Think Tanks, Policy Networks and Education Governance: The Emergence of New Intra-national Spaces of Policy in Portugal

Sofia Viseu
&

Luís Miguel Carvalho
Instituto de Educação, Universidade de Lisboa
Portugal

Abstract: This article focuses on the role of think tanks in education governance in Portugal, We are interested in contributing to a literature that discusses the emergence of new intra-national spaces of policy, and examines how the actors operating in those spaces work and influence education policy. This article is based on an empirical study conducted by EDULOG, a think tank for education that has been operating since 2015. We mapped EDULOG's activities, the information generation activities, organizations, and actors connected to EDULOG using a network ethnography and social network analysis. This study shows that a) this organization articulated a network of actors from different sectors, including the academy, business and government agencies; and b) EDULOG acts as a space of social and cognitive intermediation, committed to developing knowledge geared towards policy decision and problem solving.
Keywords: think tanks; policy networks; education governance; social network analysis

Think tanks, redes políticas y regulación de la educación: Lo nacimiento de nuevos espacios intra-nacionales de política en Portugal
Resumen: Este artículo se centra en el rol de los think tanks en la regulación de la educación, considerando el crecimiento continuo que nuevos actores, incluyendo organizaciones privadas y filantrópicas, han venido a ejercer en las políticas educativas. Estamos interesados en contribuir a una literatura que discute el nacimiento de nuevos espacios intranacionales de política, su trabajo y su influencia para el establecimiento de cambios en las políticas educativas. Para tal, se presenta un trabajo empírico sobre EDULOG, un auto intitulado think tank para la educación que opera en Portugal desde 2015. El trabajo empírico se inspiró en la etnografía de redes y análisis de redes sociales, a través de los cuales se mapean las actividades de EDULOG, en particular la producción de información, así como las organizaciones y actores que se mueven dentro y alrededor de EDULOG. Los datos muestran cómo EDULOG actúa como un espacio de intermediación social y cognitiva, ya que pretende desarrollar un determinado conocimiento educativo, orientado hacia la decisión política y la resolución de problemas, a través de una red política compuesta por actores provenientes de diferentes mundos, incluyendo la academia, las empresas y agencias gubernamentales.
Palabras-clave: think tanks; redes políticas; regulación de la educación; análisis de redes sociales

Think tanks, redes políticas e regulação da educação: A emergência de novos espaços intra-nacionais de política em Portugal
Resumo: Este artigo centra-se no papel dos think tanks na regulação da educação, considerando a crescente importância que novos atores, incluindo organizações privadas e filantrópicas, têm vindo a desempenhar nas políticas educativas. Estamos interesados em contribuir para a literatura que discute o nascimento de novos espaços intra-nacionais de política, o seu trabalho e a sua influência para as mudanças nas políticas educativas. Para tal, apresentamos um estudo empírico sobre o EDULOG, um autointitulado think tank para a educação que opera em Portugal desde 2015. O trabalho empírico foi inspirado na etnografia das redes e na análise de redes sociais, através das quais mapeamos as atividades do EDULOG, designadamente de produção de informação, assim como as organizações e atores que se movem dentro e em torno do EDULOG. Os dados mostram como o EDULOG age como um espaço de intermediação social e cognitiva, uma vez que visa desenvolver um determinado conhecimento educacional, orientado para a decisão política e a resolução de problemas por si identificados, através de uma rede política composta por atores provenientes de diferentes mundos, incluindo a academia, as empresas e agências governamentais.
Palavras-chave: think tanks; redes políticas; regulação da educação; análise de redes sociais

Introduction

This article focuses on the role of think tanks in education governance in Portugal. Its aim is to contribute to a literature that discusses the emergence of new intra-national spaces of policy, their work, and their attempts to influence the educational agenda and to bring changes to educational policy (Ball, 2016). For that purpose, we present a study about EDULOG, a think tank focusing on educational issues since 2015. Our goal is to identify and describe EDULOG's efforts to influence policy-making, the organization's strategies for agenda setting and the cognitive and social operations used in the interactions between ideas and individuals (Birkland, 2006, Nay & Smith, 2002).

What appears to be new to the Portuguese scenario, besides its specific focus on education, is EDULOG's close connection with the business world. EDULOG emerged within the context of one of Portugal's richest businessmen's philanthropic activities, Belmiro de Azevedo (1938-2017). Between 1974 and 2015, he chaired SONAE, an international holding company operating from Portugal in retail, hotels, technology, building materials, real estate and media sectors. In 2015, he announced his retirement from executive positions in his companies, in order to engage in corporate social responsibility activities, including EDULOG, a legacy he wanted to leave for the country (EDULOG, 2017). In a recent interview, EDULOG's scientific coordinator described the action of this think tank as an "attempt to influence educational policies to solve the most pressing problems of the educational system" (Correia, 2017, n. d.).

EDULOG will be taken as an example of how these new intra-national spaces of policy act as spaces of social and cognitive intermediation. Its social intermediation quality stems from the fact that the actors in these spaces, from different worlds, become connected and act as policy networks. By the same token, cognitive intermediation is also at play, given that within these networks problems are re-conceptualized, solutions advocated and knowledge disseminated. The data shows how EDULOG is characterized by such attributes, as it is committed to developing knowledge geared towards policy-making and problem solving, through a network of policy actors, including former education ministers and secretaries, former university deans, members of parliament, CEOs, business philanthropists and researchers working in EDULOG-funded projects.

The article has five sections. In the first section, we discuss the increasing importance of think tanks in education governance and provide the conceptual framework used for the study. In the second section, we present the data collection and analytical methods used for the empirical study. In the third section, we characterize EDULOG as a social intermediator followed by a section in which it is depicted as a cognitive intermediator. The article closes with some final considerations.

Think Tanks, Policy Networks and Education Governance

In this section, the theoretical perspective framing our research is presented. It may be synthesized as follows: educational governance is conceived as an interactive, multiscale and multi-actor space, constructed by and through knowledge circulation (Lawn & Grek, 2012); policy networks can be a powerful conceptual tool to observe these horizontal, vertical, internal and overall un-governability relationships (Massardier, 2003); think tanks, as others emergent actors in educational policies, act as "important 'nodes'" within these networks, "connected in dense and complex forms to each other as well as to government" (Exley, 2014, p. 4).

As a point of departure, we take the acknowledgement that international and transnational organizations, private foundations, philanthropic organizations and experts that circulate worldwide are becoming key players in education governance and have gained increasing importance in policy-making processes (Kotthoff & Klerides, 2015).

This phenomenon is an indicator of the shift from "government to governance" (Ozga, 2009, p. 150), more specifically of the emergence of "post-bureaucratic" regulatory regimes (Maroy, 2012). In this process, the governing of education, conducted by "informed politicians through rule-governed processes, centralized legal frameworks and shared assumption", is progressively replaced by a more decentralized and distributed provision of education to a range of actors and agencies, that places stress on "managerial or consumer/contract based accountability", by emphasizing contracts, good practices and the user control of schools (Ozga, 2009, pp. 150-151). These shifts call for more accountable units and, simultaneously, for more data, information and knowledge to feed better decisions. Knowledge, namely its technologies for collection, circulation and comparison, is

now central in the process of policy making and is becoming the governing process itself (Fenwick et al., 2014).

As far as the variety of actors and the importance of knowledge in education governance are concerned, at least two consequences may be drawn. The first is that the complexity inherent in today's policy processes has led to renewed perspectives of analysis that have shifted from the linear and vertical visions of the governance processes, to allow for the involvement and participation of new spaces and actors (public and private) in less hierarchical, more fragmented and flexible relationships (Commaille, 2004). This set of "formal institutional and informal linkages between governmental and other actors, structured around shared and endlessly negotiated beliefs and interests in public policymaking and implementation" was designated by Rhodes (2006) as policy networks (Rhodes, 2006, p. 426). At more than a metaphorical level, policy networks constitute an important resource to understand how certain actors "are actively involved in making and implementing decisions by forming very close relationships with the political-administrative elites' (Thatcher, 2004, p. 384).

