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**European Policy Uses of International  
Comparisons of Academic Achievement**

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### **Introduction**

International large-scale assessments (ILSAs) and the resulting ranking of countries in key academic subjects have become increasingly significant in the development of global performance indicators and national level reforms in education. As one of the largest international surveys, the Programme for International Student Assessment (PISA) has had a considerable impact on the world of international comparisons of education. Based on the results of these assessments, claims are often made about the relative success or failure of education systems, and in some cases, such as Germany or Japan, ILSAs have sparked national level reforms (Ertl, 2006; Takayama, 2007, 2009).

In this paper, I offer an analysis of how PISA is increasingly used as a key reference both for a regional<sup>2</sup> entity like the European Union (EU) and for national level performance targets in the example of Spain (Breakspear, 2012). Specifically, the paper examines the growth of OECD and EU initiatives in defining quality education, and the use of both EU benchmarks and PISA in defining the education indicators used in Spain to measure and set goals for developing quality

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<sup>2</sup> The use of "regional" in this paper points to organizations that operate above the level of the nation-state, rather than the European Studies and EU definition of "regional," which typically refer to sub-national entities found within and across nation-states.

education. By doing so, this paper points to the role of the OECD and the EU in national education systems. It therefore adds to a body of literature pointing to the complex relationship between international, regional, and national education policy spaces (cf. Dale & Robertson, 2002; Lawn & Grek, 2012; Rizvi & Lingard, 2009).

### **Education Policy Uses of ILSAs**

Driven by discourses of “human capital formation” and the “global knowledge-based economy,” international organizations like the Organization for Economic and Co-operative Development (OECD), the World Bank, the United Nations of Educational, Scientific, and Cultural Organization (UNESCO), and the EU have each developed explicit interests in education. Indeed, much has been written about the role and impact of different international and regional organizations on education (Dale & Robertson, 2002; King, 2007; Mundy, 2006; Rizvi & Lingard, 2009). These international organizations, in different ways, initiate international cooperation with the aim of facilitating more or better quality education. They often do this by providing platforms for Ministers of Education and other officials to share, borrow, or trade determined best practices, and by developing sets of global indicators. ILSAs play a significant part both in cross-national policy borrowing and in the development of global education indicators.

Since the 1990s, comparative educational assessments of educational achievement have exploded in terms of the number of assessments, the subjects they test (ranging from mathematics, science and literacy to teacher effectiveness, adult learners, and civics and citizenship), and the number of participating countries (Kamens & McNeely, 2010). These trends also include a growing number of developing countries that participate in ILSAs (Kamens & Benavot, 2011). ILSAs, however, have a longer history, dating back to the 1950s when organizations, such as UNESCO and the OECD “intensified the exchange and accumulation of data relating to the different

patterns of educational organizations, curricula, and teaching methods” (Postlethwaite, 1999, p. 7). The International Association for the Evaluation of Educational Achievement (IEA), an organization of almost 70 countries, for example, began to conduct international tests of academic achievement in a range of subjects starting in 1964. Therefore while international tests of academic achievement are not new, there has been considerable growth in assessments and their popularity over the past two decades.

As one of the largest and most influential international surveys, the OECD’s PISA compares 15-year old students’ (an age at which young people are near completion of compulsory education in many systems) competencies in reading, mathematics, and science. PISA follows a three year cycle, with each cycle emphasizing one of the key subjects. In 2000, the focus of the test was literacy (43 systems participated); in 2003, the focus was mathematics (41 systems participated); in 2006, the focus was science literacy (57 systems participated); in 2009, reading literacy was the focus (65 systems participated, with nine additional systems participating in the same assessment in 2010) (OECD, n.d.). PISA 2012 is currently underway, with 65 systems participating<sup>3</sup>. The objective of PISA is to test students on their application of knowledge to a range of “real-life” scenarios indicative of young people’s ability to be “equipped for full participation in society” (OECD, <http://www.oecd.org/pisa/aboutpisa/>, para. 4).

