valorisation of periods spent in a European context researching, teaching and training, without prejudicing their statutory rights.

Promotion of **European co-operation in quality assurance** with a view to developing comparable criteria and methodologies.

Promotion of the **necessary European dimensions in higher education**, particularly with regards to curricular development, interinstitutional co-operation, mobility schemes and integrated programmes of study, training and research.

We hereby undertake to attain these objectives - within the framework of our institutional competences and taking full respect of the diversity of cultures, languages, national education systems and of University autonomy - to consolidate the European area of higher education. To that end, we will pursue the ways of intergovernmental co-operation, together with those of non governmental European organisations with competence on higher education. We expect Universities again to respond promptly and positively and to contribute actively to the success of our endeavour.

Convinced that the establishment of the European area of higher education requires constant support, supervision and adaptation to the continuously evolving needs, we decide to meet again within two years in order to assess the progress achieved and the new steps to be taken.

Signatories:

THE EUROPEAN HIGHER EDUCATION AREA

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Ministry of the Elemish Community	Ministry for Higher Education and Research
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State Secretary for Education and Science	Secretary of State of Education, Universities,
(Sweden)	Research and Development
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TOWARDS THE EUROPEAN HIGHER EDUCATION AREA Communiqué of the meeting of European Ministers in charge of Higher Education in Prague on May 19th 2001

Two years after signing the Bologna Declaration and three years after the Sorbonne Declaration, European Ministers in charge of higher education, representing 32 signatories, met in Prague in order to review the progress achieved and to set directions and priorities for the coming years of the process. Ministers reaffirmed their commitment to the objective of establishing the European Higher Education Area by 2010. The choice of Prague to hold this meeting is a symbol of their will to involve the whole of Europe in the process in the light of enlargement of the European Union.

Ministers welcomed and reviewed the report "Furthering the Bologna Process" commissioned by the follow-up group and found that the goals laid down in the Bologna Declaration have been widely accepted and used as a base for the development of higher education by most signatories as well as by universities and other higher education institutions. Ministers reaffirmed that efforts to promote mobility must be continued to enable students, teachers, researchers and administrative staff to benefit from the richness of the European Higher Education Area including its democratic values, diversity of cultures and languages and the diversity of the higher education systems.

Ministers took note of the Convention of European higher education institutions held in Salamanca on 29-30 March and the recommendations of the Convention of European Students, held in Göteborg on 24-25 March, and appreciated the active involvement of the European University Association (EUA) and the National Unions of Students in Europe (ESIB) in the Bologna process. They further noted and appreciated the many other initiatives to take the process further. Ministers also took note of the constructive assistance of the European Commission.

Ministers observed that the activities recommended in the Declaration concerning degree structure have been intensely and widely dealt with in most countries. They especially appreciated how the work on quality assurance is moving forward. Ministers recognized the need to cooperate to address the challenges brought about by transnational education. They also recognized the need for a lifelong learning perspective on education.

FURTHER ACTIONS FOLLOWING THE SIX OBJECTIVES OF THE BOLOGNA PROCESS

As the Bologna Declaration sets out, Ministers asserted that building the European Higher Education Area is a condition for enhancing the attractiveness and competitiveness of higher education institutions in Europe. They supported the idea that higher education should be considered a public good and is and will remain a public responsibility (regulations etc.), and that students are full members of the higher education community. From this point of view Ministers commented on the further process as follows:

Adoption of a system of easily readable and comparable degrees

Ministers strongly encouraged universities and other higher education institutions to take full advantage of existing national legislation and European tools aimed at facilitating academic and professional recognition of course units, degrees and other awards, so that citizens can effectively use their qualifications, competencies and skills throughout the European Higher Education Area.

Ministers called upon existing organisations and networks such as NARIC and ENIC to promote, at institutional, national and European level, simple, efficient and fair recognition reflecting the underlying diversity of qualifications.

Adoption of a system essentially based on two main cycles

Ministers noted with satisfaction that the objective of a degree structure based on two main

cycles, articulating higher education in undergraduate and graduate studies, has been tackled and discussed. Some countries have already adopted this structure and several others are considering it with great interest. It is important to note that in many countries bachelor's and master's degrees, or comparable two cycle degrees, can be obtained at universities as well as at other higher education institutions. Programmes leading to a degree may, and indeed should, have different orientations and various profiles in order to accommodate a diversity of individual, academic and labour market needs as concluded at the Helsinki seminar on bachelor level degrees (February 2001).

Establishment of a system of credits

Ministers emphasized that for greater flexibility in learning and qualification processes the adoption of common cornerstones of qualifications, supported by a credit system such as the ECTS or one that is ECTS-compatible, providing both transferability and accumulation functions, is necessary. Together with mutually recognized quality assurance systems such arrangements will facilitate students' access to the European labour market and enhance the compatibility, attractiveness and competitiveness of European higher education. The generalized use of such a credit system and of the Diploma Supplement will foster progress in this direction.

Promotion of mobility

Ministers reaffirmed that the objective of improving the mobility of students, teachers, researchers and administrative staff as set out in the Bologna Declaration is of the utmost importance. Therefore, they confirmed their commitment to pursue the removal of all obstacles to the free movement of students, teachers, researchers and administrative staff and emphasized the social dimension of mobility. They took note of the possibilities for mobility offered by the European Community programmes and the progress achieved in this field, e.g. in launching the Mobility Action Plan endorsed by the European Council in Nice in 2000.

Promotion of European cooperation in quality assurance

Ministers recognized the vital role that quality assurance systems play in ensuring high quality standards and in facilitating the comparability of qualifications throughout Europe. They also encouraged closer cooperation between recognition and quality assurance networks. They emphasized the necessity of close European cooperation and mutual trust in and acceptance of national quality assurance systems. Further they encouraged universities and other higher education institutions to disseminate examples of best practice and to design scenarios for mutual acceptance of evaluation and accreditation/certification mechanisms. Ministers called upon the universities and other higher educations institutions, national agencies and the European Network of Quality Assurance in Higher Education (ENQA), in cooperation with corresponding bodies from countries which are not members of ENQA, to collaborate in establishing a common framework of reference and to disseminate best practice.

Promotion of the European dimensions in higher education

In order to further strengthen the important European dimensions of higher education and graduate employability Ministers called upon the higher education sector to increase the development of modules, courses and curricula at all levels with "European" content, orientation or organisation. This concerns particularly modules, courses and degree curricula offered in partnership by institutions from different countries and leading to a recognized joint degree.

FURTHERMORE MINISTERS EMPHASIZED THE FOLLOWING POINTS:

Lifelong learning

Lifelong learning is an essential element of the European Higher Education Area. In the future Europe, built upon a knowledge-based society and economy, lifelong learning strategies are necessary to face the challenges of competitiveness and the use of new technologies and to improve social cohesion, equal opportunities and the quality of life.

Higher education institutions and students

Ministers stressed that the involvement of universities and other higher education institutions and of students as competent, active and constructive partners in the establishment and shaping of a European Higher Education Area is needed and welcomed. The institutions have demonstrated the importance they attach to the creation of a compatible and efficient, yet diversified and adaptable European Higher Education Area. Ministers also pointed out that quality is the basic underlying condition for trust, relevance, mobility, compatibility and attractiveness in the European Higher Education Area. Ministers expressed their appreciation of the contributions toward developing study programmes combining academic quality with relevance to lasting employability and called for a continued proactive role of higher education institutions.

Ministers affirmed that students should participate in and influence the organisation and content of education at universities and other higher education institutions. Ministers also reaffirmed the need, recalled by students, to take account of the social dimension in the Bologna process.

Promoting the attractiveness of the European Higher Education Area

Ministers agreed on the importance of enhancing attractiveness of European higher education to students from Europe and other parts of the world. The readability and comparability of European higher education degrees world-wide should be enhanced by the development of a common framework of qualifications, as well as by coherent quality assurance and accreditation/certification mechanisms and by increased information efforts. Ministers particularly stressed that the quality of higher education and research is and should be an important determinant of Europe's international attractiveness and competitiveness. Ministers agreed that more attention should be paid to the benefit of a European Higher Education Area with institutions and programmes with different profiles. They called for increased collaboration between the European countries concerning the possible implications and perspectives of transnational education.

CONTINUED FOLLOW-UP

Ministers committed themselves to continue their cooperation based on the objectives set out in the Bologna Declaration, building on the similarities and benefiting from the differences between cultures, languages and national systems, and drawing on all possibilities of intergovernmental cooperation and the ongoing dialogue with European universities and other higher education institutions and student organisations as well as the Community programmes.

Ministers welcomed new members to join the Bologna process after applications from Ministers representing countries for which the European Community programmes Socrates and Leonardo da Vinci or Tempus-Cards are open. They accepted applications from Croatia, Cyprus and Turkey.

Ministers decided that a new follow-up meeting will take place in the second half of 2003 in Berlin to review progress and set directions and priorities for the next stages of the process towards the European Higher Education Area. They confirmed the need for a structure for the follow-up work, consisting of a follow-up group and a preparatory group. The follow-up group should be composed of representatives of all signatories, new participants and the European Commission, and should be chaired by the EU Presidency at the time. The preparatory group should be composed of representatives of the countries hosting the previous ministerial meetings and the next ministerial meeting, two EU member states and two non-EU member states; these latter four representatives will be elected by the follow-up group. The EU Presidency at the time and the European Commission will also be part of the preparatory group should be chaired by the representative of the country hosting the next ministerial meeting.

The European University Association, the European Association of Institutions in Higher Education (EURASHE), the National Unions of Students in Europe and the Council of Europe should be consulted in the follow-up work.

In order to take the process further, Ministers encouraged the follow-up group to arrange seminars to explore the following areas: cooperation concerning accreditation and quality assurance, recognition issues and the use of credits in the Bologna process, the development of joint degrees, the social dimension, with specific attention to obstacles to mobility, and the enlargement of the Bologna process, lifelong learning and student involvement



"Realising the European Higher Education Area"

Communiqué of the Conference of Ministers responsible for Higher Education in Berlin on 19 September 2003

Preamble

On 19 June 1999, one year after the Sorbonne Declaration, Ministers responsible for higher education from 29 European countries signed the Bologna Declaration. They agreed on important joint objectives for the development of a coherent and cohesive European Higher Education Area by 2010. In the first follow-up conference held in Prague on 19 May 2001, they increased the number of the objectives and reaffirmed their commitment to establish the European Higher Education Area by 2010. On 19 September 2003, Ministers responsible for higher education from 33 European countries met in Berlin in order to review the progress achieved and to set priorities and new objectives for the coming years, with a view to speeding up the realisation of the European Higher Education Area. They agreed on the following considerations, principles and priorities:

Ministers reaffirm the importance of the social dimension of the Bologna Process. The need to increase competitiveness must be balanced with the objective of improving the social characteristics of the European Higher Education Area, aiming at strengthening social cohesion and reducing social and gender inequalities both at national and at European level. In that context, Ministers reaffirm their position that higher education is a public good and a public responsibility. They emphasise that in international academic cooperation and exchanges, academic values should prevail.

Ministers take into due consideration the conclusions of the European Councils in Lisbon (2000) and Barcelona (2002) aimed at making Europe "the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion" and calling for further action and closer co-operation in the context of the Bologna Process.

Ministers take note of the Progress Report commissioned by the Follow-up Group on the development of the Bologna Process between Prague and Berlin. They also take note of the Trends-III Report prepared by the European University Association (EUA), as well as of the results of the seminars, which were organised as part of the work programme between Prague and Berlin by several member States and Higher Education Institutions, organisations and students. Ministers further note the National Reports, which are evidence of the considerable progress being made in the application of the principles of the Bologna Process. Finally, they take note of the messages from the European Commission and the Council of Europe and acknowledge their support for the implementation of the Process.

