The Pennsylvania State University

The Graduate School

College of Education

"Clients, Partners, and Friends": Addressing the Challenges of Developing Higher Education International Collaborations

A Dissertation in

Higher Education

by

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Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Doctor of Education

December 2015

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Abstract

There is a high interest in developing international collaborations in higher education as demonstrated by the immense participation of higher education institutions in international conferences, the boom of international joint publications and the great appeal that international education has gained around the world. However, there is also confusion on why and how to develop these collaborations. The literature that informs international collaboration in higher education is disarticulated and therefore confusing. The current study aimed to provide guidance to higher education institutions and their stakeholders on their interests on developing such collaborations by integrating the literature and providing a cohesive theoretical framework or taxonomy to understand international collaboration in higher education. The study also wanted to provide a practical demonstration of its limitations and extremes, as well as the skills needed to manage such collaborations.

First, on developing a theoretical framework, the study begins with an exploration of the literature that informs international collaborations in higher education. Next, the study connects the literature by exploring the practice of developing international collaborations at a comprehensive research institution. This connection was reached by proposing the classification of international collaborations in three well distinguished types of collaboration, clients, partners, and friends, and by proposing a chain of reasoning that connects the challenges of developing international collaboration at a comprehensive research university. Having three types of collaboration and a chain of reasoning that integrates the different challenges of developing collaborations allowed the

development of a comprehensive framework to understand international collaborations in higher education.

Second, by providing a practical demonstration, the study presents the limitations on developing these international collaborations, the skills required for developing those collaborations, the compartmentalization and the repurposing of international collaborative relations, and the negative extremes and mistakes of developing international collaborations in higher education.

These findings are derived from a case study of a comprehensive research university. Conditions at other higher education institutions might differ. However, the analytical explanations proposed by the study are general enough to support their extrapolation to other settings in order to contribute to facilitate the development of international collaborations in higher education.

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Chapter 1: Introduction

When we study together, and we learn together,
we work together, and we prosper together.

President Barack Obama, Mexico City, 2013

Some universities around the world are heavily involved in collaborations with different universities in other countries (Knight, 2012). At the same time, international involvement by many other universities is almost non-existent (Knight, 2012). Academic disciplines are global, so that almost any university scientist or scholar has the potential to engage in international collaborations. It is not clear how universities foster international engagements effectively. The concrete purposes of these international collaborations and the efforts necessary to sustain such enterprises are also uncertain (Klyberg, 2012). Students, faculty members, and administrators are attracted to the potential benefits of collaboration, but in many cases they are unaware of the efforts necessary to harness such benefits (Macready & Tucker, 2011).

In many cases, people do not give too much thought to the other’s interests and to the long-term consequences of engaging in joint enterprises (Huxham & Vagen, 2005). Collaboration is an attractive theme, but it is a theme full of uncertainties and various perspectives that need to be reconciled and analyzed (Huxham & Vagen, 2005). The same attractiveness of collaboration makes people overlook the complexities related to those enterprises (Huxham & Vagen, 2005). This dissertation connects these interests and ideas about cooperation and collaboration with concrete realities through an exploration of the literature and a synthesis of various international collaborations. Its intentions are to reflect on the experience of a large comprehensive research institution and inform higher education leaders who are interested in developing and strengthening their own international engagements.

Croom (2012), Knight (2012), Lane (2013), and Levy (2005) share a common explanation of the development of international higher education collaborations. They explain that the phenomenon has two complementary drivers. First, higher education institutions in underdeveloped nations drive international collaboration because of their need for economic development. Second, higher education institutions in developed nations drive international collaboration because of their need for resources. This study was motivated by a suspicion that this explanation falls short in illustrating the complexity of international higher education collaborations.

This view implies that colleges and universities in developed nations do not have anything to learn from the rest of the world. In addition, this view reduces the possibilities of international collaboration to client-provider relationships and neglects other possible forms of engagement such as partnering on addressing common opportunities or problems and the development of personal academic relationships based on mutual affinity. People in different contexts develop different solutions to address common as well as complementary problems in various fields of knowledge (Hofstede, Hofstede, & Minkov, 2010). This variety of approaches allows mutual learning. In contrast, homogenization, as proposed by the client-provider relationship model, reduces the variety of thought and undermines creativity.

The initially proposed view of collaboration as a client-provider relationship reflects the trend of mercantilization of higher education, in which universities are businesses meant for trading marketable knowledge (Birnbaum, 2011). Many stakeholders, however, are of the opinion that universities have a higher purpose than trading (Slaughter & Rhoades, 2009). That is, universities are responsible for human and social development, not just maximizing profits (Hendrickson, Lane, Harris & Dorman, 2013). The differences between higher education institutions and regular businesses make the management of colleges and universities particularly challenging for higher education administrators (Hendrickson et al.,2013).

