

SPECIAL ISSUE
**Researching 21st Century Education Policy
Through Social Network Analysis**

education policy analysis
archives

A peer-reviewed, independent,
open access, multilingual journal



Arizona State University

Volume 28 Number 122

August 17, 2020

ISSN 1068-2341

Foundation-sponsored Networks: Brokerage Roles of Higher Education Intermediary Organizations¹

Nabih Haddad

University of Michigan-Ann Arbor
United States

Citation: Haddad, N. (2020). Foundation-sponsored networks: Brokerage roles of higher education intermediary organizations. *Education Policy Analysis Archives*, 28(122).
<https://doi.org/10.14507/epaa.28.4501> This article is part of the special issue, *Researching 21st Century Education Policy Through Social Network Analysis*, guest edited by Emily Hodge, Joshua Childs, and Wayne Au.

Abstract: Philanthropic foundations are influential policy entrepreneurs in higher education, advocating new ideas, engaging in collaborative activities, and seeding research to inform the decision-making process. Despite occupying this role, the higher education literature has yet to examine how philanthropic foundations promote ideas between entities or how shared granting relationships are used to distribute and exchange information. By utilizing several sources of data, including in-depth interviews and an original dataset of postsecondary grants, and by applying social network concepts, this study explores the strategies educational funders use to disseminate ideas and promote information exchange. This study found that major foundations are not only taking on an advocacy-oriented role within their communication

¹ A previous version of this study was presented at American Educational Research Association on April 2019, Toronto, Canada. The author would like to thank all participants for their remarks and feedback.

strategies, but they are also facilitating information sharing among intermediaries based on mutual granting relationships and shared agendas. Furthermore, the most impactful grantees are those who cross sectoral boundaries, such as advocacy nonprofits, think tanks, membership associations, and government agencies.

Keywords: philanthropic foundations; higher education; knowledge brokers; higher education policy; social network analysis

Redes patrocinadas por la fundación: El papel de las organizaciones intermediarias de educación superior

Resumen: Las fundaciones filantrópicas son empresarios políticos influyentes en la educación superior, que abogan por nuevas ideas, participan en actividades colaborativas y sembran investigaciones para informar el proceso de toma de decisiones. La literatura aún tiene que examinar cómo las fundaciones filantrópicas promueven ideas entre entidades o cómo se utilizan las relaciones de concesión compartidas para distribuir e intercambiar información. Al utilizar datos de entrevistas en profundidad y un conjunto de datos original de subvenciones postsecundarias, y al aplicar conceptos de redes sociales, este estudio explora las estrategias que utilizan los financiadores educativos para difundir ideas y promover el intercambio de información. Este estudio encontró que las principales fundaciones asumen un papel de promoción dentro de sus estrategias de comunicación y también facilitan el intercambio de información entre intermediarios sobre la base de relaciones de concesión mutua y agendas compartidas. Los beneficiarios más impactantes son aquellos que cruzan las fronteras sectoriales, como las organizaciones sin fines de lucro de defensa, los grupos de expertos, las asociaciones de miembros y las agencias gubernamentales.

Palabras-clave: fundaciones filantrópicas; educación superior; *brokers* de conocimiento; política de educación superior; análisis de redes sociales

Redes patrocinadas por fundações: Papéis das organizações intermediárias de ensino superior

Resumo: As fundações filantrópicas são empreendedores políticos influentes no ensino superior, defendendo novas ideias, participando de atividades colaborativas e semeando pesquisas para informar o processo de tomada de decisão. A literatura ainda não examinou como as fundações filantrópicas promovem ideias entre entidades ou como as relações de concessão compartilhada são usadas para distribuir e trocar informações. Utilizando dados de entrevistas aprofundadas e um conjunto de dados original de bolsas pós-secundárias e aplicando conceitos de redes sociais, este estudo explora as estratégias que os financiadores educacionais usam para disseminar ideias e promover a troca de informações. Este estudo constatou que as principais fundações assumem um papel de defesa de direitos em suas estratégias de comunicação e também facilitam o compartilhamento de informações entre intermediários com base em relações de concessão mútua e agendas compartilhadas. Os donatários de maior impacto são aqueles que cruzam fronteiras setoriais, como organizações sem fins lucrativos de defesa de direitos, grupos de reflexão, associações de membros e agências governamentais.

Palavras-chave: fundações filantrópicas; ensino superior; *brokers* de conhecimento; política de educação superior; análise de rede social

Introduction

Major philanthropic foundations are becoming influential players in the educational policy arena. Scholars have documented the prominent yet hidden role of philanthropists in educational reform, mobilizing advocates across several policy domains in pursuit of their shared goals (Barnhardt, 2017; Bushhouse & Mosley, 2018; Reckhow & Snyder, 2014; Tomkins-Stange, 2016). K-12 researchers have conceptualized philanthropic organizations as political interest groups, using strategic investments for agenda-setting activities (Bushhouse & Mosley, 2018; Hess & Henig, 2015; Reckhow, 2013; Reckhow & Tomkins-Stange, 2018). Likewise, national foundations in higher education are embracing advocacy-oriented strategies to promote degree production and student success reform (Haddad & Reckhow, 2018; Hall & Thomas, 2012; Kelly & James, 2015). Indeed, postsecondary foundations are becoming influential policy entrepreneurs in the sector, financing new organizations and programs, sponsoring research to inform elite debates, and seeding technological innovations to promote inter-systemic change (Hall & Thomas, 2012; Kelly & James, 2015).

Oneway major funders are promoting postsecondary reform is through collaborative networks, where ideas can be shared across several political and institutional contexts. For example, in the Fall of 2017, the Bill and Melinda Gates Foundation (Gates) introduced a new collaborative, The Frontier Set, a national “network of 29 colleges and universities and two state systems [that] is currently engaged in a multi-year effort to develop, execute, and share institutional redesign strategies...” (Gates, 2019, para 5). The Frontier Set involves a variety of stakeholders, including colleges and universities, advocacy organizations, membership associations, and think-tanks to leverage “practical and actionable knowledge and evidence...” to scale change (Gates, 2019, para 7). Efforts like The Frontier Set represent an emerging trend in the policy formation process, in which philanthropic organizations are working through networks of intermediaries to fast-track policies and new practices.

Indeed, a growing body of literature examining the policy engagements of K-12 philanthropists demonstrated that funders are building strategic relationships between educational leaders and decision-makers, investing in boundary-spanning intermediaries that can champion shared goals (Bushhouse & Mosley, 2018; Galey-Horn, Reckhow, Ferrare, & Jasny, 2019; Reckhow, 2013; Reckhow & Tomkins-Stange, 2015, 2018; Scott & Jabbar, 2014; Quinn, Tompkins-Stange & Meyerson, 2014). In higher education, research demonstrates that intermediaries are influential knowledge brokers, interpreting and spreading information and goals across several postsecondary contexts (Gándara et al., 2017; Hammond, Adams, Rubin & Ness, 2020; Miller & Morphey, 2017; Ness, 2010; Tandberg & Hillman, 2014). Yet, there is limited work exploring the knowledge brokering function between foundations, their grantee recipients, and higher education. By drawing on multiple sources of data, including in-depth interviews and a grant dataset, and by apply concepts from social network analysis, this study examines how foundations disseminate ideas and reforms between grantees and how relationships are used to distribute information and policy priorities in the sector.

Background

Philanthropic foundations in higher education are often conceptualized as grantors with little interest in policy change or organizational reform. Recently, K-12 scholars and political scientists have been proving that this conceptual framing does not fit the activities of contemporary philanthropists (Bushhouse & Mosley, 2018; Hess & Henig, 2015; Reckhow, 2013; Reckow &

Snyder, 2014; Tomkins-Stange, 2016; Scott, 2009; Scott & Jabbar, 2014; Quinn, et al., 2014). For example, foundations are playing a central role in reform efforts in K-12 education around accountability and charter schools, investing in outcome-oriented grants to promote specific policy preferences (Tomkins-Stange, 2016; Scott, 2009; Scott & Jabbar, 2014). In particular, K-12 funders are shifting funding away from traditional actors, such as universities and K-12 schools, and investing in grantees involved in policy promotion, such as policy advocates and think tanks (Reckhow & Snyder, 2014).

Policy entrepreneurs are understood to be actors who strategically use their positions and resources to mobilize support to advance their agendas (Kingdon, 2011). Indeed, contemporary grantmakers represent a distinct group of policy entrepreneurs, who can use their status and financial investments to bring in a network of advocates to share research evidence, frame policy concerns, offer best practices, and encourage unified objectives (Hess & Henig, 2015). Educational foundations involved in policy formation regularly fund advocates who can communicate information to policymakers and institutional leaders, where ideas can be reinforced and legitimized across several domains (Reckhow & Tomkins-Stange, 2015, 2018). As Reckhow and Tompkins-Stange (2018) contend, foundations investing in "...a wide variety of interest groups can catalyze a field around a common issue position, by both igniting a new area of focus and amplifying an existing area through strategic investments" (p. 261).

Commentators are signaling a new form of strategic philanthropy in higher education, one that takes an entrepreneurial approach to grantmaking (Bernstein, 2014; Hall & Thomas, 2012). With the arrival of "advocacy philanthropy," postsecondary grantmakers are adopting a reformists agenda, with contemporary funders positioning themselves at the center of the policy implementation process, "identifying research areas, supporting best practices, engaging in public policy advocacy, enhancing communications power, using convening power, fostering partnerships, building public will, and employing the bully pulpit" (Hall & Thomas, 2012, p. 23). Contemporary foundations have converged around college completion reform, with the objective of increasing the number of degree holders to remain globally competitive (Cantwell, 2018; Kelly & Schneider, 2012). In higher education, the foundation community has united around completion reform, with funders diverting investments toward entities and research to advance these objectives (Haddad & Reckhow, 2018; Kelly & James, 2015). As such, a national movement has emerged around college completion, with many scholars crediting major foundations, policy organizations, business interests, and other advocates for amplifying student success as a crucial concern for universities and colleges (Bernstein, 2014; Hammond et al., 2020; Kelly & Schneider, 2012).