Ministers agree that efforts shall be undertaken in order to secure closer links overall between the higher education and research systems in their respective countries. The emerging European Higher Education Area will benefit from synergies with the European Research Area, thus strengthening the basis of the Europe of Knowledge. The aim is to preserve Europe's cultural richness and linguistic diversity, based on its heritage of diversified traditions, and to foster its potential of innovation and social and economic development through enhanced co-operation among European Higher Education Institutions.

Ministers recognise the fundamental role in the development of the European Higher Education Area played by Higher Education Institutions and student organisations. They take note of the message from the European University Association (EUA) arising from the Graz Convention of Higher Education Institutions, the contributions from the European Association of Institutions in Higher Education (EURASHE) and the communications from ESIB – The National Unions of Students in Europe.

Ministers welcome the interest shown by other regions of the world in the development of the European Higher Education Area, and welcome in particular the presence of representatives from European countries not yet party to the Bologna Process as well as from the Follow-up Committee of the European Union, Latin America and Caribbean

Progress

Ministers welcome the various initiatives undertaken since the Prague Higher Education Summit to move towards more comparability and compatibility, to make higher education systems more transparent and to enhance the quality of European higher education at institutional and national levels. They appreciate the co-operation and commitment of all partners - Higher Education Institutions, students and other stakeholders - to this effect.

Ministers emphasise the importance of all elements of the Bologna Process for establishing the European Higher Education Area and stress the need to intensify the efforts at institutional, national and European level. However, to give the Process further momentum, they commit themselves to intermediate priorities for the next two years. They will strengthen their efforts to promote effective quality assurance systems, to step up effective use of the system based on two cycles and to improve the recognition system of degrees and periods of studies.

Quality Assurance

The quality of higher education has proven to be at the heart of the setting up of a European Higher Education Area. Ministers commit themselves to supporting further development of quality assurance at institutional, national and European level. They stress the need to develop mutually shared criteria and methodologies on quality assurance.

They also stress that consistent with the principle of institutional autonomy, the primary responsibility for quality assurance in higher education lies with each institution itself and this provides the basis for real accountability of the academic system within the national quality framework.

Therefore, they agree that by 2005 national quality assurance systems should include:

- A definition of the responsibilities of the bodies and institutions involved.
- Evaluation of programmes or institutions, including internal assessment, external review, participation of students and the publication of results.
- A system of accreditation, certification or comparable procedures.
- International participation, co-operation and networking.

At the European level, Ministers call upon ENQA through its members, in co-operation with the EUA, EURASHE and ESIB to develop an agreed set of standards, procedures and guidelines on guality assurance, to explore ways of ensuring an adequate peer review system for guality assurance and/or accreditation agencies or bodies, and to report back through the Follow-up Group to Ministers in 2005. Due account will be taken of the expertise of other guality assurance associations and networks.

Degree structure: Adoption of a system essentially based on two main cycles

Ministers are pleased to note that, following their commitment in the Bologna Declaration to the two-cycle system, a comprehensive restructuring of the European landscape of higher education is now under way. All Ministers commit themselves to having started the implementation of the two cycle system by 2005. Ministers underline the importance of consolidating the progress made, and of improving understanding and acceptance of the new qualifications through reinforcing dialogue within institutions and between institutions and employers.

Ministers encourage the member States to elaborate a framework of comparable and compatible qualifications for their higher education systems, which should seek to describe qualifications in terms of workload, level, learning outcomes, competences and profile. They also undertake to elaborate an overarching framework of gualifications for the European Higher Education Area.

Within such frameworks, degrees should have different defined outcomes. First and second cycle degrees should have different orientations and various profiles in order to accommodate a diversity of individual, academic and labour market needs. First cycle degrees should give access, in the sense of the Lisbon Recognition Convention, to second cycle programmes. Second cycle degrees should give access to doctoral studies.

Ministers invite the Follow-up Group to explore whether and how shorter higher education may be linked to the first cycle of a qualifications framework for the European Higher Education Area.

Ministers stress their commitment to making higher education equally accessible to all, on the basis of capacity, by every appropriate means.

Promotion of mobility

Mobility of students and academic and administrative staff is the basis for establishing a European Higher Education Area. Ministers emphasise its importance for academic and cultural as well as political, social and economic spheres. They note with satisfaction that since their last meeting, mobility figures have increased, thanks also to the substantial support of the European Union programmes, and agree to undertake the necessary steps to improve the quality and coverage of statistical data on student mobility.

They reaffirm their intention to make every effort to remove all obstacles to mobility within the European Higher Education Area. With a view to promoting student mobility, Ministers will take the necessary steps to enable the portability of national loans and grants.

Establishment of a system of credits

Ministers stress the important role played by the European Credit Transfer System (ECTS) in facilitating student mobility and international curriculum development. They note that ECTS is increasingly becoming a generalised basis for the national credit systems. They encourage further progress with the goal that the ECTS becomes not only a transfer but also an accumulation system, to be applied consistently as it develops within the emerging European Higher Education Area.

Recognition of degrees: Adoption of a system of easily readable and comparable degrees

Ministers underline the importance of the Lisbon Recognition Convention, which should be ratified by all countries participating in the Bologna Process, and call on the ENIC and NARIC networks along with the competent National Authorities to further the implementation of the Convention.

They set the objective that every student graduating as from 2005 should receive the Diploma Supplement automatically and free of charge. It should be issued in a widely spoken European language.

They appeal to institutions and employers to make full use of the Diploma Supplement, so as to take advantage of the improved transparency and flexibility of the higher education degree systems, for fostering employability and facilitating academic recognition for further studies.

Higher education institutions and students

Ministers welcome the commitment of Higher Education Institutions and students to the Bologna Process and recognise that it is ultimately the active participation of all partners in the Process that will ensure its long-term success.

Aware of the contribution strong institutions can make to economic and societal development, Ministers accept that institutions need to be empowered to take decisions on their internal organisation and administration. Ministers further call upon institutions to ensure that the reforms become fully integrated into core institutional functions and processes.

Ministers note the constructive participation of student organisations in the Bologna Process and underline the necessity to include the students continuously and at an early stage in further activities.

Students are full partners in higher education governance. Ministers note that national legal measures for ensuring student participation are largely in place throughout the European Higher Education Area. They also call on institutions and student organisations to identify ways of increasing actual student involvement in higher education governance.

Ministers stress the need for appropriate studying and living conditions for the students, so that they can successfully complete their studies within an appropriate period of time without obstacles related to their social and economic background. They also stress the need for more comparable data on the social and economic situation of students.

Promotion of the European dimension in higher education

Ministers note that, following their call in Prague, additional modules, courses and curricula with European content, orientation or organisation are being developed.

They note that initiatives have been taken by Higher Education Institutions in various European countries to pool their academic resources and cultural traditions in order to promote the development of integrated study programmes and joint degrees at first, second and third level.

Moreover, they stress the necessity of ensuring a substantial period of study abroad in joint degree programmes as well as proper provision for linguistic diversity and language learning, so that students may achieve their full potential for European identity, citizenship and employability.

Ministers agree to engage at the national level to remove legal obstacles to the establishment and recognition of such degrees and to actively support the development and adequate guality assurance of integrated curricula leading to joint degrees.

Promoting the attractiveness of the European Higher Education Area

Ministers agree that the attractiveness and openness of the European higher education should be reinforced. They confirm their readiness to further develop scholarship programmes for students from third countries.

Ministers declare that transnational exchanges in higher education should be governed on the basis of academic quality and academic values, and agree to work in all appropriate fora to that end. In all appropriate circumstances such fora should include the social and economic partners.

They encourage the co-operation with regions in other parts of the world by opening Bologna seminars and conferences to representatives of these regions.

Lifelong learning

Ministers underline the important contribution of higher education in making lifelong learning a reality. They are taking steps to align their national policies to realise this goal and urge Higher Education Institutions and all concerned to enhance the possibilities for lifelong learning at higher education level including the recognition of prior learning. They emphasise that such action must be an integral part of higher education activity.

Ministers furthermore call those working on qualifications frameworks for the European Higher Education Area to encompass the wide range of flexible learning paths, opportunities and techniques and to make appropriate use of the ECTS credits.

They stress the need to improve opportunities for all citizens, in accordance with their aspirations and abilities, to follow the lifelong learning paths into and within higher education.

Additional Actions

European Higher Education Area and European Research Area – two pillars of the knowledge based society

Conscious of the need to promote closer links between the EHEA and the ERA in a Europe of Knowledge, and of the importance of research as an integral part of higher education across Europe, Ministers consider it necessary to go beyond the present focus on two main cycles of higher education to include the doctoral level as the third cycle in the Bologna Process. They emphasise the importance of research and research training and the promotion of interdisciplinarity in maintaining and improving the quality of higher education and in enhancing the competitiveness of European higher education more generally. Ministers call for increased mobility at the doctoral and postdoctoral levels and encourage the institutions concerned to increase their cooperation in doctoral studies and the training of young researchers.

Ministers will make the necessary effort to make European Higher Education Institutions an even more attractive and efficient partner. Therefore Ministers ask Higher Education Institutions to increase the role and relevance of research to technological, social and cultural evolution and to the needs of society.

Ministers understand that there are obstacles inhibiting the achievement of these goals and these cannot be resolved by Higher Education Institutions alone. It requires strong support, including financial, and appropriate decisions from national Governments and European Bodies.

Finally, Ministers state that networks at doctoral level should be given support to stimulate the development of excellence and to become one of the hallmarks of the European Higher Education Area.

Stocktaking

With a view to the goals set for 2010, it is expected that measures will be introduced to take stock of progress achieved in the Bologna Process. A mid-term stocktaking exercise would provide reliable information on how the Process is actually advancing and would offer the possibility to take corrective measures, if appropriate.

Ministers charge the Follow-up Group with organising a stocktaking process in time for their summit in 2005 and undertaking to prepare detailed reports on the progress and implementation of the intermediate priorities set for the next two years:

- quality assurance
- two-cycle system
- recognition of degrees and periods of studies

Participating countries will, furthermore, be prepared to allow access to the necessary information for research on higher education relating to the objectives of the Bologna Process. Access to data banks on ongoing research and research results shall be facilitated.

Further Follow-up

New members

Ministers consider it necessary to adapt the clause in the Prague Communiqué on applications for membership as follows:

Countries party to the European Cultural Convention shall be eligible for membership of the European Higher Education Area provided that they at the same time declare their willingness to pursue and implement the objectives of the Bologna Process in their own systems of higher education. Their applications should contain information on how they will implement the principles and objectives of the declaration.

Ministers decide to accept the requests for membership of Albania, Andorra, Bosnia and Herzegovina, Holy See, Russia, Serbia and Montenegro, "the Former Yugoslav Republic of Macedonia" and to welcome these states as new members thus expanding the process to 40 European Countries.

Ministers recognise that membership of the Bologna Process implies substantial change and reform for all signatory countries. They agree to support the new signatory countries in those changes and reforms, incorporating them within the mutual discussions and assistance, which the Bologna Process involves.

Follow-up structure

Ministers entrust the implementation of all the issues covered in the Communiqué, the overall steering of the Bologna Process and the preparation of the next ministerial meeting to a Follow-up Group, which shall be composed of the representatives of all members of the Bologna Process and the European Commission, with the Council of Europe, the EUA, EURASHE, ESIB and UNESCO/CEPES as consultative members. This group, which should be convened at least twice a year, shall be chaired by the EU Presidency, with the host country of the next Ministerial Conference as vice-chair.