The second consequence is that there is a strong interdependency between the growing process of standardization and comparison in education governance and the development of new structures geared towards producing, compiling, collecting and disseminating knowledge for policy (Delvaux, & Mangez, 2008; Grek, 2009; Nóvoa & Yariv-Mashal, 2003). In fact, this scenario provides an opportunity for the emergence of new actors and new spaces to take part in public policies, within and outside each national political system, where knowledge is constructed and diffused in order to be used in policy decision-making (van Zanten, 2013).

The literature on public and educational policies has already identified and described the relevance of these new collective or individual actors, categorized differently according to their identity traits, roles and practices as "mediators" (Jobert & Muller, 1987), "brokers" (Sabatier & Jenkins-Smith 1993), "intermediaries" (Nay & Smith, 2002), "transnational policy actors" (Lawn & Lingard, 2002), "boundary persons" (Sultana, 2011), "intermediary organizations" (Cooper & Shewchuk, 2015) or "transnational expert communities" (Kauko et al., 2018). These actors are understood as "embodied members of epistemic, expert, and practice communities" operating "in the fields of practice that are heavily intermediated, not least by a range of interests in the policy transfer business, such as consultants, advocates, evaluators, gurus, and critics" (Peck & Theodore, 2010, p. 170). In line with how La Londe et al. (2015) refer to intermediary organization networks, we also conceive this intermediation as an action to "serve any number of a range of functions that assemble, collect, interpret, package and convey research evidence to consumers for either substantive or symbolic use in policymaking" (La Londe et al., 2015, p. 3). In our opinion, think tanks are also included within this framework.

With a more established tradition in the USA, think tanks have been on the increase in Europe over the last decades (McGann, 2016), accompanied by greater public awareness and a growing presence in various sectors of activity, including education. In Portugal, the visible influence of think tanks is not yet observable in the definition of educational public policies. However, in recent years a growing number of organizations have proclaimed themselves to be think tanks or are committed to supporting, producing and disseminating knowledge to improve public policies and private decisions, such as the Foundation Francisco Manuel dos Santos or the Institute of Public Policy Thomas Jefferson - Correia da Serra. Given that this is a new phenomenon, we still do not know the real extent to which think tanks are affecting educational governance in Portugal.

Thus, theoretically, we are not interested in looking at think tanks as organizations, but rather as part of broader policy networks (Ball & Exley, 2010). This definition converges with the argument that the activities of informal groups are relevant in policy making. We aim to further

understand how these actors, who are brought together around common interests and objectives, attempt to influence policy-making and the outcomes of public policies by mobilizing different kinds of resources (Rhodes & March, 1992).

This theoretical perspective enables us to gain further insight on the particular role of think tanks in the re-framing of "policy problems and in the advocacy for particular policy solutions" (Savage, 2015, p. 35) and to understand the ideas and expertise they employ (Stone & Denham, 2004). We conceptualize think tanks as "hybrid, boundary spanning organizations that work across academic, media, political and economic fields" (Lingard, 2016, p. 15) and as "nebulous configuration[s] of new and old actors, [with] ambiguous responsibilities and blurry margins of action" (Olmedo & Santa Cruz, 2013, p. 492). Therefore, we regard think tanks as being part of education policy networks, or as networks of experts (Normand, 2010). As they are responsible for the production and diffusion of knowledge, think tanks may be conceived as epistemic communities (Haas, 1992), since they are composed of networks of "professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area" (Haas, 1992, p. 3) and the use of this knowledge in decision-making.

As our goal is to study educational governance by first examining the variety of actors and their interdependencies, whose results remain unpredictable (Lascoumes & Le Galès, 2007), our focus is not on the impact (a cause-effect rationale) of EDULOG action on Portuguese educational policy, but rather we have adopted a "re-reading attitude" (Simmons, Olssen & Peters, 2009, pp. 7-8). This means that we take specific interest in the actors, the activities and the reasoning of emergent practices that seek to bring together, and to intermediate actors from different social worlds around the production, dissemination and use of data, information, and knowledge, in order to address specific education problems and formulate evidence-based solutions.

Data Collection and Analytical Methods

The focus on the new forms of education governance and acknowledgement of the growing importance of new actors from multiple sectors, operating on multiple scales, has led us to adopt network ethnography (Hogan, 2016) as the methodological backdrop to this study. The empirical analysis was in line with recent educational policy studies that resort to traditional ethnographic methods and data collection techniques, such as documentary analysis, interviewing and social network analysis (see, for instance, Baek et al., 2018; Ball, 2016; Olmedo et al., 2013; Shiroma, 2014). This type of methodology was chosen in an attempt to combine different techniques and tools in order to collect, capture and analyse the presence and huge amount of content available and the "organizational forms built around new media" (Howard, 2002, p. 550). To this end, we began mapping EDULOG's actors, organizations and events, searching for interactions within the network, primarily by way of internet searches (website documents, flyers, Facebook publications, press clippings, calls for application to fund research, conferences and seminars). As a result, we obtained extensive information on who is involved with EDULOG and its activities.

We also conducted a semi-structured interview with EDULOG's Secretary-General (referred to in the text as "SG"), who was always available and took great interest in the study. Considering the extent of the data available on the Internet, the interview was planned to fill the gaps in the information and shed new light on the data collected through internet searches, taking the following topics into consideration: educational thinking outfits; internal operations; advisory board; connections with SONAE and other organizations; financial support for research projects; future projects and growth perspectives. The interview took as the form of an informal conversation and the questions emerged naturally around the topics (Cohen, Manion & Morrison, 2007). The

interview was audio recorded, transcribed and returned to the interviewee for final verification. These data were important to better understand EDULOG as a cognitive intermediator, as we will explore in the following sections. The data analysis was centred on "who" EDULOG is, "what" it does and "what for".

As far as "who" is concerned, we aimed to understand how EDULOG acts as a social intermediator. Hence, we mapped the actors and organizations involved in EDULOG's knowledge production activities. In order to analyse these data, we relied on Wellman and Berkowitz's (1991) contributions, referring to networks as an analytical tool to observe the relationships between actors, based on the assumption that "social structures can be represented as networks, a set of nodes (or social system members) and a set of ties depicting their interconnections" (Wellman & Berkowitz, 1991, p. 4). Using social network analysis (SNA) principles (Scott, 2000), we mapped the organizations and actors, by using (1) the advisory board members' curricula vitae available on the EDULOG website, identifying the organizations in which they worked or had worked in the past; (2) the researchers' curricula vitae available in their R&D centre websites, mapping the universities in which they worked and studied.

Through this procedure we built a two-mode matrix, a common approach in SNA, assuming that each organization is a node where two or more actors are involved or engaged (Newman, 2001). We used UCINET and NetDraw software (Borgatti, Everett & Freeman, 2002) to analyse and visualize relational data, to identify which actors and organizations play a central role in EDULOG and calculated their centrality degree (the number of ties that a node has; Freeman, 1979). As a result, we identified a network of organizations (see Figure 1) and a network of actors (see Figure 2). Of course, this analysis does not pinpoint all the relations established and shaped through EDULOG, however it appears to be a good indicator of the possible interdependences, connections and interactions between the respective organizations and actors.

Regarding "what" and "what for", the aim was to identify EDULOG's efforts to influence the policy-making process and cognitive intermediation. We used Lindquist's (1990) proposition on the kinds of information circulating in policy-making processes: (1) information generation activities, which include data generation, storage and collection (such as statistics, pools and status reports), research (such as evaluation research, policy research, applied research and the generation of new data or indicators and analysis; (2) publication activities, including how the information is transmitted (memos, reports and papers); (3) convocation activities, through workshops, seminars, conferences, etc. (Lindquist, 1990, pp. 32-34). As a result, we identified a repertoire of publications, convocation and information generation activities that enabled us to better understand EDULOG as part of a "third community" (Lindquist, 2001, p. 3), that is, as an actor that not only stands between knowledge producers and consumers, but is also committed to the generation of policy-relevant data and analysis.