From these assessments, comparisons are frequently made between systems, often based on average scores and rankings of countries, which are then picked up by politicians, the media, and the public. Research has explored the range of national policy and political uses of ILSAs (Schwippert, 2007), including for example the impact and utilization of PISA in Japan

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<sup>3</sup> As reported recently in the *Times of India*, India dropped out of PISA 2012 after disappointing results on the test. See [http://articles.timesofindia.indiatimes.com/2012-08-03/mumbai/33019239\\_1\\_india-backs-global-stage-math-and-science](http://articles.timesofindia.indiatimes.com/2012-08-03/mumbai/33019239_1_india-backs-global-stage-math-and-science)

(Takayama, 2007, 2009) and Germany (Ertl, 2006; Martens & Niemann, 2010). As what is perhaps a useful framework for understanding ILSAs and national education reform, at the ETS 2012 conference, Jo Ritzen referred to ILSAs as “change agents.” For some education systems, ILSAs provide what Phillips and Ochs (2003) refer to as a “negative external evaluation” used to spark or legitimize reform efforts in a system (p. 452). In others, ILSAs serve as part of the “pre-conditions of [education policy] borrowing” or the basis for identifying which systems might be worthy to borrow from (Phillips & Ochs, 2003, p. 452; Engel, Williams, & Feuer, 2011).

Taking a broad sweep to examining the influence of ILSAs, and specifically PISA in different OECD countries, Breakspear (2012) described two primary ways in which PISA seems to be utilized in national education policy-making. First, PISA can be used in policy-making processes, illustrated by reforms in education policies and practices in light of the country’s performance on PISA and/or the use of PISA policy findings, such as reference to high performing systems within national education reform debates. The second way that PISA may be used is through normative national policy instruments, such as the use of PISA in national assessment and evaluation policies and practices, setting PISA-referenced curriculum standards, and setting and monitoring PISA-based performance targets and indicators.

In Europe, the impact and utilization of ILSAs in education over the past decade has been highly varied by context. For example, on the one hand, ILSAs have brought the attention of the world to Europe, in which policy-makers and government officials worldwide have flocked to Finland to seek answers to some of their toughest educational problems. Indeed, the top performance of Finland on PISA has led to a growth in interest in understanding the reasons underlying the success of the Finnish education system (Sahlberg, 2011; Simola, 2005; Takayama, 2009; Valijarvi et al., 2002). As an interesting side note, whereas Finland has

performed at the top of PISA, it has not performed as well on one of the other major assessments, Trends in Mathematics and Science Study (TIMSS); yet, Finland is regarded as a leading “foreign example” of educational success. The growth in popularity of Finland may also suggest the extent to which PISA has become dominant in the world of international education comparisons.

In contrast to Finland, ILSAs for other European systems have been used to bring attention to the need for education reform. In some of the more dramatic cases, ILSAs have become the tools by which reformers and policy-makers rationalize the need to break down and rebuild a system. For example, one of the most well-documented and popular cases is Germany. After a mediocre performance on PISA 2000, Germany responded with a complete overhaul of the system, known as PISA shock (Ertl, 2006; Grek, 2009). In a more subtle set of changes, Teodoro and Estrela’s (2012) study of the Portuguese system showed that PISA is a “working tool in the definition and redirection of education policies” (p. 628). Although PISA has not led to a dramatic restructuring of the Portuguese education system, Teodoro and Estrela (2012) show that PISA was influential in guiding the education and curriculum policies in the period up to 2007.

In her comparative study of the impact of PISA 2000 on educational governance in Finland, Germany, and the United Kingdom, Grek (2009) found these same varied responses. Compared to Germany’s PISA shock, Finland experienced a “PISA-surprise.” PISA 2000 did not have an impact on the UK’s media or the public, nor did it spark any education reforms. Rather, the government utilized PISA to highlight what the government saw as solid education outcomes. Despite these different reactions, Grek (2009) argued that in each of the three contexts, PISA had an impact on national education governance. Of course, ILSAs have not only

had an impact on the national level. Some research has also highlighted the role of different institutions, including the EU and its use of ILSA data. For example, Rutkowski and Engel (2010) showed in the case of the IEA's 2009 International Civics and Citizenship Study (ICCS), that the EU took an active role in funding and managing the European regional module of ICCS as a form of asserting regional power.

Despite the growing interest of research and popular media focused on ILSAs, there is a continued need to better understand the diverse ways in which these assessments are actually utilized in the education policy formation process in different national contexts. This paper aims to add to the body of literature on this topic, exploring how PISA is increasingly used as a reference both for the EU and national level performance targets and indicators (Breakspear, 2012).

### **Context for the Study: Spain**

In the post-Franco era, Spain has undergone tremendous political, economic, and cultural change. It has been transformed from a highly centralized state under the authoritarian dictatorship of General Francisco Franco to a decentralized *Estado de Autonomías* (State of Autonomies) and one of the EU's core democracies, which it joined in 1986. In 1978, the Spanish Constitution was adopted, marking the transition into an era of democratization. This process has led to a reinvention of the modern Spanish state and a total overhaul of many areas of Spanish public policy, including education. This has included embracing decentralization as a cornerstone of democratization. The Spanish Constitution formally and officially recognized 17 autonomous communities, including the national communities of Catalonia and the Basque Country.