A Board also chaired by the EU Presidency shall oversee the work between the meetings of the Follow-up Group. The Board will be composed of the chair, the next host country as vice-chair, the preceding and the following EU Presidencies, three participating countries elected by the Follow-up Group for one year, the European Commission and, as consultative members, the Council of Europe, the EUA, EURASHE and ESIB. The Follow-up Group as well as the Board may convene ad hoc working groups as they deem necessary.

The overall follow-up work will be supported by a Secretariat which the country hosting the next Ministerial Conference will provide.

In its first meeting after the Berlin Conference, the Follow-up Group is asked to further define the responsibilities of the Board and the tasks of the Secretariat.

Work programme 2003-2005

Ministers ask the Follow-up Group to co-ordinate activities for progress of the Bologna. Process as indicated in the themes and actions covered by this Communiqué and report on them in time for the next ministerial meeting in 2005.

Next Conference

Ministers decide to hold the next conference in the city of Bergen (Norway) in May 2005.



The European Higher Education Area -Achieving the Goals

Communiqué of the Conference of European Ministers Responsible for Higher Education, Bergen, 19-20 May 2005

We, Ministers responsible for higher education in the participating countries of the Bologna Process, have met for a mid-term review and for setting goals and priorities towards 2000. At this conference, we have welcomed Armenia, Azerbaijan, Georgia, Moldova and Ukraine as new participating countries in the Bologna Process. We all share the common understanding of the principles, objectives and commitments of the Process as expressed in the Bologna Declaration and in the subsequent communiqués from the Ministerial Conferences in Prague and Berlin. We confirm our commitment to coordinating our policies through the Bologna Process to establish the European Higher Education Area (EHEA) by 2010, and we commit ourselves to assisting the new participating countries to implement the goals of the Process.

I. Partnership

We underline the central role of higher education institutions, their staff and students as partners in the Bologna Process. Their role in the implementation of the Process becomes all the more important now that the necessary legislative reforms are largely in place, and we encourage them to continue and intensity their efforts to establish the EHEA. We welcome the clear commitment of higher education institutions across Europe to the Process, and we recognise that time is needed to optimise the impact of structural change on carricula and thus to ensure the introduction of the innovative teaching and learning processes that Europe needs.

We welcome the support of organisations representing business and the social partners and look forward to intensified cooperation in reaching the goals of the Bologna Process. We further welcome the contributions of the international institutions and organisations that are partners to the Process.

II. Taking stock

We take note of the significant progress made towards our goals, as set out in the General Report 2003-2005 from the Follow-up Group, in EUA's Trends IV report, and in ESIB's report Bologna with Student Eyes.

At our meeting in Berlin, we asked the Follow-up Group for a mid-term stocktaking, focusing on three priorities – the degree system, quality assurance and the recognition of degrees and periods of study. From the stocktaking report we note that substantial progress has been made in these three priority areas. It will be important to ensure that progress is consistent across all participating countries. We therefore see a need for greater sharing of expertise to build capacity at both institutional and governmental level.

The degree system

We note with satisfaction that the two-cycle degree system is being implemented on a large scale, with more than half of the students being enrolled in it in most countries. However, there are still some obstacles to access between cycles. Furthermore, there is a need for greater dialogue, involving Governments, institutions and social partners, to increase the employability of graduates with bachelor qualifications, including in appropriate posts within the public service.

We adopt the overarching framework for qualifications in the EHEA, comprising three cycles (including, within national contexts, the possibility of intermediate qualifications), generic descriptors for each cycle based on learning outcomes and competences, and credit ranges in the first and second cycles. We commit ourselves to elaborating national frameworks for qualifications compatible with the overarching framework for qualifications in the EHEA by 2010, and to having started work on this by 2007. We ask the Follow-up Group to report on the implementation and farther development of the overarching framework.

We underline the importance of ensuring complementarity between the overarching framework for the EHEA and the proposed broader framework for qualifications for lifelong learning encompassing general education as well as vocational education and training as now being developed within the European Union as well as among participating countries. We ask the European Commission fully to consult all parties to the Bologna Process as work progresses.

Quality assurance.

Almost all countries have made provision for a quality assurance system based on the criteria set out in the Berlin Communiqué and with a high degree of cooperation and networking. However, there is still progress to be made, in particular as regards student involvement and international cooperation. Furthermore, we urge higher education institutions to continue their efforts to enhance the quality of their activities through the systematic introduction of internal mechanisms and their direct correlation to external quality assurance. We adopt the standards and guidelines for quality assurance in the European Higher Education Area as proposed by ENQA. We commit ourselves to introducing the proposed model for peer review of quality assurance agencies on a national basis, while respecting the commonly accepted guidelines and criteria. We welcome the principle of a European register of quality assurance agencies based on national review. We ask that the practiculities of implementation be further developed by ENQA in cooperation with EUA, EURASHE and ESIB with a report back to us through the Follow-up Group. We underline the importance of cooperation between nationally recognised agencies with a view to enhancing the mutual recognition of accreditation or quality assurance decisions.

Recognition of degrees and study periods

We note that 36 of the 45 participating countries have now ratified the Lisbon Recognition Convention. We urge those that have not already done so to ratify the Convention without delay. We commit ourselves to ensuring the full implementation of its principles, and to incorporating them in national legislation as appropriate. We call on all participating countries to address recognition problems identified by the ENIC/NARIC networks. We will draw up national action plans to improve the quality of the process associated with the recognition of foreign qualifications. These plans will form part of each country's national report for the next Ministerial Conference. We express support for the subsidiary texts to the Lisbon Recognition Convention and call upon all national authorities and other stakeholders to recognise joint degrees awarded in two or more countries in the EHEA.

We see the development of national and European frameworks for qualifications as an opportunity to further embed lifelong learning in higher education. We will work with higher education institutions and others to improve recognition of prior learning including, where possible, non-formal and informal learning for access to, and as elements in, higher education programmes.

III. Further challenges and priorities

Higher education and research

We underline the importance of higher education in further enhancing research and the importance of research in underpinning higher education for the economic and cultural development of our societies and for social cohesion. We note that the efforts to introduce structural change and improve the quality of teaching should not detract from the effort to strengthen research and innovation. We therefore emphasise the importance of research and research training in maintaining and improving the quality of and enhancing the competitiveness and attractiveness of the EHEA. With a view to achieving better results we recognise the need to improve the synergy between the higher education sector and other research sectors throughout our respective countries and between the EHEA and the European Research Area. To achieve these objectives, doctoral level qualifications need to be fully aligned with the EHEA overarching framework for qualifications using the outcomes-based approach. The core component of doctoral training is the advancement of knowledge through original research. Considering the need for structured doctoral programmes and the need for transparent supervision and assessment, we note that the normal workload of the third cycle in most countries would correspond to 3-4 years full time. We urge universities to ensure that their doctoral programmes promote interdisciplinary training and the development of transferable skills, thus meeting the needs of the wider employment market. We need to achieve an overall increase in the numbers of doctoral candidates taking up research careers within the EHEA. We consider participants in third cycle programmes both as students and as early stage researchers. We charge the Bologna Follow-up Group with inviting the European University Association, together with other interested partners, to prepare a report under the responsibility of the Follow-up Group on the further development of the basic principles for doctoral programmes, to be presented to Ministers in 2007. Overregulation of doctoral programmes must be avoided.

The social dimension

The social dimension of the Bologna Process is a constituent part of the EHEA and a necessary condition for the attractiveness and competitiveness of the EHEA. We therefore renew our commitment to making quality higher education equally accessible to all, and stress the need for appropriate conditions for students so that they can complete their studies without obstacles related to their social and economic background. The social dimension includes measures taken by governments to help students, especially from socially disadvantaged groups, in financial and economic aspects and to provide them with guidance and counselling services with a view to widening access.

Mobility

We recognise that mobility of students and staff among all participating countries remains one of the key objectives of the Bologna Process. Aware of the many remaining challenges to be overcome, we reconfirm our commitment to facilitate the portability of grants and loans where appropriate through joint action, with a view to making mobility within the EHEA a reality. We shall intensify our efforts to lift obstacles to mobility by facilitating the delivery of visa and work permits and by encouraging participation in mobility programmes. We urge institutions and students to make fall use of mobility programmes, advocating full recognition of study periods abroad within such programmes.

The attractiveness of the EHEA and cooperation with other parts of the world

The European Higher Education Area must be open and should be attractive to other parts of the world. Our contribution to achieving education for all should be based on the principle of sustainable development and be in accordance with the ongoing international work on developing guidelines for quality provision of cross-border higher education. We reiterate that in international academic cooperation, academic values should prevail. We see the European Higher Education Area as a partner of higher education systems in other regions of the world, stimulating balanced student and staff exchange and cooperation between higher education institutions. We underline the importance of intercultural understanding and respect. We look forward to enhancing the understanding of the Bologna Process in other continents by sharing our experiences of reform processes with neighbouring regions. We stress the need for dialogue on issues of mutual interest. We see the need to identify partner regions and intensify the exchange of ideas and experiences with those regions. We ask the Follow-up Group to elaborate and agree on a strategy for the external dimension.

IV. Taking stock on progress for 2007

We charge the Follow-up Group with continuing and widening the stocktaking process and reporting in time for the next Ministerial Conference. We expect stocktaking to be based on the appropriate methodology and to continue in the fields of the degree system, quality assurance and recognition of degrees and study periods, and by 2007 we will have largely completed the implementation of these three intermediate priorities.

In particular, we shall look for progress in:

- implementation of the standards and guidelines for quality assurance as proposed in the ENQA report;
- implementation of the national frameworks for qualifications;
- the awarding and recognition of joint degrees, including at the doctorate level;
- creating opportunities for flexible learning paths in higher education, including procedures for the recognition of prior learning.

We also charge the Follow-up Group with presenting comparable data on the mobility of staff and students as well as on the social and economic situation of students in participating countries as a basis for future stocktaking and reporting in time for the next Ministerial Conference. The future stocktaking will have to take into account the social dimension as defined above.

V. Preparing for 2010

Building on the achievements so far in the Bologna Process, we wish to establish a European Higher Education Area based on the principles of quality and transparency. We must cherish our rich beritage and cultural diversity in contributing to a knowledge-based society. We commit ourselves to upholding the principle of public responsibility for higher education in the context of complex modern societies. As higher education is situated at the crossroads of research, education and innovation, it is also the key to Europe's competitiveness. As we move closer to 2010, we undertake to ensure that higher education institutions enjoy the necessary autonomy to implement the agreed reforms, and we recognise the need for sustainable funding of institutions. The European Higher Education Area is structured around three cycles, where each level has the function of preparing the student for the labour market, for further competence building and for active citizenship. The overarching framework for qualifications, the agreed set of European standards and guidelines for quality assurance and the recognition of degrees and periods of study are also key characteristics of the structure of the EHEA.

We endorse the follow-up structure set up in Berlin, with the inclusion of the Education International (EI) Pan-European Structure, the European Association for Quality Assurance in Higher Education (ENQA), and the Union of Industrial and Employers' Confederations of Europe (UNICE) as new consultative members of the Follow-up Group.

As the Bologna Process leads to the establishment of the EHEA, we have to consider the appropriate arrangements needed to support the continuing development beyond 2010, and we ask the Follow-up Group to explore these issues.

We will hold the next Ministerial Conference in London in 2007.

⁴⁵ countries participate in the Dologna Process and are members of the Follow up Orsep: Albania, Andorra, Armania, Austria, Azarbaijan, Belgiano (Danoith Community and Found: Community), Bosnin and Nacregovina, Bulgaria, Orsitia, Cyptus, the Couch Republic, Donmark, Entonia, Finland, Brance, Goorgin, Cernney, Genree, the Holy Sox, Hangari, Isaland, Indy, Latvia, Liedonneten, Lithouson, Lacambrang, Maha, Moldova, the Netherlands, Norwey, Perland, Portugal, Romania, the Romania Federation, Serbia and Montosegno, the Norwal Republic, Storenia, Ignia, Storedon, Berkerland, Yohn Promer Tagainfor Republic of Macedonic, Tarkey, Cirnaine and the United Kengdon, Is addition, the European Commission is a voting member of the Follow-op Orsep.