EDULOG as a Social Intermediator

EDULOG as a Network: Actors and Organizations

EDULOG has a simple organizational structure, and daily tasks are carried out by a secretary general, with the support of SONAE's staff. This light structure was implemented by EDULOG's founder, Belmiro de Azevedo. Up to his death, at the end of 2017, and despite not being present in EDULOG's everyday life, he played a significant role in the definition of budgets and activities and determined its operational approach, transposing the same "spirit" as that of SONAE to EDULOG: the bootstrapping strategy (SG). Therefore, the characterization of EDULOG as a social intermediator stems from an observation of the variety of organizations and actors from different

social worlds that act and intersect within it. Figure 1 represents a network of 41 organizations moving within and around EDULOG. The size of each organization (node) is related to its higher or lower degree.
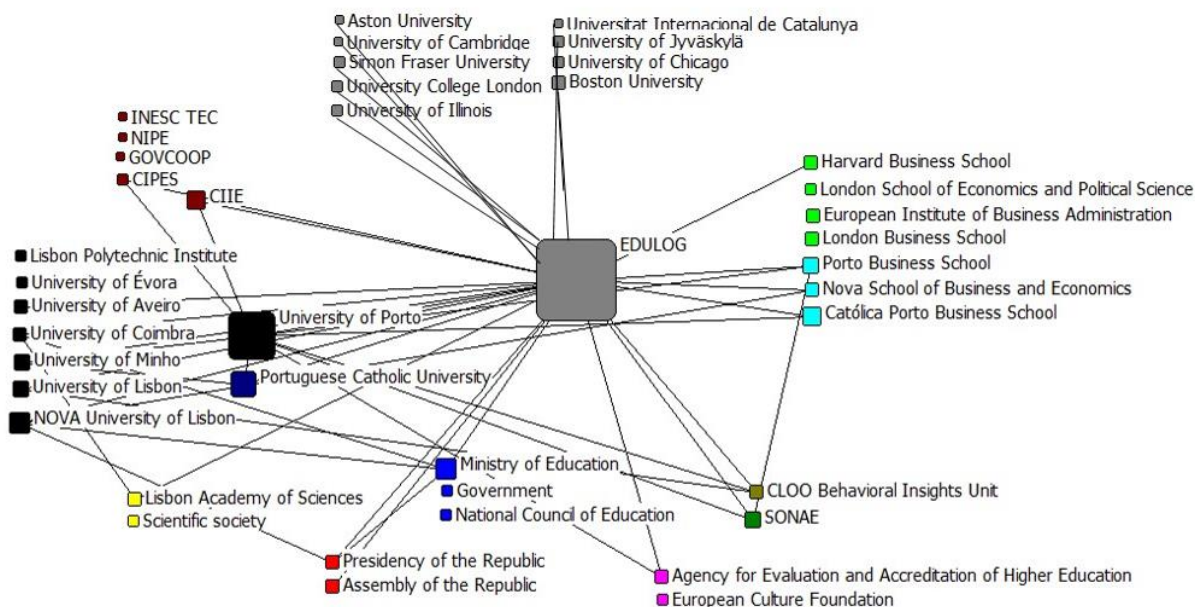

Figure 1. Organizations (potentially) connected through EDULOG

The network includes the world of academia, business, private foundations and formal political agencies, described in more detail in Table 1.

Table 1
EDULOG's relations with academy, formal political agencies, business and private foundations

Relation	Institutions		Observations
Academy	Foreign universities (grey)	Aston University Boston University Simon Fraser University Universitat Internacional de Catalunya University College London University of Cambridge University of Chicago University of Illinois University of Jyväskylä	These are the universities where EDULOG actors worked or previously studied. An exception is made for the Universitat Internacional de Catalunya and University College London, where two of the researchers involved in EDULOG projects currently work

Table 1 (Cont'd.)
EDULOG's relations with academy, formal political agencies, business and private foundations

Relation	Institutions		Observations
Academy	International business schools (green)	European Institute of Business Administration Harvard Business School London Business School London School of Economics and Political Science	Same as previous
	National business schools (light blue)	Católica Porto Business School Nova School of Business and Economics Porto Business School	Same as previous. An exception is made for Católica Porto Business School and Nova School of Business and Economics where research projects funded by EDULOG are ongoing
	National public universities (black)	Lisbon Polytechnic Institute NOVA University of Lisbon University of Aveiro University of Coimbra University of Évora University of Lisbon University of Minho University of Porto	University of Porto, NOVA University of Lisbon and University of Aveiro are working on funded research projects. The remaining are universities where EDULOG's actors work(ed) or studied
	National private universities (dark blue)	Portuguese Catholic University	Research team involved in a research project funded by EDULOG
	Research centres (brown)	Centre for Research in Higher Education Policies (CIPES), Centre for Research and Intervention in Education (CIIES), Economic Policies Research Unit (NIPE), Research Unit on Governance, Competitiveness and Public Policies (GOVCOPP), Institute for Systems and Computer Engineering, Technology and Science (INESC TEC)	Research centres working on projects funded by EDULOG
	Scientific associations (yellow)	Lisbon Academy of Sciences Portuguese Psychological Association	Two of EDULOG's advisory board members belong to these scientific associations

Table 1 (Cont'd.)
EDULOG's relations with academy, formal political agencies, business and private foundations

Relation	Institutions		Observations
Governm ent	Government agency (blue)	Ministry of Education National Council of Education Government	Seven of the nine members of EDULOG's advisory board have or had high-level responsibilities in one or more of these government agencies
Business	International enterprise operating from Portugal (green)	SONAE	Two of the members of EDULOG's advisory board are (or were) CEOs at SONAE, including EDULOG's founder, Belmiro de Azevedo
	Small business operating from Portugal (green)	CLOO Behavioural Insights Unit	EDULOG commissioned a study on Parental Engagement in Children's reading activities from CLOO
Private foundatio ns	National (pink) Foreign (pink)	Agency for Evaluation and Accreditation of Higher Education European Culture Foundation	EDULOG's scientific coordinator is also the president of the management board of the Agency for Evaluation and Accreditation of Higher Education. Another member of the advisory board is a member of the European Culture Foundation supervisory board

Regarding the well-represented world of academia, there are connections to some of the most important state universities in Portugal[1] (in black) which adds a two-fold acknowledgement and status. Within EDULOG, there is the expectation that, "based on [advisory board members'] knowledge, (...) we trust that we can make the right decisions" with regard to the way forward. In terms of EDULOG's public image, the advisory board members are presented as "people with high experience and knowledge of educational policies, systems and practices. This group will guide EDULOG in the pursuit of its mission and in the implementation of projects of high reach, profound impact and lasting results" (EDULOG, 2017). The acknowledgement and status also come from the connections to prestigious foreign universities (marked in grey), where EDULOG's actors work(ed) or studied. Although they are not active members in EDULOG's current activities, they convey greater scientific status to the network and more credibility to its action. These data are in line with the idea that, historically, think tanks have been closely connected to, or are the

---

[1] There are 14 state universities in Portugal. University of Lisbon, University of Coimbra, University of Porto and NOVA University of Lisbon are some of the most ancient and/or have more students (DGEEC, 2017).

producers of research, which "gives them a presumed legitimacy and credibility with the media, policy makers, and public" (McDonald, 2013).

The University of Porto appears to be particularly relevant, since it has a higher degree, which may be justified by two reasons. First, EDULOG's advisory board includes the University's former deans, teachers and *illuminati* students, including EDULOG's founder. Belmiro de Azevedo graduated in Industrial Chemical Engineering from the University of Porto (1964) and went on to become one of the founders of the Porto Business School in 1988 (which belongs to the University) and involved SONAE as an important partner of a research centre and the University's science and technology complex. In 2009, he was awarded the degree of Doctor Honoris Causa by the University of Porto (Azevedo, 2017). Second, one of the ongoing research projects funded by EDULOG is a consortium of the University of Porto. There are also connections to national and international business schools (blue and green), either due to the fact that a number of EDULOG actors worked or previously studied there or because they run research projects funded by EDULOG.

The business world is represented by SONAE, namely by the presence of two CEOs on the advisory board, and by CLOO, a small company operating in behavioural economics, from which EDULOG has directly commissioned a study.