Before the death of Franco in 1975, the first Spanish law of education was passed, representing one of the final laws passed during the dictatorship. The 1970 General Law of Education (*Ley General de Educación-LGE*) represented the first major educational act since 1857. The law emphasized equality of educational opportunity and the benefits of a meritocracy, which was seen as the first stage in achieving a modern capitalist state and society. Bonal (2000) pointed out that the “rhetoric [of meritocracy and equality] and the European expansion of education in the sixties stimulated a rise in educational expectations and, therefore, generated pressures to expand the education system” (p. 203). It is out of the 1970 legislation that a system of modern mass education in Spain was born. Since the Spanish law of education in 1970, six major national policies (in the form of federal legislation) have been passed with the last and current Law of Education (LOE, 2006). Table 1 provides a brief overview of these acts and some of the key reforms in education and curricular policies initiated by each act.

*Table 1: Brief historical overview of Spanish educational legislation (1970-2006)*

| Year/Law  | Some key reforms in education  |
|---|--|
| 1970 General Law of Education (LGE)   | Establishing a compulsory education system to age 14.<br>Emphasis on equal educational opportunity and meritocracy.  |
| 1980 Organic Law on the Education System (LOECE)  | Emphasis on free school choice.  |
| 1985 Organic Law on the Right to Education (LODE)   | Decentralization of educational responsibility.  |
| 1990 Organic Law on the General Organization of the Educational System (LOGSE).                   | Mandated free and compulsory basic education until 16.<br>Reduction of educational inequity and inequality.<br>Mandated improvements in teaching quality.<br>Focused on evaluation of Spanish education.<br>Introduced a more flexible curriculum model. |
| 1995 Organic Law on Participation, Assessment and Governance of Institutions of Education (LOPEG) | Created new developments in educational investigation, inspection, and evaluation.<br>Focused on quality assurance in education.   |
| 2002 Organic Law on Quality in Education (LOCE)   | Improved early school leavers.<br>Further developed a system of evaluation and control.<br>Introduced tracking to provide greater flexibility.   |
| 2006 Organic Law on Education (LOE)   | Promoted active citizenship, equality opportunities, and social cohesion.  |

Source: Bonal's (1998, 2000); Bonal & Rambla (1996)

One of the unique features of the Spanish education system is its decentralized system of governance. Educational competencies are shared between the central state (represented by the Ministry of Education, Social Policy and Sport), the 17 Autonomous Communities, and local administrations (established by provinces and municipalities). The powers allotted to the central state include the regulation and general planning of the entire state system and the establishment of standards for common curriculum areas, such as Spanish history, *castellano* (the official Spanish language), mathematics, and science. The system of shared curricular control is regulated through a system of “minimum academic requirements” or “minimums.” The system of minimums mandates that 65% of the curriculum of secondary schools (55% in Communities with an official sub-national language, such as in Catalonia, the Basque Country, and Galicia) must reflect a national (in this sense, a Castilian) focus, and the remaining 35% is left up to the governments of the 17 Autonomous Communities. There is a central inspectorate, created in 1979 to ensure that the federal laws of education were fully implemented at the sub-national and local levels in accordance with the law’s established principles.

The implementation of education policy dictated by the central state and the remainder of educational responsibilities, such as the design of academic programs to support cultural, linguistic, and economic development of regional communities, is reserved for the Autonomous Communities. In this way, although the official curriculum has a certain amount of homogeneity, particularly around objectives and attainment targets, there is variation in terms of content across the 17 Communities. Teachers possess substantial autonomy, both in their design and delivery of curriculum. They design curricular plans, which include aims, content, and assessment targets, and draw up class programs to implement the curricular plan (INCA, 2009).

## **Methods**

To carry out this study, I use evidence from education policies as represented in official, public education policy documents and legislation generated by the OECD, EU, and the Spanish government. I understand policy formation in this paper as a messy, uneven, and contentious process, produced in and influenced by a whole range of different political actors (Stone, 1988). Although policy can be understood as actual text of a policy, it is also can be understood as a space within which discourses about policy operate (Ball, 1994). From this perspective, analysis of key documents went beyond the actual policy text to also consider wider processes of policy negotiation and construction. This calls attention to agency and the important role of actors in mediating external pressures on national systems (Engel, 2009; Grek, 2009; Takayama, 2007).