Intermediary Organizations as Knowledge Brokers

Knowledge brokerage, the process of distributing and exchanging information across parties, is widely applied to intermediaries linking two disconnected parties (Dobbins et al., 2009; Hammond et al., 2019; Ward et al., 2011). Often, major foundations work through intermediary grantees to promote philanthropic-led initiatives (Haddad & Reckhow, 2018; Hall & Thomas, 2012; Kelly & James, 2015). Intermediary organizations are external entities, who act as third-party actors linking two otherwise separated and disconnected groups (Gándara et al., 2017; Honig, 2004; Ness, 2010). Frequently conceptualized as go-between entities, intermediaries consist of a comprehensive range of institutional actors, including advocacy non-profits, think-tanks, membership associations, consultants, business groups, regional agencies, and even foundations (Gándara et al., 2017; Honig, 2004; Kelly & James, 2015; Ness, 2010; Scott & Jabbar, 2014). Indeed, scholars confirm that K-12 foundations play multiple roles, serving as investors in the knowledge-sharing dynamics, as well as acting as linkage actors themselves, fostering connections within and outside their networks as a way

to disseminate innovation and encourage collaborations (Bushhouse & Mosley, 2018; Scott & Jabbar, 2014).

With a divide between the producers of research and decision-makers in higher education (Hammond et al., 2020; Kezar, 2000; Ness, 2010), intermediaries are effective advocates in packaging and advocating for policy ideas, best practices, languages, and priorities (Caloffi et al., 2015; Cooper, 2014; Howells, 2006; Sin et al., 2008). As Tseng et al. (2007) contend, “Intermediaries often play a significant role in interpreting, packaging, and distributing research evidence for policymakers and practitioners” (p. 18). Nonetheless, in the attempt to promote the exchange of information, intermediaries must decide to use their strategic positions in advantageous ways (Burt, 2004; Powell et al., 1996, 2005). Lomas (2007) emphasizes that the most capable brokers are entrepreneurial agents, who clearly and directly advocate for ideas to all stakeholders (Kramer & Cole, 2003; Kramer et al., 2004; Ward et al., 2011). They are also strategic, utilizing their networks deliberately and advantageously, having a deep understanding of field-level norms and professional expectations (Lomas, 2007; Kramer & Cole, 2003; Kramer et al., 2004; Ward et al., 2011). While scholars have examined the knowledge-brokering process of intermediaries in higher education policy, few have explored this from the vantage point of organized philanthropy. Therefore, this study includes insights from organizational theory and social network theory to assess the knowledge-brokering function among philanthropists and their grantee recipients.

Conceptual Framework

This analysis draws on multiple perspectives, including insights from organizational studies and social network theory, to examine the knowledge sharing potential of boundary-spanning grantees (DiMaggio & Powell, 1983; Fligstein & McAdams, 2015; Powell, 1990; Scott & Davis, 2007). Organizational fields are comprised of diverse players, representing “the totality of relevant actors (DiMaggio & Powell, 1983, p. 148). DiMaggio and Powell (1983) admonish that organizational fields “must be defined on the basis of empirical investigation” (p. 148). Therefore, this analysis includes the following sectors, which are regular recipients of postsecondary grants: for-profit organizations, government, colleges and universities, news outlets, membership associations, nonprofit organizations (including advocacy groups), think tanks, and philanthropic foundations (Barnhardt, 2017; Haddad & Reckhow, 2018; Kelly & James, 2015). Each sector is highly connected and frequent targets of charitable activities.

Sociological theories of fields provide insights into how institutional actors promote organizational change in higher education. However, as Kluttz and Fligstein (2016) explain, “A blind spot of field theory is how ideas move across fields: (p. 202). Thus, to examine how ideas are mobilized through interconnected fields, this analysis draws on the notion of brokerage (Burt, 1992, 2001; Fernandez & Gould, 1994; Gould & Fernandez, 1989). Not only do funders act as intermediaries in educational fields, but through their investments, but they also create channels for networks of grantees to exchange ideas, technical expertise, data, and goals (Bushhouse & Mosley, 2018; Scott & Jabbar, 2014). Therefore, insights from the brokerage literature allow researchers to examine the most strategically advantaged grantee based on their network position (Burt, 1992, 2001, 2005). According to Burt (1992), a broker linking two or more actors accumulates the greatest advantage (Figure 1). As such, nodes bridging two unconnected segments – “filling a structural hole” – can manage the interactions between two fragmented groups (Burt, 1992; Wasserman & Faust, 1994; Figure 1).

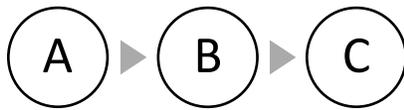


Figure 1. *A directed line where (B) represents the broker in the directed triad.*

By filling the figurative “structural hole,” brokers not only control informational flows to other members, but they also have access to novel ideas and additional opportunities (Burt, 1995, 2005; Powell & Oberg, 2017). Since brokers have diverse connections, they are the first to learn of opportunities (Burt, 1992). The network structure also facilitates brokerage. In particular, the more structural holes in a network, the higher the brokerage potential (Burt, 1992, 2001, 2005). Through grant investments, educational foundations and their networks of grantees are bridging connections between fields. Therefore, insights from social network theory provide a framework to investigate how ideas are transmitted across sectoral boundaries, assuming funders are “central nodes that connect many of the other stakeholders involved” (Bushouse & Mosley, 2018).

Research Design and Methodology

This mixed-methods analysis used interviews and grant information to examine foundation-led activities around knowledge sharing and collaborations. An original database of postsecondary grants was used to investigate the brokerage potential of intermediary grantees in these granting networks. This 2014 data set includes 1,677 grants.

Interviews were conducted to examine how foundations worked across sectors to mobilize support for policy proposals and facilitate the spread of information. Overall, 40 interviews were conducted with sources directly involved in this process, targeting individuals who regularly worked in higher education philanthropy and public policy (Tomkins-Stange, 2016). Specifically, 25 sources came from the largest philanthropies in the sector, ranging from CEOs, vice presidents, and COOs ($N=5$), to managing directors ($N=5$), senior directors ($N=5$), senior program officers ($N=5$), and program officers ($N=5$). To explore the ways in which ideas transfer from foundations to intermediaries, and vice versa, 15 grant recipients were interviewed as well. Many of these sources worked closely with several leaders in philanthropy. These interviewees included CEOs/president ($N=7$), vice presidents ($N=2$), and managing directors ($N=6$).

Two separate interview protocols were used for each group of sources (Merriam & Tisdell, 2016; Miles et al., 2014). The first was designed for foundation representatives. These questions assessed the role research funding plays in agenda-setting strategies and how foundation officials connected and mobilized relevant stakeholders. In particular, questions centered around strategic engagements with other funders, ways philanthropists worked with research producers, and how information was circulated across sectors. The second protocol was designed for grantee recipients. These questions addressed expectations regarding research use and how grantees shared information to the field. In both cases, interviews persisted until no new data could be gained (Merriam & Tisdell, 2016). Discussions ranged from 30 minutes to over two hours. Interviews were audio-recorded then transcribed verbatim. All sources remained confidential and meetings ended with notes to document overarching themes (Aberbach & Rockman, 2002; Miles et al., 2014). Grant descriptions were used to corroborate overall interview themes and findings (Miles et al., 2014). All of the qualitative data were stored in NVivo qualitative analysis software, where several sub-codes

were created relating to knowledge mobilizations, research production, information sharing, networks, and so on (Miles et al., 2004). This informed how this study was organized and presented.

Philanthropic Grant Analysis

Since philanthropic organizations are 501(c)(3)s, they must file annual tax information with the IRS each year. Tax forms provide a unique view of the funding priorities (Reckhow, 2013). Each tax form includes the foundation's name and location, recipient names, granting year, descriptions, and dollar amounts (Greene, 2005, 2015; Kelly & James, 2015). Since major foundations are more likely to be active in policy promotion, this study focuses exclusively on 10 of the leading postsecondary foundations (Tomkins-Stange, 2016). Table 1 includes a list of foundations whose recent works demonstrate heavy involvement in higher education reform efforts (Haddad & Reckhow, 2018; Hall & Thomas, 2012; Kelly & James, 2015). These are all national grantmakers with an average endowment of \$10.5B, ranging from \$1.4B to \$50.7B.

To standardize data across all philanthropies, this study extracted grants from Foundation Directory Online's (FDO) database (Kelly & James, 2015). Foundation Directory Online applies universal collection procedures when aggregating, cleaning, and housing grant information. Therefore, FDO was used to extract each funder's 990 tax forms to ensure there was a consistent process across donors (Kelly & James, 2015). As such, "higher education" was selected in the search fields to separate grants from other sectors. Because the literature on higher education philanthropy demonstrates a growing convergence around shared policy goals of college completion, the most recent data (2014) was used (Haddad & Reckhow, 2018; Hall & Thomas, 2015; Kelly & James, 2015).