The connections to the formal political agencies are active due to the composition of EDULOG's advisory board. The board includes two former ministers of education and two former secretaries of education. It also includes a former president of the Portuguese Education Council, an independent advisory body on educational matters for the Minister of Education. Three members were also members of parliament or consultants for the President of the Republic on educational matters. Indeed, the importance of the board for EDULOG may be seen in Figure 2, which represents the 42 actors we mapped and where the advisory board members are shown in red.
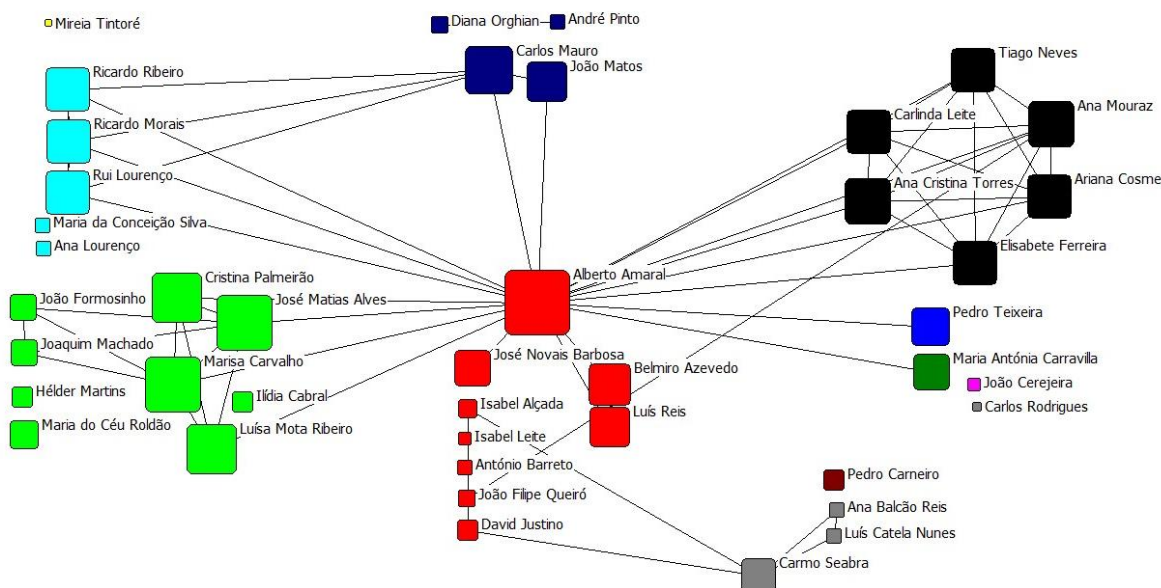
Figure 2. Actors (potentially) connected through EDULOG

The advisory board is presented on EDULOG's website as "people with high experience and knowledge of educational policies, systems and practices" (EDULOG, 2016), and it appears to represent the "best of three worlds": politics, business and academia. Besides the afore-mentioned connection with the formal political agencies, the board also includes former university deans, senior professors and researchers of higher education institutions, and SONAE's CEOs. All these actors have long career paths, they carry with them several social worlds and they establish a political-administrative elite. Given their high- level responsibilities in education, educational administration, in the state or higher education, they are recognized by a broader public audience as experts in education, which lends credibility to EDULOG's actions, as they have an important academic and expertise capital. According to the information collected, in addition to their expert status, the personal relations of trust between Belmiro de Azevedo and two of the former deans of the University of Porto also served as an inclusion criterion in the board, as well as an alleged attempt to have "almost every political color" (SG) represented. In fact, this elite appears to have been formed through the exclusion of professional teacher, parent and student representative associations.

Within the board, according to their degree, two actors are seen to play a key role and are worthy of mention. The first is Alberto Amaral, the scientific coordinator of EDULOG. He is a former dean of the University of Porto (1985-1998) and former scientific coordinator of the Centre for Research in Higher Education Policies (CIPES; 1998-2008), founded by the Universities of Aveiro and Porto and committed to the study of national and international higher education policies. He is also the president of the management board of the Agency for Evaluation and Accreditation of Higher Education, a private foundation created by the Portuguese government in 2007, responsible for the assessment and accreditation of higher education institutions and their degree programs.

The second actor is Belmiro de Azevedo, who also played a significant role in the weaving of this network. In addition to his active role in the selection of advisory board members and his connections with the University of Porto, his professional and academic background is broad. In 1974, he became SONAE's chair and, within four decades, SONAE became one of the largest business groups in Portugal and an important international holding company. In 2006 he was ranked by Forbes as the 1121th richest person in the world, with an estimated wealth of 1.67 billion USD. His trajectory was marked by an MBA from Harvard (1975) and another from Stanford (1985), and he was also a member of the advisory council of the European Business Institute, the London Business School and the Harvard Business School. In 2006, he received an award for relevant services to Portugal by the President of the Republic (Azevedo, 2017; Silva, 2017).

Table 2
Research teams working on projects funded by EDULOG

Research team	Research project designation
Nova School of Business and Economics and University College London (bottom right of Figure 2 in grey and brown)	Impact of teachers on student's learning
Centre for Research in Higher Education Policies (CIPES), Centre for Research and Intervention in Education (CIIES), Economic Policies Research Unit (NIPE), Research Unit on Governance, Competitiveness and Public Policies, (GOVCOPP) and the Institute for Systems and Computer Engineering, Technology and Science (INESC TEC) (right side of Figure 2 in black, blue, green and pink)	EDULOG Education Observatory
Portuguese Catholic University and Catholic Porto Business School (left side of Figure 2 in light green)	EDUGest—School Management and School Improvement
CLOO - Behavioural Insights Unit (top of Figure 2 in dark blue)	Parental Engagement in Children's reading activities

According to EDULOG's secretary-general, the composition of the advisory board enables EDULOG to act as a "bridge" between academia, policymakers and practitioners. Furthermore, it acts as a source of influence through a network of contacts that reaches relevant organizations or positions with "just a phone call" (SG). Besides the advisory board, Figure 2 also includes the research teams working on projects funded by EDULOG, which will be further analysed in the next section. At this point, we would like to emphasize the relevant presence of private higher education institutions and business schools within this network.

Evidence of the Network in Action

An interesting evidence of EDULOG's network in action, of how it operates and activates connections between relevant educational actors, is related to EDULOG's strategy in Science, Technology, Engineering and Mathematics (STEM) for state schools.

As is the case with Nestlé, Solvay, Randstad or the Titan Group, SONAE is a supporting company of The European Pact for Youth, committed to building "strong business education partnerships (…), focusing on youth transition to jobs by offering more quality traineeships and apprenticeships" (European Pact for Youth, p. 4). As part of this commitment, SONAE was invited by the EU STEM *Coalition* to "lead the implementation in Portugal of a STEM strategy" in order to "sensitize governments, industry and education to the crucial role of education in the STEM" (EDULOG, 2017). In response to this invitation, SONAE and EDULOG promoted the signing of a memorandum among themselves, the Ministry of Education, Porto's City Council, the international consulting company PricewaterhouseCoopers (PwcC), Porto Business School, two major distributors and food producers in Portugal and three state schools in the city of Porto (DGE, 2017). This memorandum establishes the commitment to generate an increase in the number of students and future professionals in STEM, and foresees a set of actions between the schools and the companies involved in the initiative.

Simultaneously, an already existing collaborative digital and non-profit platform devoted to and powered by STEM teachers is being integrated into EDULOG's website. This platform, referred to as the "House of sciences", is coordinated by teachers from the University of Porto and, according to the EDULOG website, has 16200 registered members, representing more than 60% of STEM teachers in Portugal. In a post on the EDULOG website, its scientific coordinator states that this process enables EDULOG to become "closer to the educational community", namely the teachers and the practitioners who have "a more pragmatic view of reality", and to reinforce EDULOG's mission of "acting as a bridge between the worlds of education, politics and the society, with the ultimate goal of Education being an engine of Excellence and Talent development" (EDULOG, 2017).

This strategy for STEM shows how EDULOG intervenes through the promotion of actor networks, mixing private and state actors. At this level, EDULOG appears to be a good example of a policy network, as a set of policy spaces, which are connected formally or informally; real or virtually (Ball, 2017). More precisely, this process reminds us that Figures 1 and 2 represent only the visible side of the network. In addition to identifying the nodes and the ties of the network and how they operate, it is also interesting to perceive what the network is able to achieve and how it seems to expand beyond itself through the worlds it evokes and mobilizes.