Analysis of key policy texts were led by Rizvi and Lingard's (2009, p. 54-55) questions on policy issues, including Where did this policy originate? Why was it adopted and why in the current period? Other key questions took a more policy and textual focus: What discourses frame the policy text? Who has advocated and promoted the policy and why? What policy communities and/or policy networks have been involved in the processes of policy production? Policy documents were then analyzed specifically for references to Europe, the EU, OECD, and specific ILSAs (e.g. TIMSS, ICCS), with particular focus on PISA. I explored the selected nation-state level documents to better understand the use of Europe and the EU as key references in the Spanish system of education. I also specifically analyzed the documents for the use and influence of PISA as an indicator or benchmark in the Spanish system of education.

I supplemented findings from the above policy and document analysis with data from sub-national and national governmental officials and policy-makers, representatives of educational agencies, and policy analysts and representatives of the OECD and European Commission. Interviews were carried out face-to-face in a semi-structured format. Fieldwork for

this study was conducted in 2005 and 2006. Therefore, it is not possible to generalize from these data to current policy-makers' perspectives. Nonetheless, perspectives from this period serve as a significant source of data for understanding the use of EU benchmarks on the current state-level Spanish policy of education (LOE, 2006), and the use of PISA and EU benchmarks on the development of Spanish indicators over the past decade. Questions were largely open-ended and reflective, focused on individual system agent's perceptions and experiences of the impact of the European Union, the OECD, and PISA specifically. For example, interview subjects were asked to consider whether and to what extent European and OECD priorities have influenced education at the sub-national and national levels in Spain. They were also asked whether and to what extent PISA data had an effect on any changes in education policies. This lends a supplementary perspective from actors involved in the process of education policy formation.

## **Findings**

Findings from this study broadly point to the role that the EU and the OECD have played in areas of Spanish education policy reform. Specifically as a mechanism for measuring quality and effectiveness of an education system, PISA is used in the development of both European and Spanish education indicators. The use of PISA may suggest that the OECD influences not only the national space for education policy-making, but also the EU, helping to facilitate a process of Europeanization (Lawn & Grek, 2012). In the discussion that follows, findings are organized around the following two themes: The growth of EU and OECD initiatives in defining "quality education," and the use of Europe and PISA as key references in Spanish education policy.

### **Growth of EU and OECD initiatives in quality education**

During the 1990s, the OECD made explicit links between education and the economy (Rizvi & Lingard, 2006) and highlighted the need for greater educational effectiveness and

quality. Three reports from the 1990s stick out as particularly illustrative. First, the OECD's (1995) report, *Governance in Transition: Public Management Reforms in OECD Countries*, argued for the need for more effective management and governance structures and practices, among them accountability, transparency and decentralization. These were considered the ingredients for what they termed, "good governance." Following this was the OECD's (1996) report, *The Knowledge Based Economy*, which pressed the economic goals of education as key priorities, underpinning the dominant idea that education is the key instrument for economic success in a competitive global marketplace. A third OECD report, published in 1998, provided further articulation of the growing importance placed on education on the part of economists. The report, *Human Capital Investment: An International Comparison*, argued that governments have to invest in the development of specific skills and competencies, which makes up the "'stock' of human capital" considered key for a country's long term global competitiveness (p. 15).

Starting in 1997, the OECD developed the project, Definition and Selection of Key Competencies (DeSeCo), serving as the basis for PISA. DeSeCo involved Ministers of Education of OECD countries, who collaborated in the construction of a conceptual framework that defined the competencies to be identified by PISA and which could be used to guide the broader goals of national education systems. The questions they sought to address were:

What skills and competencies are needed for individuals to lead a successful and responsible life and for society to face the challenges of the present and future? What are the normative, theoretical, and conceptual foundations for defining and selecting a limited set of key competencies? (OECD, n.d., para. 1)

DeSeCo's final report (2003), entitled *Key Competencies for a Successful Life and a Well-Functioning Society*, aimed at maximizing knowledge production in key areas of the global, modern society (Rychen, & Salganik, 2003); in other words, "knowledge that is transferable and segmented into skills" (Teodoro & Estrela, 2012, p. 627).

Over the past decade, one of the OECD's major projects in education is the development of specific indicators, allowing member state countries to benchmark their progress and focus their reform efforts in particular areas. A leading example is the OECD's *Education at a Glance*, its annual compilation of statistics and indicators. In their analysis of the thematic focus of the indicators included in *Education at a Glance* from 1996-2007, Teodoro and Estrela found a notable shift in focus from the 1990s to the 2000s. They defined what they saw as the new development of output-centered indicators in the 1990s that included "organizational contexts, life-long learning, and the transition from schooling to worklife. At the beginning of the 21st century, the indicators are related to education performance, quality of outcomes, educational provision, equity, and efficiency in resources management" (p. 628). They stated, "In the second half of the 1990s the indicators were related to context and costs; the market/society relationship; equity; and results. At the beginning of the new millennium they were related to context, costs, and results" (p. 628). As I discuss below, there is a similar narrowing of indicators to these three areas in the Spanish system.