Table 1
Foundations in Higher Education

Foundations Sampled
Alfred P. Sloan Foundation
Gates Foundation
Carnegie Foundation
Ford Foundation
Lumina Foundation
The Kresge Foundation
The Robert Wood Johnson Foundation
The Starr Foundation
The Hewlett Foundation
W. K. Kellogg Foundation

To create field boundaries of grantees, the recipients were coded by organizational field. In particular, following the classification approach put forward by Kelly and James (2015), recipients were given the following organizational boundaries: For-Profit Organizations ($N = 3$), Government ($N = 28$), Colleges and Universities ($N = 1,393$), News Industry ($N = 12$), Membership Associations ($N = 73$), Nonprofit Organizations ($N = 114$), and Think Tanks ($N = 54$). For example, if a grantee comprises several members, such as the American Council on Education, it would be categorized under “Membership Associations.” Grantees like the American Enterprise Institute, a policy research center, would be grouped under “Think Tanks.” This was completed until all grantees had field-specific labels.

Grantee Networks

Philanthropic grant agreements are often conceptualized as relational ties between grantor and grantees (Reckhow & Snyder, 2014; Scott & Jabbar, 2014). Based on these assumptions, these data could be transformed into network data to examine possible paths of information sharing. To operationalize this, the analysis drew on the 10 funders' tax information to create one-mode network data (grantees to grantees). The Gould and Fernandez (1989) analysis was then applied to the grantee network to assess the brokerage potential of grantees. Gould and Fernandez (1989) provide a quantitative test “rather than relying on subjective impressions that certain actors seem to occupy brokerage positions” (p. 123). Specifically, it calculates the number of times a grantee can act as a broker in each possible role across subfields. Total brokerages equal the total number of times a grantee can occupy each profile. Importantly, this measurement is sensitive to established field boundaries that are constructed based on “activities or interests” (Gould & Fernandez, 1989, p. 91). Thus, the organizational coding scheme provided the field boundaries for this analysis.

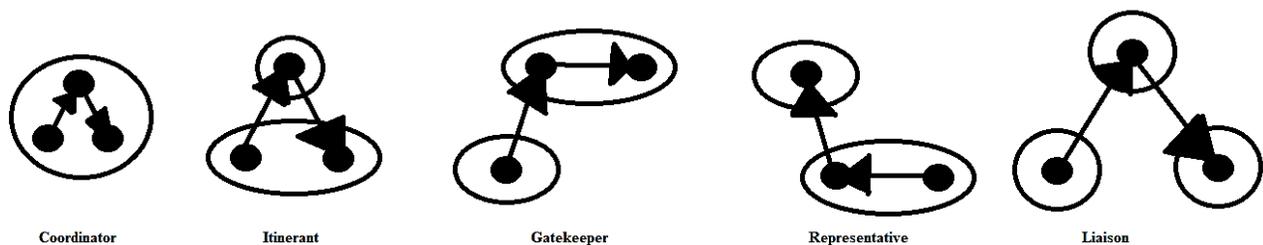


Figure 2. “Insiders” are coordinators, gatekeepers, and representatives; “outsiders” are itinerants and liaisons

Adapted from Gould and Fernandez (1989)

Gould and Fernandez (1989) offer five classifications of how brokerage can arise: coordinator, itinerant, gatekeeper, representative, and liaison (see Figure 2). The coordinator scenario occurs when all actors involved belong to the same subgroup. Itinerant brokerage (also referred to as the consultant) involves an external actor linking two nodes belonging to the same subgroup. The gatekeeper and the representative are similar in their interactions, but in reverse—gatekeepers restrict or allow information to flow to the rest of their group members, whereas representatives transfer information from their groups to external members (Gould & Fernandez, 1989). Lastly, the liaison brokerage occurs when every actor involved in the exchange belongs to a different subgroup. Notably, social actors can occupy multiple brokerage profiles (Fernandez & Gould, 1994; Gould & Fernandez, 1989).

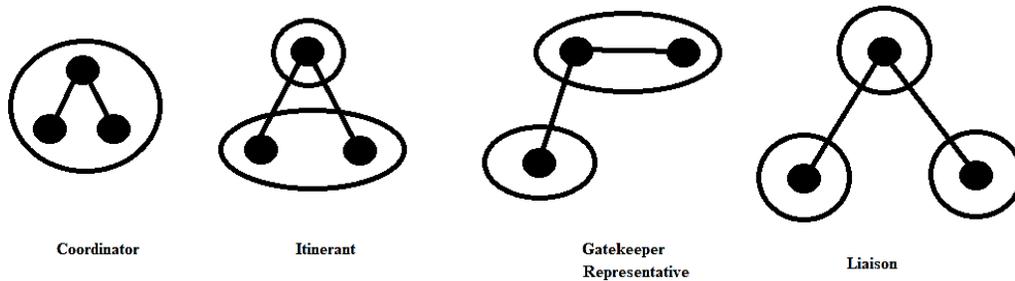


Figure 3. Brokerage roles

Adapted from Gould and Fernandez's (1989) social roles of brokers.

Gould and Fernandez (1989) also designate an insider-outsider dynamic among their classifications. In particular, coordinators, representatives, and gatekeepers are considered “insiders,” since the broker belongs to at least one member's subgroup in the process chain. On the other hand, itinerants and liaisons are considered “outsiders,” since only the broker comes from its own membership group. Lastly, while Gould and Fernandez's (1989) brokerage analysis is agnostic to the type of social ties it tests, their classifications are based on the directionality of interactions (Borgatti, Everett, & Freeman, 2002). However, the grant data analyzed are nondirectional. Therefore, the representative and gatekeeper roles have been collapsed, since they are separated based on directionality, as reflected in Figure 3. UCINET was used to determine both relative and absolute brokerage scores for each of the five states (Borgatti et al., 2002).

Findings

Three major findings emerged on how philanthropic foundations facilitate the exchange of ideas in higher education. First, philanthropic foundations act as linking agents themselves, using their elite positions and status to bridge connections between decision-makers, policy advocates, and representatives of universities and colleges. Second, grantee recipients are connected to other grantees based on their shared relationships with funders. Therefore, granting relationships facilitates the information sharing process across several sectoral domains due to these common connections. In some cases, this is initiated by foundation officials themselves or informally through professional networking activities and convenings. Lastly, the most effective grantee intermediaries are those that can cut across traditional field boundaries, such as nonprofit advocacy groups, think tanks, membership organizations, and government agencies. The sections that follow describe each finding in detail.

Foundations as “Brokers of Information”

Interview data demonstrated that foundations are becoming intentional in linking a diverse group of advocates together and spreading ideas across their networks. For example, it was not uncommon for philanthropic representatives to identify themselves as “brokers of information” and “consensus builders,” as one source noted. Likewise, grantee recipients highlighted that philanthropic foundations had mobilized support behind a unified agenda by framing policy concerns and identifying best practices across their networks. As one source noted, “I mean, that early work helped people understand the shortage was crucial, and that, for example, most states have set a postsecondary attainment goal, which really all goes back to the work of the Lumina foundation to build awareness of the problem.”

Given the influence and status of major foundations, it is reasonable to assume that decision-makers seek their advice. Sources regularly stressed the relationship-building function philanthropists fulfill. Consider this quote by one foundation leader:

We can convene people to come around the table that may have very different perspectives on an issue, whether it is around teaching and learning or whether it's around how to close equity gaps, or even something as technical as rewriting student financial aid.

Many foundation officials emphasized that knowledge sharing extends beyond their formal grantees, where they reach out to external entities outside their customary granting networks to build broad-based support. As one philanthropy source explained,

[philanthropists]...can build that big tent where people will come to whether or not we are giving them grants and really promote that exchange of ideas and that drive or movement towards a consensus to say, you know, is there really a shared sense of which way we should go on student aid or on data?

Foundation officials are filling brokerage roles themselves, connecting grantees and non-grantees alike across the broader policy community. For many sources, foundations see “a real convening power in the consensus-building function that we can and often are called upon to fill,” as one philanthropy official argued. As such, partnerships provide a way to bring greater alignment across higher education policy contexts. Several tax descriptions corroborate many of these interview findings. Consider this Ford investment in one nonprofit, stating that it will “...act as national co-intermediary to create networks, convene stakeholders and educate policymakers around college completion in the Corridors of College Success strategy” (2014, \$250,000).

Information Sharing

The grantor-grantee relationship is vital for information exchange. Many grantee recipients discussed regular interactions between program officers and their offices as routine occurrences. One grantee, a leader at a national trade association overseeing hundreds of colleges and universities, described this dynamic: “We meet with our program officer every week to do a check-in. So, every Friday, one o'clock, we are on the phone with our program officer...” Beyond regular check-ins, many philanthropic officials are active in how research is conducted, analyzed, and delivered, discussing dissemination strategies, and attending grantee sponsored events. As one source contended,

So, the regular conversations happened all along the way [from] the ... officer and ... [to the] director [who] often engages in a more direct manner by either attending convening that the grantee sponsors or certainly, you know, reviewing the research reports that the grantee develops to ensure that the outcomes are being achieved.

While major foundations indeed draw on their money to advance their goals through pilot programs and initiatives, they also see bridging strategic relationships as core to achieving their objectives. As one informant stressed, “So, I think it is money, and then it is also the convening power they have in their networking power...” One analyst at a think-tank highlighted how foundations are trying to promote a sense of community among grantees, connecting several advocates to share data and lessons learned: “So, I think the next goal is really creating a community for people to share ideas and share best practices and to share.” In fact, this same official stressed that funders would like grantees to reach an “agreement on what the problem is and then to help share potential solutions.”

As this informant contended, while funding is essential, foundations' role as connector allows them to spread ideas and solutions more freely across advocates.