In sum, EDULOG seeks to act as a policy network by creating interfaces among the academia, business, and political worlds, and by translating the meanings of these different worlds in order to produce relevant information for policy- making. This data is in line with think tanks' ambition to act as expert-based intermediators between different social worlds and "as producers of credible education research and expert personnel, regardless of the extent to which they adhere to the professional norms of social science research" (Haas, 2007, p. 66). Thus, EDULOG is a potential network of social intermediation, as it acts as a political and administrative elite closely involved in decision making and implementation (Thatcher, 1998).

EDULOG as a Cognitive Intermediator

Publication, Convocation and Inquiry

As may be read on its website, EDULOG claims that its vocation is to "contribute in a constructive way to the strategic planning of Education by elaborating critical and integrated thinking, creating continuous cycles of reflection, recommendation, measurement and analysis that allow the evaluation of the Portuguese educational system" (EDULOG, 2017). As a private organization seeking to influence policies explicitly and publicly, EDULOG responds well to Lindquist's (1990) third community typology. Three main actions are carried out to achieve this purpose: publication activities, convocation activities and information generation activities.

In the publication activities, we would like to highlight EDULOG as being highly geared towards digital platforms. According to the outsourced project manager for the EDULOG website, the website was conceived as a modern, interactive, responsive and friendly platform, aiming to reach a wider range of users (Marketeer, 2016). The website publishes an extensive range of online information, including: EDULOG advisory board members' short biographies; details regarding the calls for funding and the research topics to be financed; news on events and media clippings on education; video clips and research reports. All this information and data can be viewed and/or downloaded free of charge. In addition to the website, EDULOG is present on Facebook, Twitter, Google[+] and YouTube. As noted by McNutt & Marchildon (2009), the focus on digital platforms and the attention paid to the news media, also visible in the fact that a journalist, even if part-time, is working for EDULOG, are relevant signs of the importance given to these media to disseminate a

message and, simultaneously, as a channel so it may gain more visibility and standing in the eyes of the public.

As for the convocation activities, EDULOG promotes informal and periodic events such as the EDUTALKS, which are open to the public and in which a specific educational option is discussed within the scope of a "for or against" debate. For example, in October 2017, EDUTALK focused its debates around the use of mobile phones in the classroom. Moreover, EDULOG also promoted a conference to disseminate the preliminary results of an ongoing research project on school management. Additionally, EDULOG promotes annual conferences with a more scientific focus. Three conferences were held up to 2017. The first conference took place during the official presentation of EDULOG on April 13, 2016, aimed at discussing the importance Portuguese people attribute to education. The second conference, on the economic development in southern Europe, was held at the Porto Business School. The conference organizers aimed to promote a debate around the "poor human capital, institutions, accessibility, lack of private investment, bad policy implementation" and to "adopt a normative perspective (…) in order to develop the policy prescriptions that should be implemented in order to achieve sustainable development", namely regarding the "link between human capital, higher education (innovation) and regional development" (EDULOG, 2017). The third conference was an international meeting promoted by the House of Science, with EDULOG's support, entitled "Science education and economic development". The event was covered by an important newspaper focused on the Portuguese economy, and a quote from a former Minister of Finance was used as the headline: "there is an inconsistency between our economy and our science", claiming the need for a more integrated policy for science, education, research and the job market (idem). It appears to be obvious that all of these conferences call for a debate around education and its relationship with the social and economic development of the country.

The ethos behind information generation activities may be (powerfully) synthesized in the following statement by EDULOG's secretary-general: "We are objective but we are not neutral. We [aim] to feed the policy debate with facts" (SG). This statement was considered one of the most significant outputs of the interview to better understand the role of EDULOG as a cognitive intermediator. On the one hand, the statement illustrates the pursuit for a certain objectivity that comes from the numbers and the concern to create and publish data in order to illuminate public and private decisions. Consequently, among the information generation activities, EDULOG intends to create an observatory for education that provides online indicators (and statistical data) regarding the education system, namely the performance and quality of schools. On the other hand, the statement also indicates that EDULOG does not intend to be a neutral actor. On the contrary, it confirms EDULOG's desire to participate in the construction of the educational agenda, by: identifying "knowledge gaps" (SG), for which more research is needed; providing financial support for scientific research, committed to practice and field interventions; and the attempt to make research more accessible through its "intelligible dissemination" (SG). To this end, within the scope of information generation activities, EDULOG opens regular calls for the funding of research projects, with themes, objectives and expected results defined a priori.

In the following subsections, more detailed information may be found on these two information generation activities: the call for research funding and the observatory for education.

Calls for Research Funding

Even before the official launch of EDULOG, the first project to be funded was on the importance given to education by the Portuguese, conducted by a small group of researchers. More recently, funding was also provided for another project by direct award, on parental engagement in

education (ongoing). However, most of the research funding is based on competitive calls for funding. By December 2017, EDULOG had launched six calls: one on the impact of teachers on students' learning; one for the EDULOG education observatory; one for management skills in schools; two calls for research projects on transition to the labour market by vocational secondary education; and one regarding the explanatory factors of school failure.

The calls targeted higher education institutions or research centres (both state and private, as specified by each call) and could also comprise consortiums, including those with foreign institutions. The calls did not mention budget constraints or financial limits to the proposals, but EDULOG invited all the researchers potentially interested in the calls to attend informative public sessions in Lisbon and Porto. So far, calls for funding have received 57 applications, a healthy figure that has brought great satisfaction to the scientific coordination of EDULOG (EDULOG, 2017).

The applications are analysed and evaluated by the members of the advisory council, who can decide whether or not to approve the project or, more interestingly, to request new partnerships and consortia between two or more applications with similar and special merit, as was the case recently in a call related to the explanatory factors of school failure. This third option is a good example of how EDULOG sets actors in motion through its networking.

The budget of the approved projects ranges from approximately 26000 USD to 280000 USD. The maximum amount is the same as that set by the national agency for science, research and technology in Portugal for funded research projects (FCT, 2017). It should also be noted that EDULOG works in close connection with the research teams. The calls already state that EDULOG "will make all its assets and channels of knowledge available to applicants", including "critical support from the EDULOG advisory board" (EDULOG, 2017). When the research is already under way, there are contacts with the EDULOG secretary-general to ensure implementation of the milestones and sometimes even to reflect on the transfer of knowledge that is being produced, as explained by the SG:

> I'm a layperson, (…) an ordinary citizen. Maybe I've even had more education
> opportunities than most, but I didn't understand (…) a report made by a group
> of researchers with whom we were working (…). Our role is to be careful, to
> prepare the information (…). We know the world we live in. People read
> headings and follow the sound bites (…). We know this, so let's work this out.

Moreover, in 2017, EDULOG promoted a first meeting between researchers of all ongoing research projects, in order to bring them together.

The calls for research funding, as well as the afore-mentioned seminars and conferences, may be taken as signs of how EDULOG's cognitive intermediation is being constructed. Firstly, we must note that educational research has a long history of knowledge on factors of school failure, transition to the labour market, teachers' impact on student learning and management skills in schools. So, instead of seeking new knowledge, these calls appear to refocus the research agenda on these topics and also make "scientific research and its dissemination accessible and intelligible" (SG). In this sense, EDULOG selects and chooses the problems that should be on the research agenda, and also fixes patterns for research (external) communication.

Secondly, and more relevantly, EDULOG also sets out to establish a certain way of conducting the research and giving it a practical sense. Knowledge production is seen from a functionalist perspective, as these calls aim to "find solutions, fostering innovation and educational change" and an "adjustment between what is taught in schools and what the country needs" (EDULOG, 2017). In an interview with an important daily newspaper in Portugal, EDULOG's founder presented his vision on education as the key to building changes for the country:

> We can (…) have more rational economic policies, but little effective change if
> we do not change the paradigm of education and the learning model (Silva, 2017,
> n. d.)

Similarly, the Secretary-General stated that one of EDULOG's aims was:
> to go forward and implement pilot projects (…). For example, for school management to
> provide teacher training on how to better run a school and make their lives easy, who
> knows?"