The Crancil of Europe, the National Unions of Students in Europe (ESER), the Education International (EI) Par-European Structure, the European Association for Quality Association (ENQA), the European University Association (EUA), the European Association of Institutions in Higher Education (EURASHE), the European Centre for Higher Education (UNESCO-CEPES) and the Union of Industrial and Englisyaw' Confederations of Europe (UNICE) are consultative members of the Fullew-up Group.



18 May 2007

London Communiqué

Towards the European Higher Education Area: responding to challenges in a globalised world

1. Introduction

1.1 We, the Ministers responsible for Higher Education in the countries participating in the Bologna Process, have met in London to review progress made since we convened in Bergen in 2005.

1.2 Based on our agreed criteria for country membership, we welcome the Republic of Montenegro as a member of the Bologna Process.

1.3 Developments over the last two years have brought us a significant step closer to the realisation of the European Higher Education Area (EHEA). Building on our rich and diverse European cultural heritage, we are developing an EHEA based on institutional autonomy, academic freedom, equal opportunities and democratic principles that will facilitate mobility, increase employability and strengthen Europe's attractiveness and competitiveness. As we look ahead, we recognise that, in a changing world, there will be a continuing need to adapt our higher education systems, to ensure that the EHEA remains competitive and can respond effectively to the challenges of globalisation. In the short term, we appreciate that implementing the Bologna reforms is a significant task, and appreciate the continuing support and commitment of all partners in the process. We welcome the contribution of the working groups and seminars in helping to drive forward progress. We agree to continue to work together in partnership, assisting one another in our efforts and promoting the exchange of good practice.

1.4 We reaffirm our commitment to increasing the compatibility and comparability of our higher education systems, whilst at the same time respecting their diversity. We recognise the important influence higher education institutions (HEIs) exert on developing our societies, based on their traditions as centres of learning, research, creativity and knowledge transfer as well as their key role in defining and transmitting the values on which our societies are built. Our aim is to ensure that our HEIs have the necessary resources to continue to fulfil their full range of purposes. Those purposes include: preparing students for life as active citizens in a democratic society; preparing students for their future careers and enabling their personal

development; creating and maintaining a broad, advanced knowledge base; and stimulating research and innovation.

1.5 We therefore underline the importance of strong institutions, which are diverse, adequately funded, autonomous and accountable. The principles of nondiscrimination and equitable access should be respected and promoted throughout the EHEA. We commit to upholding these principles and to ensuring that neither students nor staff suffer discrimination of any kind.

2. Progress towards the EHEA

2.1 Our stocktaking report, along with EUA's Trends V report, ESIB's Bologna With Student Eyes and Eurydice's Focus on the Structure of Higher Education in Europe, confirms that there has been good overall progress in the last two years. There is an increasing awareness that a significant outcome of the process will be a move towards student-centred higher education and away from teacher driven provision. We will continue to support this important development.

Mobility

2.2 Mobility of staff, students and graduates is one of the core elements of the Bologna Process, creating opportunities for personal growth, developing international cooperation between individuals and institutions, enhancing the quality of higher education and research, and giving substance to the European dimension.

2.3 Some progress has been made since 1999, but many challenges remain. Among the obstacles to mobility, issues relating to immigration, recognition, insufficient financial incentives and inflexible pension arrangements feature prominently. We recognise the responsibility of individual Governments to facilitate the delivery of visas, residence and work permits, as appropriate. Where these measures are outside our competence as Ministers for Higher Education, we undertake to work within our respective Governments for decisive progress in this area. At national level, we will work to implement fully the agreed recognition tools and procedures and consider ways of further incentivising mobility for both staff and students. This includes encouraging a significant increase in the number of joint programmes and the creation of flexible curricula, as well as urging our institutions to take greater responsibility for staff and student mobility, more equitably balanced between countries across the EHEA.

Degree structure

2.4 Good progress is being made at national and institutional levels towards our goal of an EHEA based on a three-cycle degree system. The number of students enrolled on courses in the first two-cycles has increased significantly and there has been a reduction in structural barriers between cycles. Similarly, there has been an increase in the number of structured doctoral programmes. We underline the importance of curricula reform leading to qualifications better suited both to the needs of the labour market and to further study. Efforts should concentrate in future on removing barriers to access and progression between cycles and on proper implementation of ECTS based on learning outcomes and student workload. We underline the importance of improving graduate employability, whilst noting that data gathering on this issue needs to be developed further.

Recognition

2.5 Fair recognition of higher education qualifications, periods of study and prior learning, including the recognition of non-formal and informal learning, are essential components of the EHEA, both internally and in a global context. Easily readable and comparable degrees and accessible information on educational systems and qualifications frameworks are prerequisites for citizens' mobility and ensuring the continuing attractiveness and competitiveness of the EHEA. While we are pleased that 38 members of the Bologna Process, including Montenegro, have now ratified the Council of Europe/UNESCO Convention on the recognition of qualifications concerning Higher Education in the European region (Lisbon Recognition Convention), we urge the remaining members to do so as a matter of priority.

2.6 There has been progress in the implementation of the Lisbon Recognition Convention (LRC), ECTS and diploma supplements, but the range of national and institutional approaches to recognition needs to be more coherent. To improve recognition practices, we therefore ask the Bologna Follow-up Group (BFUG) to arrange for the ENIC/NARIC networks to analyse our national action plans and spread good practice.

Qualifications Frameworks

2.7 Qualifications frameworks are important instruments in achieving comparability and transparency within the EHEA and facilitating the movement of learners within, as well as between, higher education systems. They should also help HEIs to develop modules and study programmes based on learning outcomes and credits, and improve the recognition of qualifications as well as all forms of prior learning.

2.8 We note that some initial progress has been made towards the implementation of national qualifications frameworks, but that much more effort is required. We commit ourselves to fully implementing such national qualifications frameworks, certified against the overarching Framework for Qualifications of the EHEA, by 2010. Recognising that this is a challenging task, we ask the Council of Europe to support the sharing of experience in the elaboration of national qualifications frameworks. We emphasise that qualification frameworks should be designed so as to encourage greater mobility of students and teachers and improve employability.

2.9 We are satisfied that national qualifications frameworks compatible with the overarching Framework for Qualifications of the EHEA will also be compatible with the proposal from the European Commission on a European Qualifications Framework for Lifelong Learning.

2.10 We see the overarching Framework for Qualifications of the EHEA, which we agreed in Bergen, as a central element of the promotion of European higher education in a global context.

Lifelong Learning

2.11 The stocktaking report shows that some elements of flexible learning exist in most countries, but a more systematic development of flexible learning paths to support lifelong learning is at an early stage. We therefore ask BFUG to increase the

sharing of good practice and to work towards a common understanding of the role of higher education in lifelong learning. Only in a small number of EHEA countries could the recognition of prior learning for access and credits be said to be well developed. Working in cooperation with ENIC/NARIC, we invite BFUG to develop proposals for improving the recognition of prior learning.

<u>Quality Assurance and a European Register of Quality Assurance Agencies</u> 2.12 The Standards and Guidelines for Quality Assurance in the EHEA adopted in Bergen (ESG) have been a powerful driver of change in relation to quality assurance. All countries have started to implement them and some have made substantial progress. External quality assurance in particular is much better developed than before. The extent of student involvement at all levels has increased since 2005, although improvement is still necessary. Since the main responsibility for quality lies with HEIs, they should continue to develop their systems of quality assurance. We acknowledge the progress made with regard to mutual recognition of accreditation and quality assurance decisions, and encourage continued international cooperation amongst quality assurance agencies.

2.13 The first European Quality Assurance Forum, jointly organised by EUA, ENQA, EURASHE and ESIB (the E4 Group) in 2006 provided an opportunity to discuss European developments in quality assurance. We encourage the four organisations to continue to organise European Quality Assurance Fora on an annual basis, to facilitate the sharing of good practice and ensure that quality in the EHEA continues to improve.

2.14 We thank the E4 Group for responding to our request to further develop the practicalities of setting up a Register of European Higher Education Quality. Assurance Agencies. The purpose of the register is to allow all stakeholders and the general public open access to objective information about trustworthy quality assurance agencies that are working in line with the ESG. It will therefore enhance confidence in higher education in the EHEA and beyond, and facilitate the mutual recognition of guality assurance and accreditation decisions. We welcome the establishment of a register by the E4 group, working in partnership, based on their proposed operational model. The register will be voluntary, self-financing, independent and transparent. Applications for inclusion on the register should be evaluated on the basis of substantial compliance with the ESG, evidenced through an independent review process endorsed by national authorities, where this endorsement is required by those authorities. We ask the E4 group to report. progress to us regularly through BFUG, and to ensure that after two years of operation, the register is evaluated externally, taking account of the views of all stakeholders.

Doctoral candidates

2.15 Closer alignment of the EHEA with the European Research Area (ERA) remains an important objective. We recognise the value of developing and maintaining a wide variety of doctoral programmes linked to the overarching qualifications framework for the EHEA, whilst avoiding overregulation. At the same time, we appreciate that enhancing provision in the third cycle and improving the status, career prospects and funding for early stage researchers are essential

preconditions for meeting Europe's objectives of strengthening research capacity and improving the quality and competitiveness of European higher education.

2.16 We therefore invite our HEIs to reinforce their efforts to embed doctoral programmes in institutional strategies and policies, and to develop appropriate career paths and opportunities for doctoral candidates and early stage researchers.

2.17 We invite EUA to continue to support the sharing of experience among HEIs on the range of innovative doctoral programmes that are emerging across Europe as well as on other crucial issues such as transparent access arrangements, supervision and assessment procedures, the development of transferable skills and ways of enhancing employability. We will look for appropriate opportunities to encourage greater exchange of information on funding and other issues between our Governments as well as with other research funding bodies.

Social dimension

2.18 Higher education should play a strong role in fostering social cohesion, reducing inequalities and raising the level of knowledge, skills and competences in society. Policy should therefore aim to maximise the potential of individuals in terms of their personal development and their contribution to a sustainable and democratic knowledge-based society. We share the societal aspiration that the student body entering, participating in and completing higher education at all levels should reflect the diversity of our populations. We reaffirm the importance of students being able to complete their studies without obstacles related to their social and economic background. We therefore continue our efforts to provide adequate student services, create more flexible learning pathways into and within higher education, and to widen participation at all levels on the basis of equal opportunity.

The European Higher Education Area in a global context

2.19 We are pleased that in many parts of the world, the Bologna reforms have created considerable interest and stimulated discussion between European and international partners on a range of issues. These include the recognition of qualifications, the benefits of cooperation based upon partnership, mutual trust and understanding, and the underlying values of the Bologna Process. Moreover, we acknowledge that efforts have been made in some countries in other parts of the world to bring their higher education systems more closely into line with the Bologna framework.

2.20 We adopt the strategy "The European Higher Education Area in a Global Setting" and will take forward work in the core policy areas: improving information on, and promoting the attractiveness and competitiveness of the EHEA; strengthening cooperation based on partnership; intensifying policy dialogue; and improving recognition. This work ought to be seen in relation to the OECD/UNESCO Guidelines for Quality Provision in Cross-border Higher Education.

3. Priorities for 2009

3.1 Over the next two years, we agree to concentrate on completing agreed Action Lines, including the ongoing priorities of the three-cycle degree system, quality assurance and recognition of degrees and study periods. We will focus in particular on the following areas for action.