Many grantees involved in college completion reform see themselves as part of an overall movement rather than rivals competing for funding. As one grantee source stressed, "So we see each other, not as competing, but we see each other as having the same goal and figuring out what our strength and weaknesses are so that we can play off each other in the, you know the ultimate purpose of moving towards student success." This informant noted that funders are increasingly looking for grantees who can work outside their organizations, identifying individuals with personalities to foster strategic relationships. As one source put it,

...you know there are some really good people who really work but...you have to have people who can play nicely together, who obviously are smart and get the 'politics' and get the policy and get the players and all of that because you have to be able to work nicely with others if you want to scale it. Otherwise, if you want to fund individual programs and organizations run by somebody who is brilliant but can't work with others because it's going to remain globalized, you know, it's just going to be that one thing that won't take off. So, I think funders think about the type of community that they're funding – I think it's really important....

According to interview data and grant descriptions, major foundations regularly host events that promote the exchange of ideas between grantees. Consider this statement from one foundation source: "We bring grantees together to inform each other. We have other conferences that are held in which they participate." Several respondents cited foundations as frequently convening "all of their intermediaries...regularly, at least once a quarter," to share strategies and information. During such events, a "cohort of grantees" convene "to talk about their progress," to "serve as peer learning networks," and to share "best practices" regarding "institutional transformation," as one interviewee from a major advocacy group noted.

As such, within these broader philanthropy networks, subnetworks emerge. One grant recipient stated, "It's like a sub-convenor in some way, because [redacted] convenes all of the solution networks and the solution areas and those that are acting as intermediaries between the institutions they're working with, the 23 institutions, but at the same time, there's also sub-convenings." Although referencing one foundation's strategy, this informant also noted that other funders engage in similar behaviors: "I think [redacted] does similar work but more so on the policy end." Indeed, these broad-based networks allow for other, smaller networks to emerge across fields, creating an iterative process of information sharing between grantees and non-grantees, many of which cannot be captured through 990 tax information.

Consistent with expectations, foundation officials discussed how information sharing is an essential aspect of the grantor-grantee relationship, where spreading ideas are written into grant agreements. As one source explained,

...regardless of the grantee, a funder is going to have a desire to think about how that information and learnings can be shared. Maybe the learnings don't have to be shared by the specific grantee, but the funder might work with another organization to help disseminate the results.

As this quote suggests, a leading priority for many funders is how new information will be mobilized and shared, even if it needs to be contracted to an external entity. Another philanthropy leader offered insight into this strategy and how it is operationalized during negotiations:

Sometimes, of course, you can't agree on what you're going to share, because you haven't loaned it yet, but most national funders, you go into a project, again, through that scaling lens and thinking about the only way things can scale is if you share the knowledge that you've learned. That could be through papers, that could be through conferences or convenings that could be through the production of a playbook. It could be through more specific policy play in terms of supporting outreach to federal or state agencies with the information. The dissemination strategy can differ depending on the work that's being done, but it's definitely a part of the grant work.

Though many foundation officials cannot determine what will come of any grant proposal, they do want their grantees to advertise lessons learned, best practices, and outcomes widely across their networks, where each grantee type plays a role. The functional roles of grantees are essential features of this strategy. According to one grantee informant,

...we don't go with this alone, right, like you were stronger with alliances, you were stronger with partners and it's trying to figure out ... what everybody's role is? I like to see us all as being on the same team and we all have the same goal around student success, but we'll play different roles and it's important not just to know you're role, but it's really important to know everybody else's role and their strength, right.?

For many respondents, each grantee provides a unique platform to share and diffuse preferred reforms across sectoral boundaries. As a web of advocates, all address student success reform in a unique way, whether through strategic messaging about policy goals, promoting research uptake, or sharing institutional change strategies.

Networks to Scale Change

Networks are becoming a preferred strategy to promote and scale educational reform across several postsecondary policy arenas (Kezar, 2014). As one informant contended, "Completion success networks supported by philanthropy help institutions learn from each other, learn from best practice nationally." Funders note that working through networks is an effective way to share ideas, promote collaborations, and scale reforms. Consider this statement by one foundation official, who detailed some of the benefits of investing in networks:

I think that one of the reasons that this has happened is because we, as funders, have realized that change is going to come through scaling. Change is going to come, not at the initiative, by initiative, institution by institution level, but it's really going to come at the system level. Reform at the system level takes a huge amount of resources, and often more resources than anyone funder can bring to bear. So I think as we all sort of come to that understanding of the need for system-level reform has pretty much almost forced I would say just resource needs, forced us to come together and collaborate with respect to the amount of funding that's necessary to execute the goal that we have of transformative change.

One strategy is university-based networks, creating consortiums of institutions working together to share data to identify areas for reform. As such, these initiatives are intended to scale up reforms through research sharing and university-based interventions. One foundation official discussed his experiences with such projects:

...I have made grants to institutions directly to lead innovations, for example, in adaptive learning, and so those institutions received a grant from the foundation to essentially scale a certain innovation or implement a certain innovation, undertake rigorous research, measure the results from that research and share that evidence and feedback... publicly with the field.

One example frequently cited is the University Innovation Alliance (UIA). Launched in 2014, the UIA received startup investments from several foundations, including Ford, Kresge, Lumina, and Gates. The UIA includes a consortium of 11 large public research institutions and seeks to test and scale data-driven approaches to improving college retention and graduation rates across its members. As the UIA Vision Prospectus (2020) notes,

Our vision is that by piloting new interventions, sharing insights about their relative costs and effectiveness, and scaling those interventions that are successful, we will significantly increase the number of low-income Americans graduating with quality college degrees and that, over time, our collaborative work will catalyze systemic changes in the entire higher education sector (p. 4).

Commenting on the newly established UIA in 2014, Michael Crow, UIA's Chair and the president of Arizona State University, noted, "There is a lot of talk about disruption in higher education. We think that the real disruption will come through collaboration" (para. 3). Informants confirmed this strategy, noting that UIA initiatives are designed for "scaling our model and trying to expose others to it." For many philanthropists, they draw on such networks to scale organizational change strategies. One foundation informant highlighted this point, stating, "We work with associations,... the UIA, like those kinds of consortia... We're thinking about the power of networks and how do we harness change amongst a group of network institutions to enact that change at scale and leverage the power of networks." According to one foundation source, networks like the UIA are "taking the idea of a consortium to another level," because "there are very few of them that are performance-driven or so tightly aligned to a shared mission of access and success." In other words, such collaborative networks "... transform institutions to think differently in the way they do the day to day business," as this philanthropy source contended. One foundation official, who provided startup funding to the UIA, noted that the goal was, "...to get public universities to focus on student's success, 11 public universities to share data, and use big data to do that."

These networks are based on mobilizing reforms across multiple institutions to scale change, usually relying on data to elevate specific innovations that can be shared. Like other grant-funded projects, major philanthropists are interested in how new ideas and change strategies can be communicated. Referencing the UIA, this source noted the role of information sharing within these networks,

...We have a grant that we're co-funding with the [redacted] foundation around completion grants, and part of that work includes convening the 11 institutions, bringing them together along with the funders and the evaluator, where we're all in a room at the same time talking about the project, learning from each other, so those are convenings of grantee evaluator and funder happen regularly.

At many of these events, "there's a team from each campus coming together" where 'funders come to that to observe.'" The participants include "all of the grantees of our shared funders," as one source explained.

Overall, these institutional networks can “maximize student outcomes and student performance with as few resources as possible,” while providing a scalable model, as one of the interviewees stressed. One philanthropy respondent elaborated, stating its “about scale, a lot of times we're thinking about how we can work with institutions, not just for one institution's own development, but sort of institutions leading to systemic change.” For many philanthropy representatives, this strategy of “working with groups of institutions” is “more effective” than projects directed at one or two institutions. Many informants stressed that if projects are not replicable, many view them with doubt. As one source explained, “What with the idea of not being something to be replicated, it creates extra skepticism and negative attention on the institution. It also makes it so that other ideas and interventions have to compete for attention inside that organization.”

Brokerage Based on Shared Granting Relationships

To provide insight into the role grant agreements play in the knowledge brokering function, 990 forms were used to examine the broker potential of grantees based on shared funders. This assumes, as the interview data suggest, that shared funding relationships foster interactions. Sociologists often note that brokerage arises when actors function as conduits between two otherwise disconnected entities (Burt, 1995, 2005). This gives bridging entities an advantage. By applying the Gould-Fernandez (1989) brokerage test, grant data based on shared granting relationships offered insight into the brokerage potential of grantees (see Figure 4). However, this only captured networks from grant agreements, leaving out other potential interactions that could occur from other relations.