Ideas about the relationship between knowledge production and economic growth have been equally influential in the development of a European education (Hingel, 2001), in which knowledge and innovation are considered at the heart of European economic growth. The importance assigned to education in Europe and the direction of EU education policies and initiatives has been guided most prominently by the Lisbon Declaration in 2000, which stated

that Europe was “to become the most competitive and dynamic knowledge-based economy in 2010 with more and better jobs and greater social cohesion” (Commission of the European Communities, 2000). With the Lisbon Strategy also came a focus on developing a set of common principles of quality education and what was termed quality evaluation, intended to measure agreed upon indicators for quality education (European Parliament and Council, 2001; Hingel, 2001; Nóvoa & Lawn, 2002). From the European Parliament and Council’s (2001) report, one of the recommendations to the European Commission was to establish a “database for the dissemination of effective tools and instruments of school quality evaluation,” containing “examples of good practice” (European Parliament and Council, 2001, Section II.1.2).

Sixteen indicators of quality education were developed in May 2000 (European Commission, 2001). These indicators addressed educational attainment, educational success and transition, ways of monitoring school education, and educational resources and structures (European Commission, 2001). The 16 indicators were both guided by and linked to the manufacturing of data from different ILSAs. TIMSS data, for example, is used as a form of evidence determining educational attainment across European systems. The IEA’s Civic Education Study (CIVED) is also mentioned as a key data source for establishing indicators in citizenship and civics education. Moreover, the European report’s timing (2001) corresponds with the first cycle of PISA, which appears as a frequent reference. For example, the Commission report stated that

in 2001, PISA data in this area will be available for the first time and will provide a new source of European level data. With a more informed body of data, future indicators will identify the acquisition of learning to learn skills at key stages of schooling. (p. 30)

In 2001, Ministers of Education of all EU member states agreed to adopt a set of common and long-term educational objectives in alignment with the Lisbon Strategy, known as the European Commission's Education and Training (ET) 2010 program. Quality and efficiency of education was one of the core areas, along with lifelong learning, social cohesion, and active citizenship. The Commission's ET 2010 program set five benchmarks for European systems, including a reduction in the percentage of drop-out rates to no more than 10%, a reduction in low-achieving pupils in reading by at least 20%, ensuring at least 85% of young people complete upper secondary education, an increase in the number of graduates in math, science, and technology fields by at least 15%, particularly female graduates, and an increase in the percentage of adults (25-64) participating in lifelong learning to 12.5% (European Commission, 2012b, Monitoring Progress).

The EU at this time began to look increasingly towards developing systems to measure progress in these areas. EU reports frequently mention the importance of indicators and benchmarks. For instance, a 2007 European Commission document emphasized the role that indicators and benchmarks play in setting and monitoring policy changes necessary to meet the goals set out by the Lisbon Strategy:

indicators and benchmarks are key elements of evidence-based policy making and the monitoring of progress essential to the Lisbon process. They provide the tools for: Statistical underpinning of key policy messages; Analysing progress towards Lisbon objectives, both at the EU and national levels; Identifying examples of good performance which could be subject to peer review and exchange; Comparing EU performance with that of third countries, such as the US and Japan. (European Commission, 2007, p. 1)

The Commission's ET 2010 program and its set of indicators and benchmarks have served as the basis for the EU's current Europe2020 growth strategy. In a response to the global financial crisis, Europe2020 set five ambitious goals for the EU, including those related to employment, innovation, education, social inclusion, and climate/energy. Each of these is considered key to "smart, sustainable and inclusive growth" (European Commission, 2012a, p. 1). The strategy maintains the previous policy's emphasis on quality and efficient education systems, defined and measured by the following benchmarks and targets for educational progress to achieve by 2020 (European Commission, 2012a)

1. At least 95% of children between the age of four and the age for starting compulsory primary education should participate in early childhood education;
2. The share of 15-year-olds with insufficient abilities in reading, mathematics and science should be less than 15%;
3. The share of early leavers from education and training should be less than 10%;
4. The share of 30 to 34-year-olds with tertiary educational attainment should be at least 40%;
5. An average of at least 15% of adults should participate in lifelong learning

One of the key education benchmarks in the EU's growth strategy is the performance of 15 year olds in reading, mathematics and science. Here, PISA provides the data used in this indicator and therefore, a gauge used to measure "the state" of European education. Through this lens, PISA can act as a powerful reference point for European measurements of quality education. Given the explicit underscoring of education as key to the EU's approach to economic growth, this benchmark is not trivial. Rather, it can be highly influential as national policy-

makers, particularly in countries in considerable financial distress, look to make education and curricular policy reforms.