Mobility

3.2 In our national reports for 2009, we will report on action taken at national level to promote the mobility of students and staff, including measures for future evaluation. We will focus on the main national challenges identified in paragraph 2.3 above. We also agree to set up a network of national experts to share information, and help to identify and overcome obstacles to the portability of grants and loans.

Social Dimension

3.3 Similarly, we will report on our national strategies and policies for the social dimension, including action plans and measures to evaluate their effectiveness. We will invite all stakeholders to participate in, and support this work, at the national level.

Data collection

3.4 We recognise the need to improve the availability of data on both mobility and the social dimension across all the countries participating in the Bologna Process. We therefore ask the European Commission (Eurostat), in conjunction with Eurostudent, to develop comparable and reliable indicators and data to measure progress towards the overall objective for the social dimension and student and staff mobility in all Bologna countries. Data in this field should cover participative equity in higher education as well as employability for graduates. This task should be carried out in conjunction with BFUG and a report should be submitted to our 2009 Ministerial conference.

Employability

3.5 Following up on the introduction of the three-cycle degree system, we ask BFUG to consider in more detail how to improve employability in relation to each of these cycles as well as in the context of lifelong learning. This will involve the responsibilities of all stakeholders. Governments and HEIs will need to communicate more with employers and other stakeholders on the rationale for their reforms. We will work, as appropriate, within our governments to ensure that employment and career structures within the public service are fully compatible with the new degree system. We urge institutions to further develop partnerships and cooperation with employers in the ongoing process of curriculum innovation based on learning outcomes.

The European Higher Education Area in a global context

3.6 We ask BFUG to report back to us on overall developments in this area at the European, national and institutional levels by 2009. All stakeholders have a role here within their apheres of responsibility. In reporting on the implementation of the strategy for the EHEA in a global context, BFUG should in particular give consideration to two priorities. First, to improve the information available about the EHEA, by developing the Bologna Secretariat website and building on EUA's

Bologna Handbook; and second, to improve recognition. We call on HEIs, ENIC/NARIC centres and other competent recognition authorities within the EHEA to assess qualifications from other parts of the world with the same open mind with which they would expect European qualifications to be assessed elsewhere, and to base this recognition on the principles of the LRC.

Stocktaking

3.7 We ask BFUG to continue the stocktaking process, based on national reports, in time for our 2009 Ministerial conference. We expect further development of the qualitative analysis in stocktaking, particularly in relation to mobility, the Bologna Process in a global context and the social dimension. The fields covered by stocktaking should continue to include the degree system and employability of graduates, recognition of degrees and study periods and implementation of all aspects of quality assurance in line with the ESG. With a view to the development of more student-centred, outcome-based learning, the next exercise should also address in an integrated way national qualifications frameworks, learning outcomes and credits, lifelong learning, and the recognition of prior learning.

Looking forward to 2010 and beyond

4.1 As the EHEA continues to develop and respond to the challenges of globalisation, we anticipate that the need for collaboration will continue beyond 2010.

4.2 We are determined to seize 2010, which will mark the passage from the Bologna Process to the EHEA, as an opportunity to reaffirm our commitment to higher education as a key element in making our societies sustainable, at national as well as at European level. We will take 2010 as an opportunity to reformulate the vision that motivated us in setting the Bologna Process in motion in 1999 and to make the case for an EHEA underpinned by values and visions that go beyond issues of structures and tools. We undertake to make 2010 an opportunity to reset our higher education systems on a course that looks beyond the immediate issues and makes them fit to take up the challenges that will determine our future.

4.3 We ask BFUG as a whole to consider further how the EHEA might develop after 2010 and to report back to the next ministerial meeting in 2009. This should include proposals for appropriate support structures, bearing in mind that the current informal collaborative arrangements are working well and have brought about unprecedented change.

4.4 Building on previous stocktaking exercises, Trends, and Bologna With Student Eyes, we invite BFUG to consider for 2010 the preparation of a report including an independent assessment, in partnership with the consultative members, evaluating the overall progress of the Bologna Process across the EHEA since 1999.

4.5 We delegate the decision on the nature, content and place of any Ministerial meeting in 2010 to BFUG, to be taken within the first half of 2008.

4.6 Our next meeting will be hosted by the Benelux countries in Leuven/Louvainla-Neuve on 28-29 April 2009.



The Bologna Process 2020 -The European Higher Education Area in the new decade

Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009

We, the Ministers responsible for higher education in the 46 countries of the Bologna Process convened in Leuven/Louvain-la-Neuve, Belgium, on April 28 and 29, 2009 to take stock of the achievements of the Bologna Process and to establish the priorities for the European Higher Education Area (EHEA) for the next decade.

Preamble

 In the decade up to 2020 European higher education has a vital contribution to make in realising a Europe of knowledge that is highly creative and innovative. Faced with the challenge of an ageing population Europe can only succeed in this endeavour if it maximises the talents and capacities of all its citizens and fully engages in lifelong learning as well as in widening participation in higher education.

2. European higher education also faces the major challenge and the ensuing opportunities of globalisation and accelerated technological developments with new providers, new learners and new types of learning. Student-centred learning and mobility will help students develop the competences they need in a changing labour market and will empower them to become active and responsible citizens.

3. Our societies currently face the consequences of a global financial and economic crisis. In order to bring about sustainable economic recovery and development, a dynamic and flexible European higher education will strive for innovation on the basis of the integration between education and research at all levels. We recognise that higher education has a key role to play if we are to successfully meet the challenges we face and if we are to promote the cultural and social development of our societies. Therefore, we consider public investment in higher education of utmost priority.

4. We pledge our full commitment to the goals of the European Higher Education Area, which is an area where higher education is a public responsibility, and where all higher education institutions are responsive to the wider needs of society through the diversity of their missions. The aim is to ensure that higher education institutions have the necessary resources to continue to fulfil their full range of purposes such as preparing students for life as active citizens in a democratic society; preparing students for their future careers and enabling their personal development; creating and maintaining a broad, advanced knowledge base and stimulating research and innovation. The necessary ongoing reform of higher education systems and policies will continue to be firmly embedded in the European values of institutional autonomy, academic freedom and social equity and will require full participation of students and staff.

I. Achievements and consolidation

5. Over the past decade we have developed the European Higher Education Area ensuring that it remains firmly rooted in Europe's intellectual, scientific and cultural heritage and ambitions; characterised by permanent cooperation between governments, higher education institutions, students, staff, employers and other stakeholders. The contribution from European institutions and organisations to the reform process has also been a significant one.

6. The Bologna Process is leading to greater compatibility and comparability of the systems of higher education and is making it easier for learners to be mobile and for institutions to attract students and scholars from other continents. Higher education is being modernized with the adoption of a three-cycle structure including, within national contexts, the possibility of intermediate qualifications linked to the first cycle and with the adoption of the European Standards and Guidelines for quality assurance. We have also seen the creation of a European register for quality assurance agencies and the establishment of national qualifications frameworks linked to the overarching European Higher Education Area framework, based on learning outcomes and workload. Moreover, the Bologna Process has promoted the Diploma Supplement and the European Credit Transfer and Accumulation System to further increase transparency and recognition.

7. The objectives set out by the Bologna Declaration and the policies developed in the subsequent years are still valid today. Since not all the objectives have been completely achieved, the full and proper implementation of these objectives at European, national and institutional level will require increased momentum and commitment beyond 2010.

II. Learning for the future: higher education priorities for the decade to come

8. Striving for excellence in all aspects of higher education, we address the challenges of the new era. This requires a constant focus on quality. Moreover, upholding the highly valued diversity of our education systems, public policies will fully recognise the value of various missions of higher education, ranging from teaching and research to community service and engagement in social cohesion and cultural development. All students and staff of higher education institutions should be equipped to respond to the changing demands of the fast evolving society.

Social dimension: equitable access and completion

9. The student body within higher education should reflect the diversity of Europe's populations. We therefore emphasize the social characteristics of higher education and aim to provide equal opportunities to quality education. Access into higher education should be widened by fostering the potential of students from underrepresented groups and by providing adequate conditions for the completion of their studies. This involves improving the learning environment, removing all barriers to study, and creating the appropriate economic conditions for students to be able to benefit from the study opportunities at all levels. Each participating country will set measurable targets for widening overall participation and increasing participation of underrepresented groups in higher education, to be reached by the end of the next decade. Efforts to achieve equity in higher education should be complemented by actions in other parts of the educational system.

Lifelong learning

10. Widening participation shall also be achieved through lifelong learning as an integral part of our education systems. Lifelong learning is subject to the principle of public responsibility. The accessibility, quality of provision and transparency of information shall be assured. Lifelong learning involves obtaining qualifications, extending knowledge and understanding, gaining new skills and competences or enriching personal growth. Lifelong learning implies that qualifications may be obtained through flexible learning paths, including part-time studies, as well as workbased routes.

11. The implementation of lifelong learning policies requires strong partnerships between public authorities, higher education institutions, students, employers and employees. The European Universities' Charter on Lifelong Learning developed by the European University Association provides a useful input for defining such partnerships. Successful policies for lifelong learning will include basic principles and procedures for recognition of prior learning on the basis of learning outcomes regardless of whether the knowledge, skills and competences were acquired through formal, non-formal, or informal learning paths. Lifelong learning will be supported by adequate organisational structures and funding. Lifelong learning encouraged by national policies should inform the practice of higher education institutions.

12. The development of national qualifications frameworks is an important step towards the implementation of lifelong learning. We aim at having them implemented and prepared for self-certification against the overarching Qualifications Framework for the European Higher Education Area by 2012. This will require continued coordination at the level of the EHEA and with the European Qualifications Framework for Lifelong Learning. Within national contexts, intermediate qualifications within the first cycle can be a means of widening access to higher education.

Employability

13. With labour markets increasingly relying on higher skill levels and transversal competences, higher education should equip students with the advanced knowledge, skills and competences they need throughout their professional lives. Employability empowers the individual to fully seize the opportunities in changing labour markets. We aim at raising initial qualifications as well as maintaining and renewing a skilled workforce through close cooperation between governments, higher education institutions, social partners and students. This will allow institutions to be more responsive to employers needs and employers to better understand the educational perspective. Higher education institutions, together with governments, government agencies and employers, shall improve the provision, accessibility and quality of their careers and employment related guidance services to students and alumni. We encourage work placements embedded in study programmes as well as on-the-job learning.

Student-centred learning and the teaching mission of higher education

14. We reassert the importance of the teaching mission of higher education institutions and the necessity for ongoing curricular reform geared toward the development of learning outcomes. Student-centred learning requires empowering individual learners, new approaches to teaching and learning, effective support and guidance structures and a curriculum focused more clearly on the learner in all three cycles. Curricular reform will thus be an ongoing process leading to high quality, flexible and more individually tailored education paths. Academics, in close
cooperation with student and employer representatives, will continue to develop learning outcomes and international reference points for a growing number of subject areas. We ask the higher education institutions to pay particular attention to improving the teaching quality of their study programmes at all levels. This should be a priority in the further implementation of the European Standards and Guidelines for guality assurance.

Education, research and innovation

15. Higher education should be based at all levels on state of the art research and development thus fostering innovation and creativity in society. We recognise the potential of higher education programmes, including those based on applied science, to foster innovation. Consequently, the number of people with research competences should increase. Doctoral programmes should provide high quality disciplinary research and increasingly be complemented by inter-disciplinary and inter-sectoral programmes. Moreover, public authorities and institutions of higher education will make the career development of early stage researchers more attractive.

International openness

16. We call upon European higher education institutions to further internationalise their activities and to engage in global collaboration for sustainable development. The attractiveness and openness of European higher education will be highlighted by joint European actions. Competition on a global scale will be complemented by enhanced policy dialogue and cooperation based on partnership with other regions of the world, in particular through the organisation of Bologna Policy Fora, involving a variety of stakeholders.