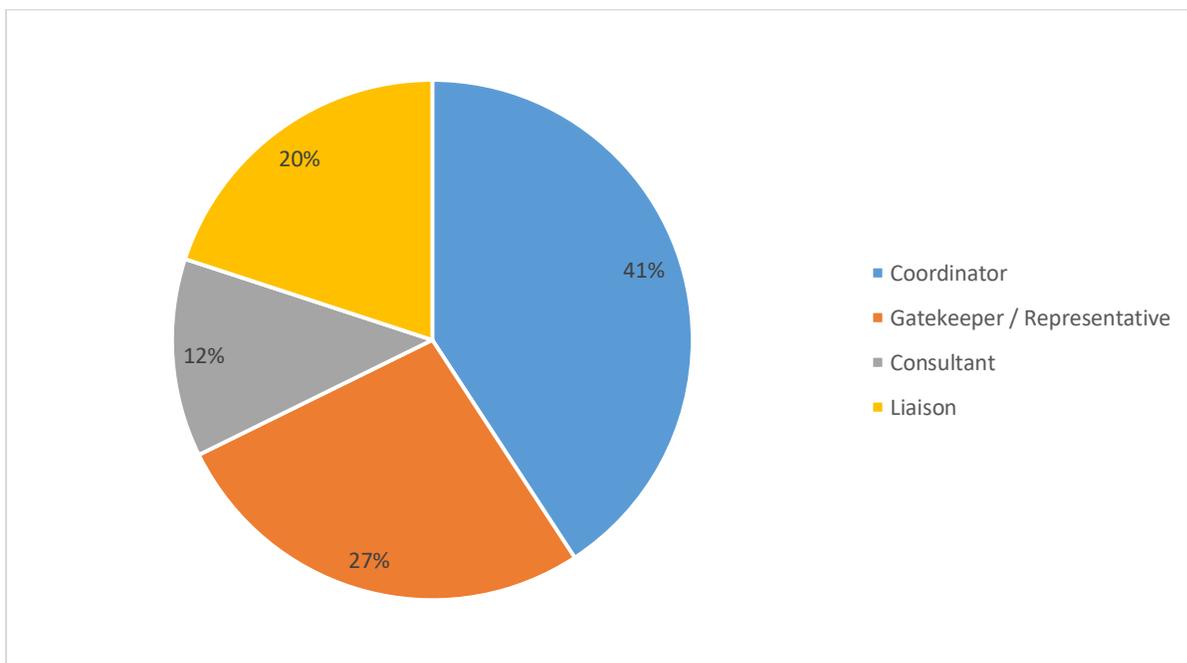


Figure 4. *Brokerage profiles of aggregated shared grantee networks.*

Overall, in 2014, the most representative brokers in shared grantee networks were coordinators (41%) (brokers connecting two actors from their own subgroups), followed by gatekeepers or representatives (entities that transmit or restrict information to and from external actors) (27%), liaisons (external brokers who connect two actors from two outside groups) (20%),

and consultants (external actors who connect two nodes from the same subgroup) (12%). As such, nearly 70% of grantees fall within the “insider” category (coordinators, representatives, gatekeepers), and 32% fall within the “outsider” group (consultants and liaisons). This is not surprising since foundations give most grants to colleges and universities, though philanthropists have been investing in more non-institutional entities over time (Hall & Thomas, 2012).

Brokerage profiles of the organizational types are also presented in Figure 5. Colleges and universities are highly represented in the coordinator and gatekeeper and representative roles, or insiders (see Figure 5). Based on shared ties, postsecondary institutions are more likely to exchange ideas within their fields. In contrast, government agencies, membership organizations, nonprofits, and think tanks all fall within the consultant and liaison roles, in the outsiders’ bucket (see Figure 5). These entities can broker relationships across sectors, and can “get a lot of coverage,” as one source noted.

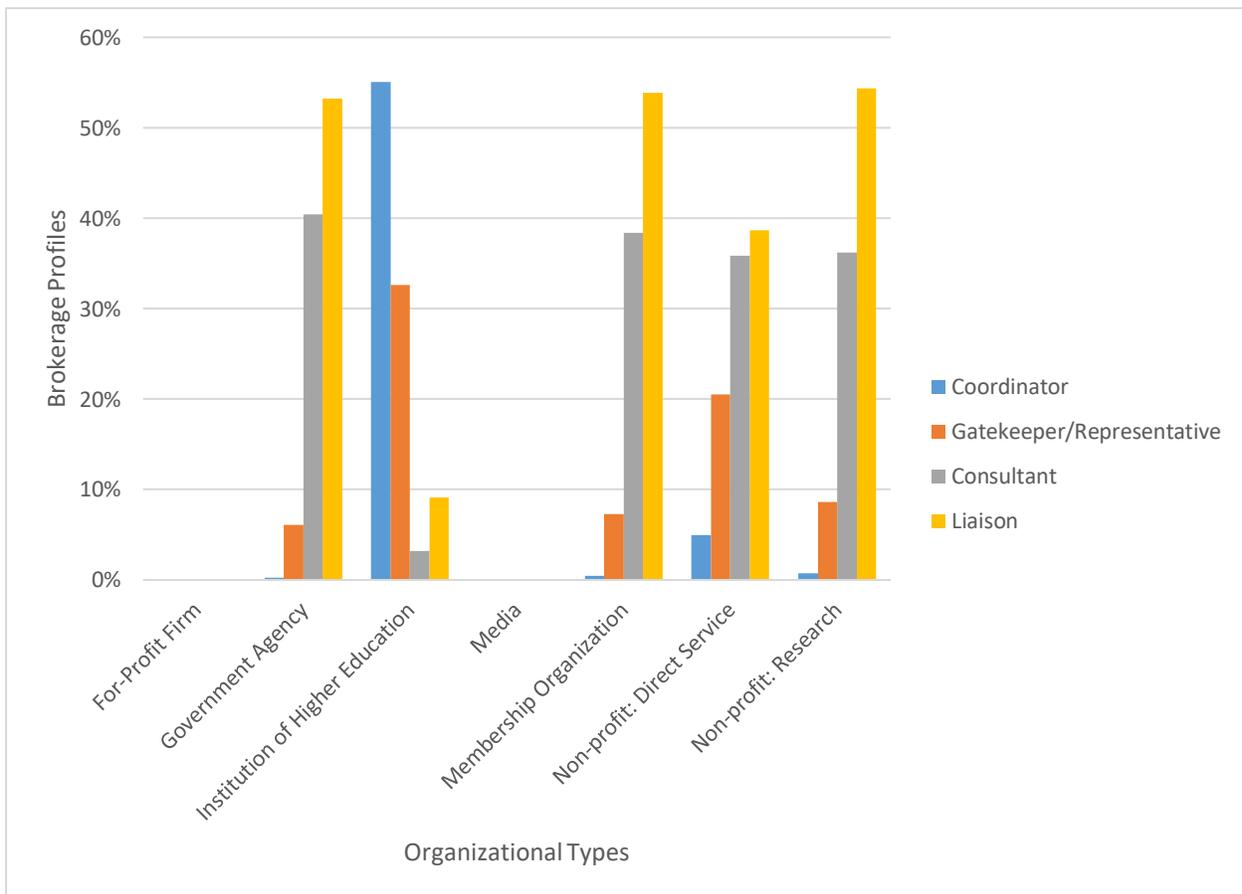


Figure 5. Brokerage profiles of organizational types.

While most foundation grants are directed to insiders, outsiders are important social actors for philanthropists seeking to influence multiple fields. According to one source, “Their role is to make the world a better place and do it transcending government or any other kind of siloed approach...” Indeed, organizations that can cut across traditional sectoral lines are essential for broadcasting ideas and embedding policy agendas. Likewise, one philanthropy respondent identified these intermediary types as “influential” and regularly “arm[ing] them with information...” to “mobilize people by promoting guides and frameworks and tool-kits.”

As depicted in Table 2, a selection of grantees scored highly as outsiders (consultants and liaisons) and were also frequently mentioned by informants. Government agencies, including those that conduct statewide coordinating activities, such as the Western Interstate Commission for Higher Education and the University System of Georgia, tend to function as consultants and liaisons (see Table 2). Similarly, and not surprisingly, advocacy organizations such as the Aspen Institute, Complete College America, and Excelencia in Education all scored highly as consultants and liaisons (see Table 2). Many foundation officials highlight how these advocates can “identify, elevate, and demystify...policies and practices....” One aspect that makes funders “love working with them” is “how clear” they are in their advocacy, as one source noted.

Table 2
Selected Grantees, Brokerage Statistics of Grantee Recipients

Government Agency	Coord	G/Rep	Conslt.	L
WICHE Region	0%	6%	35%	52%
University System of Georgia	0%	5%	41%	48%
Advocacy Nonprofit	Coord	G/Rep	Conslt.	L
Aspen Institute	1%	7%	35%	34%
Complete College America	3%	14%	35%	34%
Excelencia in Education	4%	18%	28%	31%
Membership Organization	Coord	G/Rep	Conslt.	L
Achieving the Dream	0%	7%	35%	51%
AAC&U	0%	6%	38%	49%
American Association of Community Colleges	1%	7%	39%	46%
Think Tank	Coord	G/Rep	Conslt.	L
Center for American Progress	1%	9%	27%	53%
New America Foundation	1%	8%	35%	48%
Institute for Higher Education Policy	1%	8%	32%	52%

Note: Selected grantees based on liaison score and interview data. Includes regional higher education commissions and university-wide systems.

Likewise, membership organizations such as Achieving the Dream, the American Association of Community Colleges, and the Association of American Colleges and Universities all scored highly as outsiders (Table 2). Sources noted that foundations rely on membership organizations since they “are very effective at broadcasting,” as one respondent contended. In fact, membership associations have a captive audience of colleges and universities where information can be shared to hundreds if not thousands of institutional leaders. Think tanks, such as the Center for American Progress, the Institute for Higher Education Policy, and New American Foundation, are highly represented in the liaison profile, hovering at the 50% mark (Table 2). Think tanks are important grantees in taking policy-relevant research and connecting it to policymakers (Gandara et al., 2017). As one think-tank informant reflected on how their organization could push the envelope in the policy world when compared to other grantees,

... connecting those dots is really important because you could fund a whole bunch of individuals and that's good, but what's more powerful is funding those individuals and helping them to see how they were related and how are they, how they are connected and how there are different strikes tend to be used in different situations. I mean, I work with folks all the time. You know, we are not a membership organization, we are not an institution, but within the think tank world, we're more comfortable pushing the envelope a little bit in some of our colleagues.

Indeed, foundations regularly rely on externally oriented intermediaries—government, membership entities, advocacy nonprofits, and think tanks—to broadcast policy notions and solutions across subfields, thus ensuring that multiple actors are reinforcing similar reforms. Many informants stressed that intermediaries building strategic relationships across sectors are most effective at promoting and scaling policy and organizational change.