### **Europe and PISA as references in Spanish education policies**

The ideas of educational effectiveness and quality that developed in the 1990s, including those by the OECD and the EU, appear to be influential in the Spanish system. During the 1990s, Spain turned more of its attention to educational reforms aimed at building a higher quality system of education. Spain's accession into the EU and its participation in projects and conferences of the OECD and UNESCO is cited as a major impetus for its focus on quality and effectiveness (LOE, 2006). For example, out of a November 1990 meeting held by the OECD for Ministers of Education of member countries, several initiatives were launched, including a focus on increasing educational effectiveness, attention to enhancing the quality of teaching, an increase in the flexibility of educational systems, and the promotion of equality of educational opportunities. The Spanish Minister of Education's participation in this meeting is cited as one of the influencing factors in the shift in focus of Spanish reform efforts during the 1990s toward effectiveness and quality education (LOE, 2006, Preamble). The LOE (2006) also described the nation-wide focus on better quality education in the 1990s as growing also out of Spain's participation in some of the early international tests of academic achievement, which "provided evidence of insufficient performance" (LOE, 2006, Preamble, p. 26-27).

The current policy, in its aim for "quality education for all," establishes three principles: quality for all, shared effort, and integration in Europe (López, 2006, p. 14). The LOE (2006) attributes the inspiration for these core principles to the EU and its education objectives. The policy states in its Preamble: "the process of constructing Europe has brought about a certain convergence of educational systems, which has translated into the establishment of common

educational objectives for the beginning of the 21<sup>st</sup> century” (p. 30). This sentiment is also reflected in data from interviews with policy-makers. One Spanish education policy-maker described the EU as “exercising great pressure” on national systems of education, particularly through cross-national data produced by the OECD and EU educational indicators, viewed as a “major source of motivation” (personal communication).

The LOE (2006) lays out as an objective for the Spanish system the use of European benchmarks to determine Spanish educational progress in comparison with other EU Member States. The law itself and the corresponding financial report set aside 1,269,321,000 Euros dedicated to reaching the 10 ET benchmarks to be achieved by 2010 (Ministry of Education, 2011b). Directly relating to ET and Europe2020 benchmarks, these objectives included an increase in schooling rates at the early childhood level, increase rates of post-compulsory education, improve educational attainment for all students at the compulsory level, and to promote citizenship, social cohesion, equal opportunities, and lifelong learning (Ministry of Education, 2011b). Rather than lofty goals, each of these areas is measured against and monitored by indicators in specific system and curricular areas, including by PISA, which is used as a system-wide barometer of academic attainment.

The focus on quality education and the use of indicators with which to measure progress within the Spanish system was solidified much earlier in the 1990s with two national acts: the LOGSE (1990), from which the current law is based, and the LOPEG (1995). Specifically, the LOGSE (1990) pointed to the importance of excellence in education, addressing inequity in educational opportunities, a more flexible curriculum model, making improvements of teacher quality (Fierro, 1994; Petrongolo & San Segundo, 2002), and as Bonal (1998) stated, “an explicit objective to not lose ground in the process of European convergence” (p. 156, my translation).

The LOGSE launched the *Instituto Nacional de Calidad y Evaluación* (National Institute of Quality and Evaluation [INCE]), now known as the National Institute of Educational Evaluation (INEE), which was aimed at designing and carrying out evaluations of the Spanish education system. The follow up education act, LOPEG (1995) focused explicitly on new developments in educational investigation, inspection, and evaluation as a way of ensuring quality within the Spanish system (MEC, 1999; LOE, 2006). Attention was on regulating evaluations of educational institutions and creating mechanisms for quality assurance.

With the LOGSE's (1990) initiation of the INCE, the State System of Educational Indicators (*El sistema estatal de indicadores de la educación* [SEIE]), was developed in 1993 "in light of the preparation of other international indicators that began to be published in the early 1990s" (National Institute of Educational Evaluations, n.d., first paragraph; my translation). The SEIE creates, maintains, and disseminates a set of nation-wide educational indicators in key areas to build both quality and equity within the Spanish system (National Institute of Educational Evaluations, n.d.). There have been eight major reports of indicators published. The following table presents an overview of the SEIE indicator project, its key areas of focus, and new developments. This overview is suggestive of the ways in which national-level indicators have become increasingly aligned with European and international indicators and goals. It also provides an illustration of the use of PISA as a key source of data and a reference point for the measurement of priority areas of Spanish education policy.