Thirdly, this functionalist view is in line with the assumption that education can bring social
mobility, an ideology of schooling which may have resulted from the proximity of EDULOG to the
business world and its founder. According to the EDULOG website, this self-made man's story
shows the "impact that a quality education can have on a person's life". In his own words:
> It is well known that one of the figures that marked my life was my primary school
> teacher. A teacher who demanded a lot of work, a lot of rigor and a lot of discipline,
> but at the same time he was able to transmit the passion for the discovery of
> knowledge (…). This kept me eager to learn, (…) determined my course and made
> me always be connected, in different ways, to education (EDULOG, 2017).

This statement is a good example of how Belmiro de Azevedo's life story is relevant to attain the
enabling environment of EDULOG's educational perspective.

Observatory for Education

The statement "we are objective" conjures up the idea of accuracy of numbers, data, facts,
informed decisions. Hence, EDULOG opened a call to create an Observatory for Education in
order "to inform political discussions with facts" (…), to "encourage policy makers and other actors
in the education system to make decisions based on rigor and objectivity" (EDULOG, 2017).

The Observatory is run by a consortium of five research centres (see Table 2) and aims to
"create global and detailed metrics on the state of education in Portugal, on a yearly basis, which
should be accessible on an online database that is free for all" (idem). In acknowledgement of the
increase in information circulating on a worldwide scale, one of the project's researchers underlined
the Observatory's mission to
> construct an understandable reading of what exists (...), helping schools and society
> to gain more and more knowledge about what is happening in education, to make
> comparisons and decisions to prevent problems and set up new interventions
> (EDULOG, 2017).

Thus, the observatory contributes to the fulfilment of EDULOG's vision of creating "cycles of
reflection, recommendation, measurement and analysis of the educational system" (idem).

One of the main researcher's concerns is choosing the appropriate indicators regarding the
variety of audiences the observatory targets: teachers, those who have coordination and management
responsibilities in schools, families, municipalities, businesses and employers (EDULOG, 2017).
According to a Portuguese news agency, the EDULOG scientific coordinator has stated that the
observatory will also take into account existing international indicators, such as those from the
OECD, and seek others that are relevant for the Portuguese context (Lusa, 2016). The search for
specific national indicators may be one of EDULOG's distinguishing features. The research
consortium, aQueduto, running in Portugal, is sponsored by the National Council for Education and

a private foundation, Francisco Manuel dos Santos Foundation, and is working on Portuguese students' results in PISA, with a view to "providing public opinion with credible and sustained information on the performance of Portuguese students" (aQeduto, 2017). Furthermore, according to EDULOG's secretary general, there were previous contacts with the Francisco Manuel dos Santos Foundation so that EDULOG would not "replicate things".

It is clear that knowledge production tends to be geared towards informing policy makers on the best solutions for the problems of the educational systems, to providing teachers and schools with practical information, and also to providing families with the information they require so that they make better decisions about their children's school paths.

The centrality of the Observatory, considered by its' secretary-general as the "think tank' backbone" (SG), also shows how cognitive intermediation is constructed through the quest to change the system's modes of government. It is not just a matter of shifting to governing by rules or good practices; it is a question of governing by numbers, reminding ourselves of how statistics, data, indicators, and comparisons are increasingly central to the governance of education (Ozga, 2009). Digital platforms allow for permanent performance monitoring with continuous feedback (Simon, 2014): objects, whether individuals, organizations or countries are called to account for their performance to other relevant actors. Receiving or not getting an applause promotes self-government that includes a voluntary and open adherence to the constant feedback of others.

In sum, EDULOG's cognitive intermediation is carried out in its attempt to produce and disseminate a self-portrait of neutral and objective knowledge that is useful for the development of the country and, simultaneously, by producing new forms of future governing by offering conditions to permanently monitor and display public results.

Final Remarks

As previously stated, the rise of think tanks in Portugal, namely those committed to education, is a recent and under-studied phenomenon. This study on EDULOG, a self-entitled think tank for education which has been operating in Portugal since 2015, has shown its commitment and ambition to influence the setting of the education policy agenda (Birkland, 2006). These intentions are made through the production of knowledge, operating as a cognitive intermediator, and the creation of interfaces connecting the academia, business, and political actors and spaces, thus acting as a social intermediator. As for our initial research proposal, our study sheds some light on the social and cognitive dimensions of EDULOG's intermediary work, thus positioning itself as a participant in the (rising) intra-national policy paces (Ball, 2016). At this level, the empirical study helps to better understand the phenomena underlying the broader changes that have turned public policy into a multidimensional and multi-layered process, with multiple sites of occurrence (Rizvi & Lingard, 2010).

Broadening the spectrum of our discussion, the emergence of think tanks anticipates a complexification of political processes in which two trends appear to be evident. The first is related to the complexity resulting from the expansion of social actors who position themselves as producers of problem issues in educational reality and of recommendations on how—and in what sense—the educational system should be re-oriented. The second trend is the complexity resulting from the increase of data, information and knowledge that these new actors wish to observe in the spheres of public policy coordination and communication (Schmidt, 2010).

As far as the current actors are concerned, it should be noted that this policy network, built around the initiative of a business-philanthropic actor, is made up of state actors or actors who have previously represented the state, and of experts with important academic, social and political capital.

It is, thus, a fabrication of an elite that includes actors from business, academia and public policy, and excludes—or has done, up to now—teachers' professional associations, local authorities, parent and student representatives. This option contrasts with the traditional corporatist structure, as new political actors seeking to influence political decision making have had to find new and alternative ways of gaining public and political influence (Blach-Ørsten & Kristensen, 2016). These actors—whether we look at the organizations or at the individuals involved—are not new actors in education policy issues, but rather more like old actors with new ways of asserting their own strategies (Massardier, 2003) and legitimizing a set of values, of ideas for the educational system, and aiming for new modes of governance.

Regarding the activities developed to date, it is quite clear that EDULOG embraces a wide variety of activities, including publication, convocation and information generation activities. Moreover, these activities are channels for both social and cognitive intermediation.

On the one hand, these activities expand the potential of the actors who are actively involved in the network—as networkers and networked individuals—though with different purposes. The highly-digital platform oriented publication activities, seek to extend users of the information gathered and/or analysed, to knowledge producers in order to engage them with the knowledge programs funded by EDULOG, and to promote their visibility and reputation within the scope of public opinion. The convocation activities have a less-mass oriented vocation (although EDUTALKS themes may interest a wider audience), and appear to be more geared towards the mobilization of target actors for the activities, thus expanding the network and possibly in the long run changing its configuration. These convocation activities also aim to establish the central issues of the think tank's agenda, as the economic value of education (seethe themes of the conferences), and the effectiveness of education practices (see the calls for research). Finally, the information-gathering activities, including research calls and the Observatory, are clearly a strategy for the creation and stabilization of interdependencies with and among actors from the fields of research (state and private) and policy/administration.

On the other hand, and 'other hand' here is due to an analytical imposition, given that social and cognitive intermediation are intertwined, these activities are the way through which agenda setting occurs and education is problematized, advocacy built and knowledge translated. It is there one can more clearly observe sets of rules that guide the beliefs, attitudes and conducts of the networkers. Thus, regarding the rationales that 'constitute' the think tank, three features may be highlighted: (a) an agenda for education, in the sense that EDULOG chooses specific research topics on problems that are (re)conceptualized as priorities of the Portuguese education system; (b) a perspective on schooling that combines, drawing on Labaree's (1999) education conflicting goals, the "social efficiency" framework—i.e., schooling as a device to provide different groups of students with the specific skills and knowledge required to become productive workers for the current economy—and "social mobility"—i.e., schooling as a device to provide each individual with competitive advantages; (c) an approach to knowledge production and dissemination in close connection with economic and practical knowledge (see Ozga, 2008). Ultimately, the choices on the research agenda to be financed, the criteria for project selection, and interventions for the composition of research consortia, produce the legitimization of a certain knowledge and certain knowledge producers—and support their existence and expansion. Supporting the production of knowledge for policy is also to make a policy of knowledge.