17. Transnational education should be governed by the European Standards and Guidelines for quality assurance as applicable within the European Higher Education Area and be in line with the UNESCO/OECD Guidelines for Quality Provision in Cross-Border Higher Education.

Mobility

18. We believe that mobility of students, early stage researchers and staff enhances the quality of programmes and excellence in research; it strengthens the academic and cultural internationalization of European higher education. Mobility is important for personal development and employability, it fosters respect for diversity and a capacity to deal with other cultures. It encourages linguistic pluralism, thus underpinning the multilingual tradition of the European Higher Education Area and it increases cooperation and competition between higher education institutions. Therefore, mobility shall be the hallmark of the European Higher Education Area. We call upon each country to increase mobility, to ensure its high quality and to diversify its types and scope. In 2020, at least 20% of those graduating in the European Higher Education Area Should have had a study or training period abroad.

19. Within each of the three cycles, opportunities for mobility shall be created in the structure of degree programmes. Joint degrees and programmes as well as mobility windows shall become more common practice. Moreover, mobility policies shall be based on a range of practical measures pertaining to the funding of mobility, recognition, available infrastructure, visa and work permit regulations. Flexible study paths and active information policies, full recognition of study achievements, study support and the full portability of grants and loans are necessary requirements. Mobility should also lead to a more balanced flow of incoming and outgoing students

across the European Higher Education Area and we aim for an improved participation rate from diverse student groups.

20. Attractive working conditions and career paths as well as open international recruitment are necessary to attract highly qualified teachers and researchers to higher education institutions. Considering that teachers are key players, career structures should be adapted to facilitate mobility of teachers, early stage researchers and other staff; framework conditions will be established to ensure appropriate access to social security and to facilitate the portability of pensions and supplementary pension rights for mobile staff, making the best use of existing legal frameworks.

Data collection

21. Improved and enhanced data collection will help monitor progress made in the attainment of the objectives set out in the social dimension, employability and mobility agendas, as well as in other policy areas, and will serve as a basis for both stocktaking and benchmarking.

Multidimensional transparency tools

22. We note that there are several current initiatives designed to develop mechanisms for providing more detailed information about higher education institutions across the EHEA to make their diversity more transparent. We believe that any such mechanisms, including those helping higher education systems and institutions to identify and compare their respective strengths, should be developed in close consultation with the key stakeholders. These transparency tools need to relate closely to the principles of the Bologna Process, in particular quality assurance and recognition, which will remain our priority, and should be based on comparable data and adequate indicators to describe the diverse profiles of higher education institutions and their programmes.

Funding

23. Higher education institutions have gained greater autonomy along with rapidly growing expectations to be responsive to societal needs and to be accountable. Within a framework of public responsibility we confirm that public funding remains the main priority to guarantee equitable access and further sustainable development of autonomous higher education institutions. Greater attention should be paid to seeking new and diversified funding sources and methods.

III. The organisational structure and follow-up

24. The present organisational structure of the Bologna Process, characterised by the cooperation between governments, the academic community with its representative organisations, and other stakeholders, is endorsed as being fit for purpose. In the future, the Bologna Process will be co-chaired by the country holding the EU presidency and a non-EU country.

25. In order to interact with other policy areas, the BFUG will liaise with experts and policy makers from other fields, such as research, immigration, social security and employment.

26. We entrust the Bologna Follow-up Group to prepare a work plan up to 2012 to take forward the priorities identified in this Communiqué and the recommendations of the reports submitted to this Ministerial conference, allowing the future integration of the outcome of the independent assessment of the Bologna Process.

In particular the BFUG is asked:

- To define the indicators used for measuring and monitoring mobility and the social dimension in conjunction with the data collection;
- To consider how balanced mobility could be achieved within the EHEA;
- To monitor the development of the transparency mechanisms and to report back to the 2012 ministerial conference;
- To set up a network, making optimal use of existing structures, for better information on and promotion of the Bologna Process outside the EHEA;
- To follow-up on the recommendations of analysis of the national action plans on recognition.

 Reporting on the progress of the implementation of the Bologna Process will be carried out in a coordinated way.

- Stocktaking will further refine its evidence-based methodology.
- Eurostat together with Eurostudent and in cooperation with Eurydice will be asked to contribute through relevant data collection.
- The work of reporting will be overseen by the Bologna Follow-up Group and will lead to an overall report integrating the aforementioned sources for the 2012 ministerial conference.

28. We ask the E4 group (ENQA-EUA-EURASHE-ESU) to continue its cooperation in further developing the European dimension of quality assurance and in particular to ensure that the European Quality Assurance Register is evaluated externally, taking into account the views of the stakeholders.

29. We will meet again at the Bologna anniversary conference jointly hosted by Austria and Hungary in Budapest and Vienna on 11-12 March 2010. The next regular ministerial conference will be hosted by Romania in Bucharest on 27-28 April 2012. The following ministerial conferences will be held in 2015, 2018 and 2020.



Budapest-Vienna Declaration on the European Higher Education Area

March 12, 2010

1. We, the Ministers responsible for higher education in the countries participating in the Bologna Process, met in Budapest and Vienna on March 11 and 12, 2010 to launch the European Higher Education Area (EHEA), as envisaged in the Bologna Declaration of 1999.

2. Based on our agreed criteria for country membership, we welcome Kazakhstan as new participating country of the European Higher Education Area.

3. The Bologna Declaration in 1999 set out a vision for 2010 of an internationally competitive and attractive European Higher Education Area where higher education institutions, supported by strongly committed staff, can fulfil their diverse missions in the knowledge society; and where students benefiting from mobility with smooth and fair recognition of their qualifications, can find the best suited educational pathways.

4. Since 1999, 47 parties to the European Cultural Convention, have signed up to this vision and have made significant progress towards achieving it. In a unique partnership between public authorities, higher education institutions, students and staff, together with employers, quality assurance agencies, international organisations and European institutions, we have engaged in a series of reforms to build a European Higher Education Area based on trust, cooperation and respect for the diversity of cultures, languages, and higher education systems.

5. The Bologna Process and the resulting European Higher Education Area, being unprecedented examples of regional, cross-border cooperation in higher education, have raised considerable interest in other parts of the world and made European higher education more visible on the global map. We welcome this interest and look forward to intensifying our policy dialogue and cooperation with partners across the world.

6. We have taken note of the independent assessment and the stakeholders' reports. We welcome their affirmation that institutions of higher education, staff and students increasingly identify with the goals of the Bologna Process. While much has been achieved in implementing the Bologna reforms, the reports also illustrate that EHEA action lines such as degree and curriculum reform, quality assurance, recognition, mobility and the social dimension are implemented to varying degrees. Recent protests in some countries, partly directed against developments and measures not related to the Bologna Process, have reminded us that some of the Bologna aims and reforms have not been properly implemented and explained. We acknowledge and will listen to the critical voices raised among staff and students. We note that adjustments and further work, involving staff and students, are necessary at European, national, and especially institutional levels to achieve the European Higher Education Area as we envisage it.

7. We, the Ministers, are committed to the full and proper implementation of the agreed objectives and the agenda for the next decade set by the Leuven/Louvain-la-Neuve Communiqué. In close cooperation with higher education institutions, staff, students and other stakeholders, we will step up our efforts to accomplish the reforms already underway to enable students and staff to be mobile, to improve teaching and learning in higher education institutions, to enhance graduate employability, and to provide quality higher education for all. At national level, we also strive to improve communication on and understanding of the Bologna Process among all stakeholders and society as a whole.

8. We, the Ministers, recommit to academic freedom as well as autonomy and accountability of higher education institutions as principles of the European Higher Education Area and underline the role the higher education institutions play in fostering peaceful democratic societies and strengthening social cohesion.

9. We acknowledge the key role of the academic community - institutional leaders, teachers, researchers, administrative staff and students - in making the European Higher Education Area a reality, providing the learners with the opportunity to acquire knowledge, skills and competences furthering their careers and lives as democratic citizens as well as their personal development. We recognise that a more supportive environment for the staff to fulfil their tasks, is needed. We commit ourselves to working towards a more effective inclusion of higher education staff and students in the implementation and further development of the EHEA. We fully support staff and student participation in decision-making structures at European, national and institutional levels.

10. We call upon all actors involved to facilitate an inspiring working and learning environment and to foster student-centred learning as a way of empowering the learner in all forms of education, providing the best solution for sustainable and flexible learning paths. This also requires the cooperation of teachers and researchers in international networks.

11. We, the Ministers, reaffirm that higher education is a public responsibility. We commit ourselves, notwithstanding these difficult economic times, to ensuring that higher education institutions have the necessary resources within a framework established and overseen by public authorities. We are convinced that higher education is a major driver for social and economic development and for innovation in an increasingly knowledge-driven world. We shall therefore increase our efforts on the social dimension in order to provide equal opportunities to quality education, paying particular attention to underrepresented groups.

12. We, the Ministers responsible for the European Higher Education Area, ask the Bologna Follow-up Group to propose measures to facilitate the proper and full implementation of the agreed Bologna principles and action lines across the European Higher Education Area, especially at the national and institutional levels, among others by developing additional working methods, such as peer learning, study visits and other information sharing activities. By continuously developing, enhancing and strengthening the European Higher Education Area and taking further the synergies with the European Research Area, Europe will be able to successfully face the challenges of the next decade.

13. Our next Ministerial Meeting to take stock of progress and to drive the Leuven/Louvain-la-Neuve agenda forward, will be hosted by Romania in Bucharest on 26-27 April 2012.





Making the Most of Our Potential: Consolidating the European Higher Education Area

Bucharest Communiqué FINAL VERSION

We, the Ministers responsible for higher education in the 47 countries of the European Higher Education Area (EHEA) have met in Bucharest, on 26 and 27 April 2012, to take stock of the achievements of the Bologna Process and agree on the future priorities of the EHEA.

investing in higher education for the future

Europe is undergoing an economic and financial crieis with damaging societal effects. Within the field of higher education, the crisis is affecting the availability of adequate funding and making graduates' job prospects more uncertain.

Higher education is an important part of the solution to our current difficulties. Strong and accountable higher education systems provide the foundations for thriving knowledge societies. Higher education should be at the heart of our efforts to overcome the crisis – new more than ever.

With this in mind, we commit to securing the highest possible level of public funding for higher education and drawing on other appropriate sources, as an investment in our future. We will support our institutions in the education of creative, innoviative, critically thinking and responsible graduates needed for economic growth and the sustainable development of our democracies. We are dedicated to working together in this way to reduce youth unemployment.

The EHEA yesterday, today and tomorrow

The Bologna reforms have changed the face of higher education across Europe, thanks to the involvement and dedication of higher education institutions, staff and students.

Higher education structures in Europe are now more compatible and comparable. Quality assurance systems contribute to building trust, higher education gualifications are more recognisable across borders and participation in higher education has widened. Students today benefit from a wider variety of educational opportunities and are increasingly mobile. The vision of an integrated EHEA is within reach.

However, as the report on the implementation of the Bologna Process shows, we must make further efforts to consolidate and build on progress. We will strive for more coherence between our policies, especially in completing the transition to the three cycle system, the use of ECTS credits, the issuing of Diploma Supplements, the enhancement of quality assurance and the implementation of qualifications trameworks, including the definition and evaluation of learning outcomes.

We will pursue the following goals: to provide quality higher education for all, to enhance graduates' employability and to strengthen mobility as a means for better learning.

Our actions towards these goals will be underpinned by constant efforts to align national practices with the objectives and policies of the EHEA, while addressing those policy areas where further work is needed. For 2012-2015, we will especially concentrate on fully supporting our higher education institutions and stakeholders in their efforts to deliver meaningful changes and to further the comprehensive implementation of all Bologna action lines.