*Table 2: The development of the Spanish State System of Educational Indicators (SEIE), 2000-2011*

| Edition | Year | Number of indicators | Key areas of focus and new developments   |
|---------|------|----------------------|---|
| 1       | 2000 | 29                   | Five dimensions including contextual factors, resources, schooling, processes, educational results  |
| 2       | 2002 | 35                   | Continuation of focus with some slight changes, new indicators included continued training and professional development, number of teaching hours, tracking, mentoring. |
| 3       | 2004 | 38                   | Continuation of focus and increase in number of indicators. Explicit mention of alignment between Spanish and European education benchmarks and PISA.                   |
| 4       | 2006 | 38                   | Developed a separate and new report on the 15 priority indicators aligned with European Education and Training 2010 goals   |
| 5       | 2007 | 38                   | Highlighted the importance of the 15 priority indicators, including an alignment with PISA 2006   |
| 6       | 2009 | 38                   | Continued the focus, though modified the format and   |

|   |      |  |    |   |
|---|------|--|----|---|
|   |      |  |    | abbreviated the discussion of each indicator  |
|   |      |  |    | Reduce the number of indicators to 16 focused on three areas: Schooling, finance, results.  |
| 7 | 2010 |  | 16 | Indicators aligned explicitly with European and Spanish objectives (Ministry of Education, 2011a) and OECD's <i>Education at a Glance</i>                             |
| 8 | 2011 |  | 16 | Correspondence of indicators with 2010 secondary education data, PISA 2009, and results from the International Civic and Citizenship Study (ICCS, 2009 <sup>4</sup> ) |

Source: National Institute of Educational Evaluations, n.d

<sup>4</sup> The International Civics and Citizenship Study (ICCS) 2009 was an international survey led by the IEA. As a follow up study to the IEA's CIVED, its intent is to examine how educational systems help prepare young people to become future citizens (Brese, Jung, Mirazchiyski, Schulz, & Zuehlke, 2011).

As shown in the table above, in the early period of indicator development, the focus was on five dimensions included contextual factors, resources, schooling, processes and educational results. As the system of indicators evolves, there is more of an alignment between Spanish and European benchmarks, stated most directly in the 2004 report: “The selection of indicators has been enlarged to contain all of the benchmarks established in the European Education and Training 2010 goals” (INCE, 2004, p. 1; my translation). PISA appears for the first time in the 2004 report of indicators, providing a measure of academic attainment. In 2006, INCE created a set of 15 priority indicators aligned with the Commission’s ET 2010 goals, which in the 2007 set of indicators, were measured by PISA 2006 results.

From their inception, the intent of these indicators was to provide *relevant information* to Education administrations, institutional bodies responsible for different areas of education, and the range of actors involved in education (families, students, teachers, other professionals and entities), and to citizens in general, about the level of *quality of the education system* in its current state (INCE, 2000, [http://www.educacion.gob.es/inee/sistema-indicadores/indicadores-ediciones-antteriores.html#IND\\_2000\\_1](http://www.educacion.gob.es/inee/sistema-indicadores/indicadores-ediciones-antteriores.html#IND_2000_1); my translation; my emphasis)

In this way, data from PISA become part of the relevant information that is given to education system level actors and PISA then becomes a barometer of Spain’s success in creating an effective or quality education system.

During this same time, policy-makers at the national and sub-national level articulated their frequent use of these international performance indicators and benchmarks largely generated from the PISA data. In specific examples, policy-makers described a greater focus on European and OECD indicators and benchmarks in key areas. These included, for example, the

reduction of number of early school exit, the increase in rates of graduation, improvement of basic skills in reading, mathematical and scientific literacy performance, measured by PISA, and an increase in educational investments.

In the SEIE project, there was an overall narrowing of indicators in 2010 to focus explicitly in three dimensions: schooling, finance, and results. These support Teodoro and Estrela's (2012) assessment of the narrowing of OECD indicators to "context, costs, and results" during the same period (p. 628). Moreover, the last published set of indicators in 2011 shows explicit correspondence of national indicators with PISA 2009 results and the IEA's International Civic and Citizenship 2009 international survey.