References

aQeduto (2017). *Apresentação* [Presentation]. Retrieved September 5, 2017, from
        http://www.aqeduto.pt/apresentacao/

Azevedo, S. (2017). É tão grande o seu legado que não cabe numa folha [His legacy is so great that it
        does not fit into a single page]. *Jornal Público*. Retrieved November 30, 2017, from
        https://www.publico.pt/2017/11/30/jornal/e-tao-grande-o-seu-legado-que-nao-cabe-
        numa-folha-33587868

Baek C., Hörmann, B., Karseth, B., Pizmony-Levy, O., Sivesind, K., & Steiner-Khamsi, G. (2018).
        Policy learning in Norwegian school reform: A a social network analysis of the 2020
        incremental reform, *Nordic Journal of Studies in Educational Policy*, *4*(1), 24-37.
        https://doi.org/10.1080/20020317.2017.1412747

Ball, S. J. (2016). Following policy: networks, network ethnography and education policy mobilities.
        Journal of Education Policy, *31*(5), 549-566. http://dx.doi.org/10.1080/02680939.2015.1122232

Ball, S. J. (2017). Laboring to relate: Neoliberalism, embodied policy, and network dynamics. *Peabody
        Journal of Education*, 92(1), 29-41. http://dx.doi.org/10.1080/0161956X.2016.1264802

Ball, S. J., & Exley, S. (2010). Making policy with 'good ideas': Policy networks and the 'intellectuals'
        of New Labour. *Journal of Education Policy*, *25*(2), 151-169.
        https://doi.org/10.1080/02680930903486125

Birkland, T. A. (2006). Agenda setting, power, and interest groups. *Handbook of public policy analysis:
        Theory, politics, and methods* (pp. 105-131). New York: ME Sharpe.

Blach-Ørsten, M., & Kristensen, N. N. (2016). Think tanks in Denmark—Media visibility and
        network relations. *Politik*, 19(1), 22-42.

Borgatti, S. P., Everett, M., & Freeman, L. C. (2002). *Ucinet for Windows: Software for Social Network
        Analysis*. Harvard, MA: Analytic Technologies.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. London: Routledge.

Commaille J. (2004), Sociologie de l'action publique. In: L. Boussaguet, S. Jacquot & P. Ravinet
        (Eds), *Dictionnaire des politiques publiques* (pp. 413- 421). Paris: Sciences-Po Les Presses.

Cooper, A., & Shewchuk, S. (2015). Knowledge brokers in education: How intermediary
        organizations are bridging the gap between research, policy and practice internationally.
        Education Policy Analysis Archives, 23(118). https://dx.doi.org/10.14507/epaa.v23.2355

Correia, L. (2017). Alberto Amaral: "Impressiona-me a falta de continuidade nas políticas" de
        educação [Alberto Amaral: "I am impressed by the lack of continuity in educational
        policies"]. *JNP*, Retrieved December 19, 2017, from https://jpn.up.pt/2017/05/16/alberto-
        amaral-impressiona-me-falta-continuidade-nas-politicas-educacao/

Delvaux, B., & Mangez, E. (2008). *Towards a sociology of the knowledge-policy relation*. Retrieved December
        19, 2017, from
        http://knowandpol.eu/IMG/pdf/literature_sythesis_final_version_english.pdf

Direção-Geral de Educação [Directorate-General for Education]. (2017). *Incentivar o interesse dos jovens
        pelas áreas CTEM: Aassinatura de um memorando de entendimento entre parceiros públicos e privados*
        [Encouraging the interest of young people in STEM areas: Ssignature of a memorandum of
        understanding between public and private partners]. Retrieved September 5, 2017, from
        http://www.dge.mec.pt/noticias/incentivar-o-interesse-dos-jovens-pelas-areas-ctem-
        assinatura-de-um-memorando-de

Direção-Geral de Estatísticas da Educação e Ciência [Directorate for Education and Science
        Statistics]. (2017). *Estatísticas do Ensino Superior* [Statistics of Higher Education]. Retrieved
        September 5, 2017, from http://www.dgeec.mec.pt/

EDULOG. (2017). *EDULOG - Think Tank da Educação*. Retrieved December 19, 2017, from https://www.edulog.pt/

Exley, S. (2014). Think tanks and policy networks in English education. In: M. Hill (Ed.), *Studying public policy: An international approach* (pp. 179-190). Bristol: Policy Press.

Fenwick, T., Mangez, E., & Ozga, J. (Eds.). (2014). *World yearbook of education 2014: Governing knowledge: Comparison, knowledge-based technologies and expertise in the regulation of education*. London: Routledge.

Freeman, L. (1979). Centrality in social networks: Conceptual clarification. *Social Networks*, *1*, 215-239. https://doi.org/10.1016/0378-8733(78)90021-7

Fundação para a Ciência e a Tecnologia. (2017). *About FCT*. Retrieved December 19, 2017, from http://www.fct.pt/

Grek, S. (2009). Governing by numbers: The PISA 'effect' in Europe. *Journal of Education Policy*, *24*(1), 23-37. https://doi.org/10.1080/02680930802412669

Haas, E. (2007). False equivalency: Think tank references on education in the news media. *Peabody Journal of Education*, *82*(1), 63-102. https://doi.org/10.1080/01619560709336537

Haas, P. M. (1992). Introduction: Epistemic communities and international policy coordination. *International Organization*, *46*(1), 1-35. https://doi.org/10.1017/S0020818300001442

Hogan, A. (2016). Network ethnography and the cyberflâneur: Evolving policy sociology in education. *International Journal of Qualitative Studies in Education*, *29*(3), 381-398. https://doi.org/10.1080/09518398.2015.1053159

Howard, P. N. (2002). Network ethnography and the hypermedia organization: New media, new organizations, new methods. *New Media & Society*, *4*(4), 550-574. https://doi.org/10.1177/146144402321466813

Jenkins- Smith, H., & Sabatier, P. (1993). The study of public policy processes. In P. Sabatier & H. Jenkins- Smith (Eds.). *Policy change and learning: An advocacy coalition approach* (pp. 1-9). Boulder: Westview Press.

Jobert, B., & Muller, P. (1987). *L'état en action*. Paris: PUF.

Kauko, J., Suominen, O., Gorodski, V., Centeno, Piattoeva, N., & Takala, T. (2018). Established and emerging actors in the national political arenas. In: J. Kauko, R. Rinne, & and T. Takala, (Eds.), *Politics of quality in education* (pp. 71-90). Ney York: Routledge.

Kotthoff, H. G., & Klerides, E. (2015). Researching governance in education: Synergies and future research agendas. In *Governing educational spaces* (pp. 1-11). Rotterdam: Sense Publishers.

La Londe, P. G., Brewer, T. J., & Lubienski, C. A. (2015). Teach For America and Teach For All: Creating an intermediary organization network for global education reform. *Education Policy Analysis Archives*, *23*(47). http://dx.doi.org/10.14507/epaa.v23.1829

Labaree, D. (1999). The chronic failure of curriculum reform. *Education Week, 18*(36), 42-44.

Lascoumes, P., & Le Galès, P. (2007). *Sociologie de l'action publique*. Paris: Armand Colin.

Lawn, M., & B. Lingard (2002). Constructing a European policy space in educational governance: The role of transnational policy actors. *European Educational Research Journal*, *1*(2), 290-307. https://doi.org/10.2304/eerj.2002.1.2.6

Lawn, M., & Grek, S. (2012). *Europeanizing education: Governing a new policy space*. Oxford: Symposium Books Ltd.

Lindquist, E. A. (1990). The third community, policy inquiry, and social scientists. In S. Brooks & A. Gagnon (Eds.). *Social scientists, policy, and the state* (pp. 21-51). New York and London: Praeger.

Lindquist, E. A. (2001) *Discerning policy influence: Framework for a strategic evaluation of IDRC-supported research*. University of Victoria, Canada: International Development Research Council.