Providing quality higher education for all

Widening access to higher education is a precondition for societal progress and economic development. We agree to adopt national measures for widening overall access to quality higher education. We will work to raise completion rates and ensure timely progression in higher education in all EHEA countries.

The student body entering and graduating from higher education institutions should reflect the diversity of Europe's populations. We will step up our efforts towards underrepresented groups to develop the social dimension of higher education, reduce inequalities and provide adequate student support.



services, counselling and guidance, flexible learning paths and alternative access routes, including recognition of prior learning. We encourage the use of peer learning on the social dimension and aim to monitor progress in this area.

We reiterate our commitment to promote student-centred learning in higher education, characterised by innovative methods of teaching that involve students as active participants in their own learning. Together with institutions, students and staff, we will facilitate a supportive and inspiring working and learning environment.

Higher education should be an open process in which students develop intellectual independence and personal self-assuredness alongside disciplinary knowledge and skills. Through the pursuit of academic learning and research, students should acquire the ability confidently to assess situations and ground their actions in critical thought.

Quality assurance is essential for building trust and to reinforce the attractiveness of the EHEA's offerings, including in the provision of cross-border education. We commit to both maintaining the public responsibility for quality assurance and to actively involve a wide range of stakeholders in this development. We acknowledge the ENQA, ESU, EUA and EURASHE (the E4 group) report on the implementation and application of the "European Standards and Guidelines for Quality Assurance" (ESG)³. We will revise the ESG to improve their clarity applicability and usefulness, including their scope. The revision will be based upon an initial proposal to be prepared by the E4 in cooperation with Education International, BUSINESSEUROPE and the European Quality Assurance Register for Higher Education (EQAR), which will be submitted to the Bologna Follow-Up Group.

We welcome the external evaluation of EGAR and we encourage quality assurance agencies to apply for registration. We will allow EQAR-registered agencies to perform their activities across the EHEA, while complying with national requirements. In particular, we will aim to recognise guality assurance decisions of EQAR-registered agencies on joint and double degree programmes.

We confirm our commitment to maintaining public responsibility for higher education and acknowledge the need to open a dialogue on **funding and governance** of higher education. We recognise the importance of further developing appropriate funding instruments to pursue our common goals. Furthermore, we stress the importance of developing more efficient governance and managerial structures at higher education institutions. We commit to supporting the engagement of students and staff in governance structures at all levels and reiterate our commitment to autonomous and accountable higher education institutions that embrace academic freedom.

Enhancing employability to serve Europe's needs

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Today's graduates need to combine transversal, multidisciplinary and innovation skills and competences with up-to-date subject-specific knowledge so as to be able to contribute to the wider needs of society and the labour market. We aim to enhance the **employability** and personal and professional development of graduates throughout their careers. We will achieve this by improving cooperation between employers, students and higher education institutions, especially in the development of study programmes that help increase the innovation, entrepreneurial and research potential of graduates. Lifetong learning is one of the important factors in meeting the needs of a changing labour market, and higher education institutions play a central role in transferring knowledge and strengthening regional development, including by the continuous development of competences and reinforcement of knowledge alliances.

Our societies need higher education institutions to contribute innovatively to sustainable development and therefore, higher education must ensure a stronger link between research, teaching and learning at all levels. Study programmes must reflect changing research priorities and emerging disciplines, and research should underplin teaching and learning. In this respect, we will sustain a diversity of doctoral programmes. Taking into account the "Salzburg II recommendations" and the Principles for innovative

Europeen Association for Quality Assurance (2011): "Mapping the implementation and application of the ESG", European University Association (2010): "Satzburg II Recommendations";

¹⁴²



Doctoral Training.³ we will explore how to promote quality, transparency, employability and mobility in the third cycle, as the education and training of doctoral candidates has a particular role in bridging the EHEA and the European Research Area (ERA). Next to doctoral training, high quality second cycle programmes are a necessary precondition for the success of linking teaching, learning and research Keeping wide diversity and simultaneously increasing readability, we might also explore further possible common principles for master programmes in the EHEA, taking account of previous work⁴.

To consolidate the EHEA, meaningful implementation of **learning outcomes** is needed. The development, understanding and practical use of learning outcomes is crucial to the success of ECTS, the Diploma Supplement, recognition, qualifications frameworks and quality assurance – all of which are interdependent. We call on institutions to further link study credits with both learning outcomes and student workload, and to include the attainment of learning outcomes in assessment procedures. We will work to ensure that the ECTS Users' Guide⁵ fully reflects the state of on-going work on learning outcomes and recognition of prior learning.

We welcome the progress in developing qualifications frameworks: they improve transparency and will enable higher education systems to be more open and flexible. We acknowledge that realising the full benefits of qualifications frameworks can in practice be more challenging than developing the structures. The development of qualifications frameworks must continue so that they become an everyday reality for students, staff and employers. Meanwhile, some countries face challenges in finalising national frameworks and in self-certifying compatibility with the framework of qualifications of the EHEA (QF-EHEA) by the end of 2012. These countries need to redouble their efforts and to take advantage of the support and experience of others in order to achieve this goal.

A common understanding of the levels of our qualifications frameworks is essential to recognition for both academic and professional purposes. School leaving qualifications giving access to higher education will be considered as being of European Qualifications Framework (EQF) level 4, or equivalent levels for countries not bound by the EQF, where they are included in National Qualifications Frameworks. We further commit to referencing first, second and third cycle qualifications against EQF levels 6, 7 and 8 respectively, or against equivalent levers for countries not bound by the EQF. We will explore how the QF-EHEA could take account of short cycle qualifications (EQF level 5) and encourage countries to use the QF-EHEA for referencing these qualifications in national contexts where they exist. We ask the Council of Europe and the European Commission to continue to coordinate efforts to make the respective qualifications frameworks work well in practice.

We velocime the clear reference to ECTS, to the European Qualifications. Framework and to learning outcomes in the European Commission's proposal for a revision of the EU Directive on the recognition of professional qualifications. We underline the importance of taking appropriate account of these elements in recognition decisions.

Strengthening mobility for better learning

Learning mobility is essential to ensure the quality of higher education, enhance students' employability and expand cross-border collaboration within the EHEA and beyond. We adopt the strategy 'Mobility for Better Learning'⁶ as an addendum, including its mobility target, as an integral part of our efforts to promote an element of internationalisation in all of higher education.

Sufficient financial support to students is essential in ensuring equal access and mobility opportunities. We reiterate our commitment to full **portability** of national grants and loans across the EHEA and call on the European Union to underplin this endeavour through its policies.

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³ European Commission (2011) "Report of Mapping Exercise on Doctoral Training in Europe – Towards a common approach";

European University Association (2009): "Survey of Master Degrees in Europe")

Europeen Commission (2009) "EC15 Users' Guide";

⁸ Bucharest Ministerial Conference (2012) 'Mobility for Better Learning. Mobility strategy 2020 for the European Higher Education Area (EHEA/*,



Fair academic and professional recognition, including recognition of non-formal and informal learning, is at the core of the EHEA. It is a direct benefit for students' academic mobility, it improves graduates' chances of professional mobility and it represents an accurate measure of the degree of convergence and trust attained. We are determined to remove outstanding obstacles hindering effective and proper recognition and are willing to work together towards the automatic recognition of comparable academic degrees, building on the tools of the Bologna framework, as a long-term goal of the EHEA. We therefore commit to reviewing our national legislation to comply with the Lisbon Recognition Convention⁷. We welcome the European Area of Recognition (EAR) Manual⁴ and recommend its use as a set of guidelines for recognition of foreign qualifications and a compendium of good practices, as well as encourage higher education institutions and quality assurance agencies to assess institutional recognition procedures in internal and external guality assurance.

We strive for open higher education systems and better **balanced mobility** in the EHEA. If mobility imbalances between EHEA countries are doemed unsustainable by at least one party, we encourage the countries involved to jointly seek a solution, in line with the EHEA Mobility Strategy.

We encourage higher education institutions to further develop joint programmes and degrees as part of a wider EHEA approach. We will examine national rules and practices relating to joint programmes and degrees as a way to dismantle obstacles to cooperation and mobility embedded in national contexts.

Cooperation with other regions of the world and international openness are key factors to the development of the EHEA. We commit to further exploring the global understanding of the EHEA goals and principles in line with the strategic priorities set by the 2007 strategy for 'the EHEA in a Global Setting'⁸ We will evaluate the strategy's implementation by 2015 with the aim to provide guidelines for further internationalisation developments. The Bologna Policy Forum will continue as an opportunity for dialogue and its format will be further developed with our global partners.

Improvement of data collection and transparency to underpin political goals

We welcome the improved quality of data and information on higher education. We ask for more targeted data collection and referencing against common indicators, particularly on employability, the social dimension, lifelong learning, internationalisation, portability of grants/coans, and student and staff mobility. We ask Eurostat, Eurydice and Eurostudent to monitor the implementation of the reforms and to report back in 2015.

We will encourage the development of a system of voluntary peer learning and reviewing in countries that request it. This will help to assess the level of implementation of Bologna reforms and promote good practices as a dynamic way of addressing the challenges facing European higher education.

We will strive to make higher education systems easier to understand for the public, and especially for students and employers. We will support the improvement of current and developing transparency tools in order to make them more user-driven and to ground them on empirical evidence. We aim to reach an agreement on common guidelines for transparency by 2015.

Setting out priorities for 2012-2015

Having outlined the main EHEA goals in the coming years, we set out the following priorities for action by 2015

At the national level, together with the relevant stakeholders, and especially with higher education institutions, we will:

 Reflect thoroughly on the findings of the 2012 Bologna Implementation Report and take into account its conclusions and recommendations;

Council of Europer/UNESCO (1907): "Lisbon Convention on the Recognition of Qualifications concerning Higher Education in the European Region";

NUFFIC, Netherlands Organisation for International Cooperation in higher education (2012): "European Area of Recognition Manual";

⁹ London Ministerial Conference (2007): "European Higher Education in a Global Setting. A Strategy for the External Dimension of the Bologna Process".





- Strengthen policies of widening overall access and raising completion rates, including measures targeting the increased participation of underrepresented groups;
- Establish conditions that foster student-centred learning, innovative teaching methods and a supportive and inspiring working and learning environment, while continuing to involve students and staff in governance structures at all levels.
- Allow EQAR registered quality assurance agencies to perform their activities across the EHEA, while complying with national requirements.
- Work to enhance employability, lifelong learning, problem-solving and entrepreneurial skills through improved cooperation with employers, especially in the development of educational programmes.
- Ensure that qualifications frameworks, ECTS and Diploma Supplement implementation is based on learning outcomes;
- invite countries that cannot finalise the implementation of national qualifications frameworks compatible with QF-EHEA by the end of 2012 to redouble their efforts and submit a revised roadmap for this task;
- Implement the recommendations of the strategy "Mobility for better learning" and work towards full
 portability of national grants and loans across the EHEA;
- Review national legislation to fully comply with the Lisbon Recognition Convention and promote the use of the EAR-manual to advance recognition practices;
- Encourage knowledge-based aliances in the EHEA focusing on research and technology.