In an OECD (2011) report for Spain is the recommendation for increased evaluations and measurements of learning outcomes, provided by external assessments. The report stated:

Evaluations and measurements of learning outcomes can also be key tools. Although some regional governments in Spain have introduced periodic centralised testing, this is not done at the national level to establish a benchmark for regional education policies and thus define appropriate methods. External assessment of schools should be expanded to all regions and used as a benchmark for rating performance, according to agreed objectives, and to identify priorities for the necessary actions. (p. 22)

The above recommendation for greater use of external assessments suggests that the growing focus on PISA and other ILSAs in SEIE will continue and may likely be expanded on in the future.

Exploring the development of SEIE over the past 12 years points to the growing alignment between Spanish, EU, and OECD benchmarks in education and the use of PISA as a reference for national level indicators. For example, the current Law of Education (2006), a

recent OECD (2011) report detailing Spanish progress in economic recovery, and both the Commission's ET 2010 program and Europe2020 strategies each prioritize the same indicators of educational progress, shown in Table 3 below.

*Table 3: Indicators used for education reforms*

|  | Spanish LOE<br>2006 | Education and<br>Training 2010 | Europe2020 | Spain/OECD 2011<br>progress report |
|--|---------------------|--------------------------------|------------|------------------------------------|
| Early childhood  | X                   | X                              | X          | X                                  |
| Access and<br>attainment of HE   | X                   | X                              | X          | X                                  |
| Improve early<br>school leavers  | X                   | X                              | X          | X                                  |
| Improve<br>academic<br>attainment of 15<br>year olds in key<br>subjects (math,<br>science, literacy) | X                   | X                              | X          | X                                  |

Each of the policies feature the improvement of the academic attainment of 15 year olds in key subjects as a key goal and a tool by which progress can be determined, suggesting a central role that PISA now has in national and European education.

## **Discussion**

The importance of education for the EU and European project cannot be overstated. The EU has most recently cited education as one of the five core areas through which it can achieve the growth it needs to address such high rates of unemployment and growing inequalities across the continent. Spain is in a unique and precarious position in Europe, with the global financial crisis leaving a lasting impact on Spanish public policy, including education. At the same time as budgets for education are being slashed and large-scale protests take place, increased pressure is

on policy-makers and practitioners alike to raise academic achievement in an effort to foster economic growth. It is within this terrain that ILSAs become part of the evidence providing policy-makers, practitioners, and the public with a snapshot of the “state” of an education system, at times raising anxieties and helping spark debates about the need for reform.

In this paper, findings have illustrated the use of European benchmarks and targets in the Spanish system of education. Findings also show the role of ILSAs in guiding national initiatives, particularly how ILSAs can influence the evaluation standards set in a national education system. PISA, in particular, appears as one of the core reference points, not only at the national-level but also by the EU, pointing to a mutual influence of the OECD and the EU on one another’s educational initiatives and some of the ways in which PISA helps facilitate a process of Europeanization at the national level (Lawn & Grek, 2012). In this way, the study is broadly suggestive of the continued and growing influence of European and global pressures on education policy in Spain (Engel, 2009).

In the effort to build more effective and higher quality education systems, indicators serve to set targets or goals, and to measure system-level progress. They often provide “hard measures” used to legitimize particular ideas and ideologies about education (Rutkowski & Engel, 2010). In this way, indicators can be used as guidelines for policy reform and have the potential to guide policy-makers toward certain areas of education and curricular policy reforms. Findings from this paper illustrated the growing use of PISA in both EU and national level indicators, which were increasingly narrow in their focus on “quality education.” At both national and EU levels, “results” featured as one of three key areas of indicators. In the area of results, PISA provides the data on the academic attainment of 15 year olds in mathematics,

science, and literacy, suggesting a link between measuring quality and effectiveness with performance on PISA.

Perspectives from this study illustrate several lines for further research. By using official policy documents as a primary source of data, the study can only offer limited conclusions about the ways in which policy-makers, as central actors in the policy formation process, interpret and enact these official documents. Moreover, given the decentralized organization of the Spanish education system, in which teachers and schools maintain a considerable amount of autonomy, the use of official curriculum as a source of data limits conclusions about the ways in which teachers interpret and enact these education and curricular policies (Osler, 2011). Building on this study, further research could examine policy-makers' perspectives and their utilization of PISA as a determining reference point or barometer for reform. Future research could also explore the impact of these indicators and the role that the EU and PISA play in guiding curricular policy reforms, for example in literacy, and early childhood education.

### **Acknowledgments**

The author would like to thank the American Consortium on EU Studies for their support of this study through the ACES research seed grant. The author would also like to thank David Rutkowski and Matt Youngblood for their feedback on an earlier draft of the paper.

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