Retrieved December 19, 2017, from https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/29252/118166.pdf?sequence=1

Lingard, B. (2016). Think tanks, 'policy experts' and 'ideas for' education policy making in Australia. *The Australian Educational Researcher*, *43*(1), 15-33. https://doi.org/10.1080/09518398.2015.1053159

Lusa. (2016). Novo Observatório da Educação terá resultados dentro de um ano [New Education Observatory will have results within a year]. *Jornal Público*. Retrieved July 20, 2016, from https://www.publico.pt/2016/07/20/sociedade/noticia/novo-observatorio-da-educacao-tera-resultados-dentro-de-um-ano-1738889

Marketeer. (2016). Massive assina plataforma educativa [Massive subscribes educational platform]). *Marketeer*. Retrieved September 5, 2017, from http://marketeer.pt/2016/08/30/massive-assina-plataforma-educativa/

Maroy, C. (2012). Towards post-bureaucratic modes of governance: A European perspective. In F. Waldow & G. Steiner-Khamsi (Eds.). *Policy borrowing and lending in education* (pp. 62-79). London: Routledge.

Massardier G. (2003). *Politiques et action publiques*. Paris: Armand Colin.

McDonald, L. (2013). In their own words: US think tank "experts" and the framing of education policy debates. *Journal for Critical Education Policy Studies*, *11*(3), 1-28.

McGann, J. (2016). *The Fifth Estate: Think tanks, public policy, and governance*. Washington: Brookings Institution Press.

McNutt, K., & Marchildon, G. (2009). Think tanks and the Web: Measuring visibility and influence. *Canadian Public Policy / Analyse De Politiques*, *35*(2), 219-236. https://doi.org/10.3138/cpp.35.2.219

Nay, O. & Smith, A. (2002). Les intermédiaries en politique: Mediation et jeux d'instituitions. In O. Nay & A. Smith (Dir.). *Le gouvernement du compromis: Courtiers et generalistes dans l'action politique* (pp. 1-21). Paris: Economica.

Newman, M. (2001). The structure of scientific collaboration networks. *PNAS*, *98*(2), 404-409. https://doi.org/10.1073/pnas.98.2.404

Normand, R. (2010). Expertise, networks and indicators: The construction of the European strategy in education. *European Educational Research Journal*, *9*(3), 407-421. https://doi.org/10.2304/eerj.2010.9.3.407

Nóvoa, A., & Yariv-Mashal, T. (2003). Comparative research in education: A mode of governance or a historical journey? *Comparative Education*, *39*(4), 423-438. https://doi.org/10.1080/0305006032000162002

Olmedo, A., & Grau, E. S. C. (2013). Neoliberalism, policy advocacy networks and think tanks in the Spanish educational arena: The case of FAES. *Education Inquiry*, *4*(3), 473-496. https://doi.org/10.3402/edui.v4i3.22618

Olmedo, A., Bailey, P. L., & Ball, S. J. (2013). To Infinity and Beyond…: Heterarchical governance, the Teach For All network in Europe, and the making of profits and minds. *European Educational Research Journal*, 12(4), 492-512: https://doi.org/10.2304/eerj.2013.12.4.492

Ozga, J. (2008). Governing knowledge: Research steering and research quality. *European Educational Research Journal*, *7*(3), 261-272. https://doi.org/10.2304/eerj.2008.7.3.261

Ozga, J. (2009). Governing education through data in England: From regulation to self-evaluation. *Journal of Education Policy*, *24*(2), 149-162. https://doi.org/10.1080/02680930902733121

Peck, J., & Theodore, N. (2010). Mobilizing policy: Models, methods, and mutations. *Geoforum*, *41*(2), 169-174. https://doi.org/10.1016/j.geoforum.2010.01.002

Rhodes, R. A. W. (2006). Policy network analysis. In M. Moran, M. Rein & R. E. Goodin (Eds.), *The Oxford handbook of public policy* (pp. 425-447). Oxford: Oxford University Press.

Rhodes, R. A. W., & Marsh, D. (1992). New directions in the study of policy networks. *European Journal of Political Research*, *21*(1-2), 181-205. https://doi.org/10.1111/j.1475-6765.1992.tb00294.x

Rizvi, F., & Lingard, B. (2010). *Globalizing education policy*. London: Routledge.

Savage, G. C. (2015). Think tanks, education, and elite policy actors. *The Australian Educational Researcher*, *43*(1), 35-53. https://doi.org/10.1007/s13384-015-0185-0

Schmidt, V. (2010). Taking ideas and discourse seriously: Explaining change through discursive institutionalism as the fourth 'new institutionalism'. *European Political Science Review*, *2*(1), 1–25. https://doi.org/10.1017/S175577390999021X

Scott, J. (2000). *Social network analysis: An handbook*. London: Sage.

Shiroma, E. (2014) Networks in action: New actors and practices in education policy in Brazil. *Journal of Education Policy*, *29*(3), 323-348. https://doi.org/10.1080/02680939.2013.831949

Silva, S. (2017). O empresário que também olhava para o mundo [The businessman who also looked at the world]. *Jornal Público*. Retrieved November 30, 2017, from https://www.publico.pt/2017/11/30/sociedade/noticia/o-empresario-que-tambem-olhava-para-o-mundo-1794443

Simons, M. (2014). Governing through feedback: From national orientation towards global positioning. In T. Fenwick, E. Mangez &and J. Ozga (Eds.). *World yearbook of education 2014: Governing knowledge: Comparison, knowledge-based technologies and expertise in the regulation of education* (pp. 155-171). London: Routledge.

Simons, M., Olssen, M., & Peters, M. A. (2009). Re-reading education policies: The critical education policy orientation. In M. Simons, M. Olssen & M.A. Peters (Eds.). *Re-reading education policies: A handbook studying the policy agenda of the 21st century* (pp. 1-35). Rotterdam: Sense Publishers.

Stone, D., & Denham, A. (2004). *Think tank traditions: Policy research and the politics of ideas*. New York: Manchester University Press.

Sultana, R. (2011). On being a boundary person': mediating between the local and the global in career guidance policy learning. *Globalisation, Societies and Education*, *9*(2), 265-283. https://doi.org/10.1080/14767724.2011.577326

Thatcher, M. (1998). The development of policy network analyses: From modest origins to overarching frameworks. *Journal of theoretical politics*, 10(4), 389-416. https://doi.org/10.1177/0951692898010004002

Thatcher, M. (2004), Réseau (policy network). In: L. Boussaguet, S. Jacquot & P. Ravinet (Eds.), *Dictionnaire des politiques publiques* (pp. 384-390). Paris: Sciences-Po Les Presses.

Universidade Católica Portuguesa. (2017). *Porto Católica Business School*. Retrieved December 19, 2017, from http://www.catolicabs.porto.ucp.pt/pt/apresentacao-escola

van Zanten, A. (2013). Connaissances et politiques d'éducation: Quelles interactions? *Revue Française de Pédagogie*, *1*(182), 5-8. Retrieved December 19, 2017, from http://journals.openedition.org/rfp/3979

Wellman, B., & Berkowitz, S. D. (1991). *Social structures. A network approach*. Cambridge: Cambridge University Press.

About the Authors

Sofia Viseu
Instituto de Educação, Universidade de Lisboa
sviseu@ie.ulisboa.pt
http://orcid.org/0000-0002-0059-9717
Sofia Viseu is an Assistant Professor at the Institute of Education of the University of Lisbon. She
studies educational policy, policies network and educational governance. She is the president of the
Portuguese Forum of Education Administration, non-profit association that aims to study and
develop educational administration, bringing together teachers, administration, and academics.

Luís Miguel Carvalho
Instituto de Educação, Universidade de Lisboa
lmcarvalho@ie.ulisboa.pt
http://orcid.org/0000-0003-0301-1592
Luís Miguel Carvalho is Full Professor of Education Policy and Administration at the Institute of
Education, University of Lisbon. He is author of several studies on educational policies and
educational organizations. His recent work as a focus on the role of expert knowledge in the
fabrication of education policies.

education policy analysis archives

Please send errata notes to Audrey Amrein-Beardsley at audrey.beardsley@asu.edu

Join EPAA's Facebook community at https://www.facebook.com/EPAAAAPE and **Twitter
feed** @epaa_aape.

archivos analíticos de políticas educativas
consejo editorial

arquivos analíticos de políticas educativas
conselho editorial