At the European level, in preparation of the Ministerial Conference in 2015 and together with relevant stakeholders, we will:

- Ask Eurostat, Eurydice and Eurostudent to monitor progress in the implementation of the Bologna Process reforms and the strategy "Mobility for better learning";
- Develop a system of voluntary peer learning and reviewing by 2013 in countries which request it
 and initiate a plot project to promote peer learning on the social dimension of higher education;
- Develop a proposal for a revised version of the ESG for adoption;
- Promote quality, transparency, employability and mobility in the third cycle, while also building
 additional bridges between the EHEA and the ERA;
- Work to ensure that the ECTS Users' Guide fully reflects the state of on-going work on learning outcomes and recognition of prior learning.
- Coordinate the work of ensuring that qualifications frameworks work in practice, emphasising their link to learning outcomes and explore how the QF-EHEA could take account of short cycle gualifications in national contexts;
- Support the work of a pathfinder group of countries exploring ways to achieve the automatic academic recognition of comparable degrees;
- Examine national legislation and practices relating to joint programmes and degrees as a way to dismantie obstacles to cooperation and mobility embedded in national contexts;
- Evaluate the implementation of the 'EHEA in a Global Setting' Strategy.
- Develop EHEA guidelines for transparency policies and continue to monitor current and developing transparency tools.

The next EHEA Ministerial Conference will take place in Yerevan, Armenia in 2015, where the progress on the priorities set above will be reviewed.

Appendix Main Developments in the Bologna Process

Date and place	Structures and process management			
Bologna 1999	- 27 countries signed the Declaration			
	 Process defined as based on intergovernmental cooperation and cooperation with non-governmental European organizations with competence in higher education. 			
	 Process initiated by governments, universities expected to respond promptly and positively 			
	 Follow-up process defined (biennial ministerial meetings with set preparatory group) 			
	 Process defined as dynamic: 'requires constant support, supervision and adaptation to the continuously evolving needs' 			
	- European Commission only a consultative member in the process			
Prague 2001	 Ministers welcomed the involvement of universities and other higher education institutions as well as students as competent, active and constructive partners in the establishment and shaping of a European Higher Education Area 			
	- European Commission recognized as a member in the process			
	 Membership in the process linked with membership in the European Community programmes Sociarias and Leonardo da Vinci or Traceos- Canos. 			
	Croatia, Cyprus and Turkey joined the process.			
	— Follow up group work structure formalized with the setting up of two bodies: 1) Follow Up Group composed of representatives of all signatories, new participants and the European Commission, and abould be <u>chaired by the EU Presidency</u> at the time: 2) Preparatory group composed of representatives of the countries hosting the previous ministerial meetings and the next ministerial meeting, two EU and two non-EU member states; these latter four representatives will be elected by the follow-up group. The EU Presidency at the time and the European Commission will also be part of the preparatory group which will be chaired by the representative of the country hosting the			
	next ministerial meeting.			
	— The European University Association (EUA), the European Association of Institutions in Higher Education (EURASHE), the National Unions of Students in Europe (ESIB) and the Council of Europe defined as consultative members in the follow-up work.			
	 The official Bologna seminars with topics were defined as elements of the follow-up work in order to explore key elements of the process and propose political recommendations. 			
Berlin 2003	 Albania, Andorra, Bomia and Herzegovina, Holy See, Rassia, Serbia and Montenegro and PYROM joined the process. 			
	 Series of official reporting was developed for the ministerial conference Progress Report commissioned by the Follow-up Group with official rapporteur. National reports, Trends report, etc. 			
	 The institution of the General Rapporteur for each ministerial meeting was abolished and the Stocktaking exercise was announced for the new ministerial summit. 			

Appendix Continued

Date and place	Structures and process management					
	 Ministers recognise the fundamental role in the development of the European Higher Education Area played by higher education institutions and student organisations. 					
	 UNESCO/CEPES defined as consultative member next to the Counce of Europe, the EUA, EURASHE, and ESIB. 					
	 Follow Up Group was asked to be convened at least twice a year, shall be chained not only by the EU Presidency but also by the host country of the next Ministerial Conference as vice-chair. 					
	— The Preparatory group was renamed Board with the mandate to oversee the work between the meetings of the Follow-up Group and is to be chaired by the EU Presidency and not by the representative of the country hosting the next Ministerial Conference.					
	— The Board is composed of the chair, the next host country as vice-chair, the preceding and the following EU Presidencies, three participating countries elected by the Follow-up Group for one year, the European Commission and, as consultative members, the Council of Europe, EUA, EURASHE and ESIB.					
	— The Follow Up group was clearly defined as the main follow-up decision making body mandated to to further define the responsibilities of the Board and the tasks of the Secretariat in its first meeting after the Berlin Conference.					
	 Bologna Secretariat provided by the country hosting the next Ministerial Conference was mandated to support the overall follow-up. 					
Bergen 2005	 Ukraine, Moldova, Azerbaijan, Georgia and Armenia joined the process. 					
	— The follow-up structure set up in Berlin was endorsed, with the inclusion of Education International (EI) Pan-European Structure, the European Association for Quality Assurance in Higher Education (ENQA), and the Union of Industrial and Employers' Confederations of Europe (UNICE) as consultative members of the Follow-up Group.					
	 The Follow-up Group was asked to explore the development of the Bologna Process after 2010. 					
	 The first Stocktaking report was presented and the issues for the next stocktaking were defined. 					
London 2007	 Montenegro joined the process. 					
	 E4 Group (EUA, ENQA, EURASHE and ESIB) extended its mandate to organize annual Quality Assurance Fors and develop practicalities of setting up a Register of European Higher Education Quality Assurance Agencies. 					
	 BFUG asked to report back on the overall development of the EHEA in a global context. 					
	 Stocktaking was widened to include more indicators and a development of the qualitative analysis in stocktaking, particularly in relation to mobility, the Bologna Process in a global context and the social dimension. 					

Appendix Continued

Date and place	Structures and process management
	— The commitment to continue the process after 2010 with a new reform agenda. IFPUG was asked 'to consider further how the EHEA might develop after 2010 and to formulate proposals for appropriate support structures, bearing in mind that the current informal collaborative arrangements are working well and have brought about unprecedented change'.
	- Follow-up structures did not change.
Leaven 2005	— The present organisational structure of the Bologna Process, characterised by cooperation between governments, the academic community with its representative organisations, and other stakeholders, is endorsed as being fit for purpose.
	 In future, the Bologna Process will be <u>co-chaired by the country</u> holding the EU presidency and a non-EU country.
	Robust reporting and monitoring structures were set: 'Stocktaking will further refine its evidence-based methodology; Eurostat together with Eurostudent and in cooperation with Eurydice will be asked to contribute through relevant data collection: The work of reporting will be overseen by the Bologna Follow-up Group and will lead to an overall report integrating the aforementioned sources for the 2012 ministerial conference';
	 The ministerial meetings after 2010 are scheduled for 2012, 2015, 2018 and 2020.

APPENDIX B: CODEBOOK

Codebook Analysis of Action Line Prevalence

Unit of Data Collection: Each communiqué document represents the discourse recorded during Biannual Ministerial meetings from 1999 to 2012.

Coder ID: Indicate the assigned number of the individual who coded the coding sheet

- 1. Coder One: Dissertation Author, Cheryl Wink
- 2. Coder Two: PhD Student in Statistics & Research Methods, Paige Alfonzo

Character name and Description:

Critical Variable/Construct Prevalence: Indicate whether the construct is never mentioned, rarely mentioned, occasionally mentioned or frequently mentioned within each communiqué.

- 1. Never: If a construct is represented by 0 words within the communiqué
- 2. Rarely: If a construct is represented by 0 words within the communiqué
- 3. Occasionally: If a construct is represented by 0 words within the communiqué
- 4. Frequently: If a construct is represented by 0 words within the communiqué

Total Prevalence: Based on the baseline degree of prevalence set to 5 words, divide the total word count by 5 to derive a total prevalence score.

- 1. Never: Total words divided by 5
- 2. Rarely: Total words divided by 5
- 3. Occasionally: Total words divided by 5
- 4. Frequently: Total words divided by 5

Actor Involvement: If the actor listed has been noted as being present at the respective ministerial meeting of the communiqué coded, a score of either zero or one should be recorded.

- 1. Present: Record a score of one
- 2. Not Present: Record a score of zero

APPENDIX C: LIST OF 79 THEMES AND SUBTHEMES

Adoption of a system

Encouraged national legislation

Higher education = public good

Higher education = responsibility

Regulations are in place

Students are part of HE community

Learning communities

Students participating partners

Environment of trust

Environment of relevance

Environment of mobility

Environment of compatibility

Environment of attractiveness

Recognize social dimension of HE

Characteristics of system

Easily readable

Comparable degrees

Levels of degrees

Articulation agreements in place

Recognition of credentials

Transnational education

Recognition of national uniqueness

Adoption cycles

Undergraduate

Graduate

Levels of coursework

Differentiated degree requirements

Response to individual goals

Response to market needs

Response to labor shortages

Preparation for career employability

System of credits

Common course content

Transferability of credits

Uniform quality assurance system

Course availability across countries

Attractiveness of offerings

Competitiveness of offerings

Diploma Supplement

Mobility

Support for mobility of faculty

Support for mobility of students

Support for mobility of researchers

Quality assurance

Elements defined

High quality courses

Comparability of courses

Comparability of faculty credentials

Share best practices

Mutually accepted evaluation schema

Accreditation (role of)

Certification

Develop common framework of QA

Information efforts

Research expertise

Course content

European influences

Institutional partnerships

Joint degree programs

Lifelong learning

Support lifelong learning

Offer informal learning

Competency enhancement

Skill development

Universal accessibility

Improve quality of life

Follow-up steps

Accept new members

Shepherd preparatory members

Consult HE organizations

Specific progress areas

Review the issues

Importance of strong HE system

Europe's economic and financial crisis

Damaging societal effects of crisis

Inadequate funding for graduate job

prospects

Lack of availability of job prospects

Public investment in HE held as a

priority

APPENDIX D: FOUR-CLUSTER SOLUTION

	Defining Bologna	Major Action Lines	Faculty & Follow- Up Group	Economic & Social Growth
Adoption of a system				
encouraged national legislation				
nigher education = public good				
nigher education = responsibility				
regulations are in place				
students are part of HE community				
_earning communities				
students participating partners				
environment of trust				
environment of relevance				
environment of mobility				
environment of compatibility				
environment of attractiveness				
ecognize social dimension of HE				
Characteristics of system				_
easily readable				
comparable degrees				
evels of degrees				
articulation agreements in place				
recognition of credentials				
transnational education				
recognition of national uniqueness			_	
Adoption cycles				_
Undergraduate		_		
Graduate				_
Levels of coursework				
Differentiated degree requirements				
Response to individual goals				
	1 7 4			

			Faculty	
		·	&	_ ·
		Major	Follow-	Economic
	Defining	Action	Up Croup	& Social Crowth
	DOIOgila	Lines	Group	Growth
Response to market needs				
Response to labor snortages				
Preparation for career employability				
System of credits				
common course content				
transferability of credits		_	_	I
uniform quality assurance system				
course availability across countries				
attractiveness of offerings				
competitiveness of offerings				
Diploma Supplement				
Mobility				
support for mobility of faculty				l i
support for mobility of students				
support for mobility of researchers				
Quality assurance				
elements defined				
high quality courses				
comparability of courses				
comparability of faculty credentials				
share best practices				
mutually accepted evaluation schema				
accreditation (role of)				
certification				
develop common framework of QA				
information efforts (transparency?)				
research expertise				
Course content				
European influences				
institutional partnerships				
joint degree programs			_	
Lifelong learning				
support lifelong learning				
offer informal learning				

	Defining Bologna	Major Action Lines	Faculty & Follow- Up Group	Economic & Social Growth
competency enhancement				
skill development				
universal accessibility				
improve quality of life				
Follow-up steps				
accept new members				
shepherd preparatory members				
consult HE organizations				
specific progress areas				
review the issues				
Importance of strong HE system				
Europe's economic and financial crisis				
Damaging societal effects of crisis				
Inadequate funding for graduate job				
prospects				
lack of availability of job prospects				
public investment in HE held as a				
priority Data Callestian				
Data Collection				