Conclusion

Educational foundations are influential advocates in the policy implementation process (Bushhouse & Mosely, 2018; Hess & Henig, 2015; Galey-Horn et al., 2019; Reckhow & Tomkins-Stange, 2015, 2018). Major foundations function as linkage actors across several educational contexts, advocating for specific policy ideas within a network of entities. As such, this study demonstrates that philanthropic organizations are agents for change, using their influence to facilitate connections between decision makers, policy organizations, and higher-education leaders to share preferred ideas and goals. One feature is how grantees are linked based on their shared granting relationships, where information sharing extends beyond the grantor and grantee affiliation. Specifically, grant recipients frequently interact with other grantees based on their working relationships with foundations. Several interviewees described the importance of sharing data and best practices within these networks, with many writing knowledge-sharing strategies into grant agreements. Furthermore, foundations have created a sense of community among advocates, hosting events, sponsoring convenings, and providing other networking opportunities to push for greater collaboration.

Networks are also powerful platforms to scale reform. Specifically, philanthropic organizations are using networks to foster strategic relationships across several institutional and political domains. As with the case of the Frontier Set and the UIA, foundations are not only interfacing several institutions together but are using these networks to streamline ideas, priorities, and preferred reforms. With philanthropic support, these networked initiatives are indirectly shaping the postsecondary landscape, fast-tracking academic innovations through grantees. Unlike traditional advocacy groups, consortiums allow philanthropists to achieve greater returns with relatively small investments, creating buy-in from partnering institutions. While philanthropic funding cannot account for how successful networks like the Frontier Set or the UIA have become, without the support of private philanthropy, they would not have the same scope and legitimacy in the field. While these networks are common themes in the interviews and grant descriptions, they are difficult to assess with 990 tax data alone. Further studies would need to access and analyze additional data sets, including surveys, to examine the influence and scope of these networks and their outcomes.

Overall, this analysis illuminates several of the agenda-setting functions philanthropic foundations play. Accordingly, these findings confirm that foundations regularly rely on grantees who can function as these entrepreneurial agents, advocating for ideas outside traditional circles. Often, these groups include influential policy organizations that can bundle and disseminate policy

proposals broadly and concisely, such as advocacy nonprofits, think tanks, and membership associations. Indeed, as postsecondary foundations take a more central role in higher education reform, scholars should begin to examine these activities rigorously. Critics of philanthropic interventions often highlight the lack of transparency and accountability of private donors in public affairs (Reich, 2018). As university leaders and decision makers lean on philanthropists for policy proposals and institutional change strategies, stakeholders should ensure that all ideas and viewpoints are represented. This requires that postsecondary scholars spotlight the role of non-state actors in the higher education policy formation process (Ness et al., 2015).

References

- Aberbach J. F., & Rockman B. A. (2002). Conducting and coding elite interviews. *Political Science and Politics*, 35, 673-676.
- Allen, J., James, A. D., & Gamlen, P. (2007). Formal versus informal knowledge networks in R&D: A case study using social network analysis. *R&D Management*, 37(3), 179-196.
- Barnhardt, C. L. (2017). Private philanthropic foundations' social agendas and the field of higher education. In M. B. Paulsen (Eds.) *Higher education: Handbook of theory & research* (pp. 181-257). Springer.
- Bernstein, A. R. (2014). *Funding the future: Philanthropy's influence on American higher education*. Rowman & Littlefield Education.
- Borgatti, S. P., Everett, M. G., & Freeman, L. C. (2002). Ucinet for Windows: Software for Social Network Analysis [Software]. Analytic Technologies.
- Bowen, S., Martens, P., Need to Know Team, & The Need to Know Team. (2005). Demystifying knowledge translation: Learning from the community. *Journal of Health Services Research and Policy*, 10(4), 203-211.
- Bowen, S., Martens, P., Need to Know Team, & The Need to Know Team. (2005). Demystifying knowledge translation: Learning from the community. *Journal of Health Services Research and Policy*, 10(4), 203-211.
- Burt, R. S. (1992.) *Structural holes: The social structure of competition*. Harvard University Press.
- Burt, R. S. (2000). The network structure of social capital. *Research in Organizational Behaviour*, 22, 345-423.
- Burt, R. S. (2005). *Brokerage and closure*. Oxford University Press.
- Bushouse, B. K., & Mosley, J. E. (2018). The intermediary roles of foundations in the policy process: Building coalitions of interest. *Interest Groups & Advocacy*, 7(3), 289-311.
- Cantwell, B. (2018). Student Success as a Social Problem. *International Journal of Chinese Education*, 7(1), 6-21. The Netherlands: Brill.
- Conklin, J., Lusk, E., Harris, M., & Stolee, P. (2013). Knowledge brokers in a knowledge network: The case of seniors health research transfer network knowledge brokers. *Implementation Science: IS*, 8(1), 7-7.
- DeBray, E., Scott, J., Lubienski, C., & Jabbar, H. (2014). Intermediary organizations in charter school policy coalitions: Evidence from New Orleans. *Educational Policy*, 28(2), 175-206.
- Diani, M., & D. McAdam, eds. 2003. *Social movements and networks: Relational approaches to collective action*. Oxford University Press.
- DiMaggio, P. J. (1991). Constructing and organizational field as a professional project: U.S. art museums 1920-1940. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 267-292). University of Chicago Press.

- DiMaggio, P., & Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160.
- Dobbins, M., Robeson, P., Ciliska, D., Hanna, S., Cameron, R., O'Mara, L., DeCorby, K., & Mercer, S. (2009). A description of a knowledge broker role implemented as part of a randomized controlled trial evaluating three knowledge transition strategies. *Implementation Science*, 4, Article 23. <http://www.implementationscience.com/content/4/1/23>
- Dougherty, K. J., & Natow, R. S. (2015). *The politics of performance funding for higher education: Origins, discontinuations, and transformations*. Johns Hopkins University Press.
- Fernandez, R. M., & Gould, R. V. (1994). A dilemma of state power: Brokerage and influence in the national health policy domain. *American Journal of Sociology*, 99(6), 1455–1491.
- Ferrare, J. J., & Reynolds, K. (2016). Has the elite foundation agenda spread beyond the gates? An organizational network analysis of nonmajor philanthropic giving in K–12 education. *American Journal of Education*, 123(1), 137-169.
- Fligstein, N., & McAdam, D. (2015). *A theory of fields*. Oxford University Press.
- Galey-Horn, S., Reckhow, S., Ferrare, J. J., & Jasny, L. (2019;2020;). Building consensus: Idea brokerage in teacher policy networks. *American Educational Research Journal*, 57(2), 000283121987273-905
- Gandara, D., Rippner, J., & Ness, E. (2017). Exploring the 'how' in policy diffusion: National interme-diary organizations' roles in facilitating the spread of performance-based funding policies in the states. *Journal of Higher Education*, 88(5), 701–725
- Gates (2019). *THE FRONTIER SET – FACT SHEET*. Retrieved from <https://postsecondary.gatesfoundation.org/frontier-set-fact-sheet/>
- Gould, R. V., & Fernandez, R. M. (1989). Structures of mediation: A formal approach to brokerage in transaction networks. *Sociological Methodology*, 19, 89-126.
- Greene, J. P. (2005). Buckets into the sea: Why philanthropy isn't changing schools, and how it could. In F. M. Hess (Ed.), *With the best of intentions: How philanthropy is reshaping K-12 education* (pp. 49–56). Harvard Education Press.
- Greene, J. P. (2015). Buckets into another sea. In F. M. Hess & J. R. Henig (Eds.), *The new education philanthropy: Politics, policy, and reform* (pp. 11-28). Harvard Education Press.
- Greenhalgh, T., Robert, G., MacFarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: Systematic review and recommendations. *The Milbank Quarterly*, 82(4), 581-629
- Haddad, N., & Reckhow, S. (2018). The shifting role of higher education philanthropy: A network analysis of philanthropic policy strategies. *Philanthropy & Education*, 2(1), 25–52. <https://doi.org/10.2979/phileduc.2.1.02>
- Hall, C., & Thomas, S. (2012, April). *Advocacy philanthropy and the public policy agenda: The role of modern foundations in American higher education*. Paper presented at the American Education Research Association, Vancouver, BC.
- Hammond, L., Adams, P., Rubin, P. G., & Ness, E. C. (2019). A Rhetorical Analysis of Intermediary Organization Documents on College Completion Policy. *Educational Policy*. <https://doi.org/10.1177/0895904819888231>
- Hess, F. M., & Henig, J. R. (Eds.). (2015). *The new education philanthropy: Politics, policy, and reform*. Harvard Education Press.
- Hillman, N. W., Tandberg, D. A. & Gross, J. P. K. (2014). Performance funding in higher education: Do financial incentives impact college completions? *The Journal of Higher Education*, 85(6), 826-857.

- Hillman, N., Tandberg, D., & Fryar, A. (2015). Evaluating the impacts of 'new' performance funding in higher education. *Educational Evaluation and Policy Analysis*, (37), 501–591.
- Honig, M. I. (2004). The new middle management: Intermediary organizations in education policy implementation. *Educational Evaluation and Policy Analysis*, 26(2), 65.
- Kelly, A. P., & James, K. J. (2015). Philanthropy goes to college. In F. M. Hess & J. R. Henig (Eds.). *The new education philanthropy: Politics, policy, and reform* (pp. 79-104). Harvard Education Press.
- Kezar, A. (2014). Higher education change and social networks: A review of research. *The Journal of Higher Education*, 85(1), 91-125.
- Kezar, A. (2000). Understanding the research-to-practice gap: A national study of researchers' and practitioners' perspectives. In A. Kezar & P. Eckel (Eds.), *New directions for higher education: Moving beyond the gap between research and practice in higher education* (Vol. 110, pp. 9–19). Jossey-Bass.
- Kingdon, J. W. (2011). *Agendas, alternatives, and public policies*. Longman.
- Kramer, D. M., & Cole, D. C. (2003). Sustained, intensive engagement to promote health and safety knowledge transfer to and utilization by workplaces. *Science Communication*, 25(1), 56-82
- Kramer, D. M., Cole, D. C., & Leithwood, K. (2004). Doing knowledge transfer: Engaging management and labor with research on employee health and safety. *Bulletin of Science, Technology & Society*, 24(4), 316-330.
- Lomas, J. (2000). Using 'linkage and exchange' to move research into policy at a Canadian foundation. *Health Affairs (Project Hope)*, 19(3), 236.
- Lomas, J. (2007). The in-between world of knowledge brokering. *British Medical Journal*, 334(7585), 129-132.
- Martinez, N. R., & Campbell, D. (2007). Using knowledge brokering to promote evidence-based policy-making. *Bulletin of the World Health Organization*, 85(5), A-B.
- Mehta, J., & Teles, S. (2012). Jurisdictional politics: A new federal role in education. In F. M. Hess & A. P. Kelly (Eds.), *Carrots, sticks, and the bully pulpit: Lessons from a half-century of federal efforts to improve America's schools* (pp. 197–216). Harvard Education Press.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.
- Metcalfe A. S. (2008). Theorizing research policy: A framework for higher education. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (pp. 241-276)..
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.
- Miller, G. N. S., & Morphew, C. C. (2017). Merchants of optimism: Agenda-setting organizations and the framing of performance-based funding for higher education. *The Journal of Higher Education*, 88(5), 754-784.
- Ness E. C. (2010). The role of information in the policy process: Implications for the examination of research utilization in higher education policy. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. 25, pp. 1-49). Springer.
- Ness, E. C., & Gándara, D. (2014). Ideological think tanks in the states: An inventory of their prevalence, networks, and higher education policy activity. *Educational Policy*, 28(2), 258-280.
- Ness, E. C., Hearn, J. C., & Rubin, P. G. (2018). The SHEEO and intermediary organizations. In D. A. Tandberg, B. A. Sponsler, R. W. Hanna, & J. P. Guilbeau (Eds.), *The state higher education executive officer and the public good: Developing new leadership for improved policy, practice, and research* (pp.163-192). Teachers College Press.

- Ness, E. C., Tandberg, D. A., & McLendon, M.K. (2015). Interest groups and state policy for higher education: new conceptual understandings and future research directions. In M. B. Paulsen (Ed.), *Higher education: Handbook of theory and research 30* (pp. 151-186). Springer Verlag.
- Powell, W. (2007). The New Institutionalism. In *The International Encyclopaedia of Organization Studies*. Sage Publications.
- Powell, W. W., & DiMaggio, P. (1991). *The new institutionalism in organizational analysis*. University of Chicago Press.
- Quinn, R., Tompkins-Stange, M., & Meyerson, D. (2014). Beyond grantmaking: Philanthropic foundations as agents of change and institutional entrepreneurs. *Nonprofit and Voluntary Sector Quarterly*, 43(6), 950-968
- Reckhow, S. & Tompkins-Stange, M. (2015). Singing from the same hymnbook: Education policy advocacy at Gates and Broad. In F. M. Hess & J. R. Henig (Eds.) *The new education philanthropy: Politics, policy, and reform*. (pp. 55-77). Harvard Education Press.
- Reckhow, S. (2013). *Follow the money. How foundation dollars change public school politics*. Oxford University Press.
- Reckhow, S., & Snyder, J. W. (2014). The expanding role of philanthropy in education politics. *Educational Researcher*, 43(4), 186-195.
- Reckhow, S., & Tompkins-Stange, M. (2018). Financing the education policy discourse: Philanthropic funders as entrepreneurs in policy networks. *Interest Groups & Advocacy*, 7(3), 258-288
- Reich, R. (2018). *Just giving: Why philanthropy is failing democracy and how it can do better*. Princeton University Press.
- Robeson, P., Dobbins, M., & DeCorby, K. (2008). Life as a knowledge broker in public health. *Journal of the Canadian Health Libraries Association / Journal De l'Association Des Bibliothèques De La Santé Du Canada*, 29(3), 79.
- Scott, J., & Jabbar, H. (2014). The hub and the spokes: Foundations, intermediary organizations, incentivist reforms, and the politics of research evidence. *Educational Policy*, 28(2), 233-257.
- Scott, W. R., Davis, G. F., & Scott, W. R. (2007). *Organizations and organizing: Rational, natural, and open system perspectives*. Pearson Prentice Hall.
- Sin, C. H. (2008). The role of intermediaries in getting evidence into policy and practice: Some useful lessons from examining consultancy client relationships. *Evidence & Policy: A Journal of Research, Debate and Practice*, 4(1), 85-103.
- Snyder, J. (2015). How old foundations differ from new foundations. In F. M. Hess & J. R. Henig (Eds.) *The new education philanthropy: Politics, policy, and reform*. (pp. 29-54). Harvard Education Press.
- Tandberg, D. A., & Hillman, N. W. (2014). State higher education performance funding: Data, outcomes, and policy implications. *Journal of Education Finance*, 39(3), 222-243.
- The Foundation Center. (2018). *Foundation States: Education*. Retrieved September 5, 2018, from <http://data.foundationcenter.org/#/fc1000/subject:education/all/top:foundations/list/2012>
- Thompson, G. N., Estabrooks, C. A., & Degner, L. F. (2006). Clarifying the concepts in knowledge transfer: A literature review. *Journal of Advanced Nursing*, 53(6), 691-701.
- Tompkins-Stange, M. E. (2016). *Policy patrons: Philanthropy, education reform, and the politics of influence*. Harvard Education Press.
- Tseng, V., Granger, R., Seidman, E., Maynard, R., Weisner, T. & Wilcox, B. (2007). *Studying the use of research evidence in policy and practice*. The William T. Grant Foundation.
- Ward, V., Smith, S., House, A., & Hamer, S. (2012). Exploring knowledge exchange: A useful framework for practice and policy. *Social Science & Medicine*, 74(3), 297-304

- Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications*. Cambridge University Press.
- Yanovitzky, I., & Weber, M. S. (2019). News media as knowledge brokers in public policymaking processes. *Communication Theory*, 29(2), 191-212.
- Yin, R. K. (2009). *Case study research design and methods* (4th ed.). Sage Publications.

About the Author

Nabih Haddad

University of Michigan

Nabih@umich.edu

Nabih Haddad is a postdoctoral research fellow at the University of Michigan-Ann Arbor. His research interests include higher education policy, educational philanthropy, and college completion. He has worked on projects which examined the intersections of philanthropic foundations and non-profits, the role of funders in academic labor markets, and the relationship between intermediary entities and educational systems.

About the Guest Editors

Emily M. Hodge

Montclair State University

hodgee@montclair.edu

Emily M. Hodge, Ph.D., is an assistant professor in the Department of Educational Leadership at Montclair State University. She received her PhD from the Department of Education Policy Studies at the Pennsylvania State University. Her work uses qualitative methods and social network analysis to understand the changing nature of strategies for educational equity. Recent projects have explored how educational systems, schools, and teachers negotiate the tension between standardization and differentiation in the context of the Common Core State Standards, and the varied strategies state education agencies are using to support standards implementation.

Joshua Childs

The University of Texas at Austin

joshuachilds@austin.utexas.edu

Joshua Childs is an assistant professor of Educational Policy and Planning (EPP) in the Department of Educational Leadership and Policy. Joshua received his PhD in Learning Sciences and Policy at the University of Pittsburgh. Joshua's research focuses on the role of interorganizational networks, cross-sector collaborations, and strategic alliances to address complex educational issues. Specifically, his work examines collaborative approaches involving community organizations and stakeholders that have the potential to improve academic achievement and reduce opportunity gaps for students in urban and rural schools.

Wayne Au

University of Washington, Bothell

wayneau@uw.edu

Wayne Au is an educator, activist, and scholar who focuses on issues of race, class, and power in schooling. He is a professor in the School of Educational Studies at the University of Washington-Bothell, where he currently serves as dean of diversity and equity. Au is an editor of the social justice teacher magazine *Rethinking Schools* and the author or editor of numerous other publications, including *Teaching for Black Lives*, *Rethinking Ethnic Studies*, and *A Marxist Education: Learning to Change the World*.

SPECIAL ISSUE
Researching 21st Century Education Policy
Through Social Network Analysis

education policy analysis archives

Volume 28 Number 122

August 17, 2020

ISSN 1068-2341



Readers are free to copy, display, distribute, and adapt this article, as long as the work is attributed to the author(s) and **Education Policy Analysis Archives**, the changes are identified, and the same license applies to the derivative work. More details of this Creative Commons license are available at <https://creativecommons.org/licenses/by-sa/4.0/>. **EPAA** is published by the Mary Lou Fulton Institute and Graduate School of Education at Arizona State University. Articles are indexed in CIRC (Clasificación Integrada de Revistas Científicas, Spain), DIALNET (Spain), [Directory of Open Access Journals](#), EBSCO Education Research Complete, ERIC, Education Full Text (H.W. Wilson), QUALIS A1 (Brazil), SCImago Journal Rank, SCOPUS, SOCOLAR (China).

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

Join EPAA's Facebook community at <https://www.facebook.com/EPAAAPE> and Twitter feed @epaa_aape.

education policy analysis archives
editorial board

Lead Editor: **Audrey Amrein-Beardsley** (Arizona State University)

Editor Consultor: **Gustavo E. Fischman** (Arizona State University)

Associate Editors: **Melanie Bertrand, David Carlson, Lauren Harris, Eugene Judson, Mirka Koro-Ljungberg, Daniel Liou, Scott Marley, Molly Ott, Iveta Silova** (Arizona State University)

Cristina Alfaro

San Diego State University

Gary Anderson

New York University

Michael W. Apple

University of Wisconsin, Madison

Jeff Bale

University of Toronto, Canada

Aaron Bevanot SUNY Albany

David C. Berliner

Arizona State University

Henry Braun Boston College

Casey Cobb

University of Connecticut

Arnold Danzig

San Jose State University

Linda Darling-Hammond

Stanford University

Elizabeth H. DeBray

University of Georgia

David E. DeMatthews

University of Texas at Austin

Chad d'Entremont Rennie Center
for Education Research & Policy

John Diamond

University of Wisconsin, Madison

Matthew Di Carlo

Albert Shanker Institute

Sherman Dorn

Arizona State University

Michael J. Dumas

University of California, Berkeley

Kathy Escamilla

University of Colorado, Boulder

Yariv Feniger Ben-Gurion

University of the Negev

Melissa Lynn Freeman

Adams State College

Rachael Gabriel

University of Connecticut

Amy Garrett Dikkers University
of North Carolina, Wilmington

Gene V Glass

Arizona State University

Ronald Glass University of

California, Santa Cruz

Jacob P. K. Gross

University of Louisville

Eric M. Haas WestEd

Julian Vasquez Heilig California

State University, Sacramento

Kimberly Kappler Hewitt

University of North Carolina

Greensboro

Aimee Howley Ohio University

Steve Klees University of Maryland

Jaekyung Lee SUNY Buffalo

Jessica Nina Lester

Indiana University

Amanda E. Lewis University of

Illinois, Chicago

Chad R. Lochmiller Indiana

University

Christopher Lubienski Indiana

University

Sarah Lubienski Indiana University

William J. Mathis

University of Colorado, Boulder

Michele S. Moses

University of Colorado, Boulder

Julianne Moss

Deakin University, Australia

Sharon Nichols

University of Texas, San Antonio

Eric Parsons

University of Missouri-Columbia

Amanda U. Potterton

University of Kentucky

Susan L. Robertson

Bristol University

Gloria M. Rodriguez

University of California, Davis

R. Anthony Rolle

University of Houston

A. G. Rud

Washington State University

Patricia Sánchez University of

University of Texas, San Antonio

Janelle Scott University of

California, Berkeley

Jack Schneider University of

Massachusetts Lowell

Noah Sobe Loyola University

Nelly P. Stromquist

University of Maryland

Benjamin Superfine

University of Illinois, Chicago

Adai Tefera

Virginia Commonwealth University

A. Chris Torres

Michigan State University

Tina Trujillo

University of California, Berkeley

Federico R. Waitoller

University of Illinois, Chicago

Larisa Warhol

University of Connecticut

John Weathers University of

Colorado, Colorado Springs

Kevin Welner

University of Colorado, Boulder

Terrence G. Wiley

Center for Applied Linguistics

John Willinsky

Stanford University

Jennifer R. Wolgemuth

University of South Florida

Kyo Yamashiro

Claremont Graduate University

Miri Yemini

Tel Aviv University, Israel

archivos analíticos de políticas educativas
consejo editorial

Editor Consultor: **Gustavo E. Fischman** (Arizona State University)

Editores Asociados: **Felicitas Acosta** (Universidad Nacional de General Sarmiento), **Armando Alcántara Santuario** (Universidad Nacional Autónoma de México), **Ignacio Barrenechea**, **Jason Beech** (Universidad de San Andrés), **Angelica Buendia**, (Metropolitan Autonomous University), **Alejandra Falabella** (Universidad Alberto Hurtado, Chile), **Veronica Gottau** (Universidad Torcuato Di Tella), **Carolina Guzmán-Valenzuela** (Universidade de Chile), **Antonio Luzon**, (Universidad de Granada), **Tiburcio Moreno** (Autonomous Metropolitan University-Cuajimalpa Unit), **José Luis Ramírez**, (Universidad de Sonora), **Axel Rivas** (Universidad de San Andrés), **Maria Veronica Santelices** (Pontificia Universidad Católica de Chile)

Claudio Almonacid
Universidad Metropolitana de
Ciencias de la Educación, Chile

Miguel Ángel Arias Ortega
Universidad Autónoma de la
Ciudad de México

Xavier Besalú Costa
Universitat de Girona, España

Xavier Bonal Sarro Universidad
Autónoma de Barcelona, España

Antonio Bolívar Boitia
Universidad de Granada, España

José Joaquín Brunner Universidad
Diego Portales, Chile

Damián Canales Sánchez
Instituto Nacional para la
Evaluación de la Educación,
México

Gabriela de la Cruz Flores
Universidad Nacional Autónoma de
México

Marco Antonio Delgado Fuentes
Universidad Iberoamericana,
México

Inés Dussel, DIE-CINVESTAV,
México

Pedro Flores Crespo Universidad
Iberoamericana, México

Ana María García de Fanelli
Centro de Estudios de Estado y
Sociedad (CEDES) CONICET,
Argentina

Juan Carlos González Faraco
Universidad de Huelva, España

María Clemente Linuesa
Universidad de Salamanca, España

Jaume Martínez Bonafé
Universitat de València, España

Alejandro Márquez Jiménez
Instituto de Investigaciones sobre la
Universidad y la Educación,
UNAM, México

María Guadalupe Olivier Tellez,
Universidad Pedagógica Nacional,
México

Miguel Pereyra Universidad de
Granada, España

Mónica Pini Universidad Nacional
de San Martín, Argentina

Omar Orlando Pulido Chaves
Instituto para la Investigación
Educativa y el Desarrollo
Pedagógico (IDEP)

José Ignacio Rivas Flores
Universidad de Málaga, España

Miriam Rodríguez Vargas
Universidad Autónoma de
Tamaulipas, México

José Gregorio Rodríguez
Universidad Nacional de Colombia,
Colombia

Mario Rueda Beltrán Instituto de
Investigaciones sobre la Universidad
y la Educación, UNAM, México

José Luis San Fabián Maroto
Universidad de Oviedo,
España

Jurjo Torres Santomé, Universidad
de la Coruña, España

Yengny Marisol Silva Laya
Universidad Iberoamericana,
México

Ernesto Treviño Ronzón
Universidad Veracruzana, México

Ernesto Treviño Villarreal
Universidad Diego Portales
Santiago, Chile

Antoni Verger Planells
Universidad Autónoma de
Barcelona, España

Catalina Wainerman
Universidad de San Andrés,
Argentina

Juan Carlos Yáñez Velazco
Universidad de Colima, México

arquivos analíticos de políticas educativas
conselho editorialEditor Consultor: **Gustavo E. Fischman** (Arizona State University)Editoras Associadas: **Andréa Barbosa Gouveia** (Universidade Federal do Paraná), **Kaizo Iwakami Beltrao**, (Brazilian School of Public and Private Management - EBAPE/FGV), **Sheizi Calheira de Freitas** (Federal University of Bahia), **Maria Margarida Machado**, (Federal University of Goiás / Universidade Federal de Goiás), **Gilberto José Miranda**, (Universidade Federal de Uberlândia, Brazil), **Marcia Pletsch, Sandra Regina Sales** (Universidade Federal Rural do Rio de Janeiro)**Almerindo Afonso**
Universidade do Minho
Portugal**Alexandre Fernandez Vaz**
Universidade Federal de Santa
Catarina, Brasil**José Augusto Pacheco**
Universidade do Minho, Portugal**Rosanna Maria Barros Sá**
Universidade do Algarve
Portugal**Regina Célia Linhares Hostins**
Universidade do Vale do Itajaí,
Brasil**Jane Paiva**
Universidade do Estado do Rio de
Janeiro, Brasil**Maria Helena Bonilla**
Universidade Federal da Bahia
Brasil**Alfredo Macedo Gomes**
Universidade Federal de Pernambuco
Brasil**Paulo Alberto Santos Vieira**
Universidade do Estado de Mato
Grosso, Brasil**Rosa Maria Bueno Fischer**
Universidade Federal do Rio Grande
do Sul, Brasil**Jefferson Mainardes**
Universidade Estadual de Ponta
Grossa, Brasil**Fabiany de Cássia Tavares Silva**
Universidade Federal do Mato
Grosso do Sul, Brasil**Alice Casimiro Lopes**
Universidade do Estado do Rio de
Janeiro, Brasil**Jader Janer Moreira Lopes**
Universidade Federal Fluminense e
Universidade Federal de Juiz de Fora,
Brasil**António Teodoro**
Universidade Lusófona
Portugal**Suzana Feldens Schwertner**
Centro Universitário Univates
Brasil**Debora Nunes**
Universidade Federal do Rio Grande
do Norte, Brasil**Lílian do Valle**
Universidade do Estado do Rio de
Janeiro, Brasil**Geovana Mendonça Lunardi
Mendes** Universidade do Estado de
Santa Catarina**Alda Junqueira Marin**
Pontifícia Universidade Católica de
São Paulo, Brasil**Alfredo Veiga-Neto**
Universidade Federal do Rio Grande
do Sul, Brasil**Flávia Miller Naethe Motta**
Universidade Federal Rural do Rio de
Janeiro, Brasil**Dalila Andrade Oliveira**
Universidade Federal de Minas
Gerais, Brasil