The scholars mentioned above, Croom (2012), Knight (2012), Lane (2013), and Levy (2005), have illustrated one approach for developing international collaborations, but this study was driven by the thought that this explanation is not broad enough to describe the myriad possibilities of international collaboration. Some people tend to see all relations as client-provider relationships, others see them as partnerships, and still others view them as personal connections. This study explored the different possibilities of inter-organizational engagement and their different conditions without advocating for any particular kind of engagement. It identified different kinds of engagement, the approaches through which they were developed and the conditions that supported them.

The study was designed to develop an understanding of international collaborations in higher education. Various scholars in the field of inter-organizational relations have illuminated different aspects of these collaborations. The study examined such contributions and sought to organize and connect them. It also considered the integration and interrelation of different concepts that help to address the challenges associated with developing international collaborations in higher education to create a comprehensive understanding of these phenomena.

When studying collaboration through the lens of inter-organizational relations, the literature provides conceptualizations that have been used to address several of its challenges. This study found that these conceptualizations are disarticulated among each other and explored if it is possible to articulate such conceptualizations. The current study hypothesized that the conceptualizations used to address such challenges can be analytically interrelated and articulated by exploring the literature and interrelating it with the experiences of participants who are developing international collaborations at a comprehensive research university.

The concepts that help to address the challenges of higher education cross-border collaborations are varied and interrelated, which makes analysis even more complex. To disentangle those complexities and make this study manageable, these concepts were divided into eight different groups. The first group of concepts addressed the challenge of finding stakeholders' interests, which stems from why higher education organizations engage in international collaborations. The second group of concepts addressed the challenge of finding the advantages of collaboration when compared with other alternatives for securing resources or skills, which stems from what people understand by collaboration or the "generation of mutual dependencies." The third group of concepts addressed the challenge of finding the approaches to create collaborations, which stems from how are collaborations created. The fourth group of concepts addressed the challenge of finding the dynamics to engage in collaborations, which stems from how to engage in collaborations or the ability to pursue common and/or complementary goals. The fifth group of concepts addressed the challenge of finding the skills needed to manage collaborations, which stems from how to manage collaborations or handle the intricacies and complexities of such engagements. The sixth group of concepts addressed the challenge of finding the purposes for collaborations, which stems from the aspirations for collaboration. The seventh group of concepts addressed the challenge of finding the geographical, cultural, knowledge, and resource differences that motivate international collaboration. The eighth and final group of concepts addressed the challenge of finding institutional conditions and capabilities as well as conditions and capabilities among counterparts that facilitate development of international collaborations. In practice, these challenges have been addressed by faculty members, students, and administrators who have participated in international collaborations. The public knows that colleges and universities engage in international collaborations, and that these collaborations are highly regarded by participants (E. Beerkens, 2002; Institute of International Education, n.d.; Knight, 2012; Lane, 2013; Levy, 2005; Ministerio de educacion nacional, 2014; NAFSA: Association of International Educators, 2013).

Research Questions

This dissertation study systematically examined how institutions address these challenges to inform practice on creating concrete productive international collaborations. To these ends, this study addressed the following research questions.

1. What literature informs the development of collaborations?
2. To what extent does the literature on international collaboration apply to the practices of international collaboration at a comprehensive research university?

3. To what extent can the practices of creating cross-border collaborations in higher education be learned or developed? To what extent do such practices depend upon having or controlling certain critical resources?
4. How can the competencies of creating cross-border partnerships be learned or developed?

Leaders and administrators of international collaborations are continually learning from their experiences as well as from research on practice, and they apply their learning to their own work (NAFSA, 2013). From a higher education administration perspective, they want to enable different units within their institution to find worthy justifications, as well as to discard faulty reasons, to engage in cross-border collaborations. They want to help faculty members' and department heads' processes to create international collaborations (NAFSA, 2013), such as establishing the conditions that make partnering a viable long-term enterprise. This dissertation study sought to harness the experience of leaders, faculty and administrators of international collaborations at this comprehensive research university to extrapolate for other international collaborations.

Significance of the Study

The study sought both theoretical and practical contributions to higher education scholarship. The first three research questions have theoretical implications, while the fourth has practical implications. The first question was designed to find the literature of collaboration. The second and the third questions were meant to explore the contributions from the literature and, if possible, to expand them using the contributions from key senior leaders, faculty and administrators' perspectives. The fourth research question sought to bring about practical recommendations for the development of international collaborations in higher education.

International collaborations do not happen overnight. Social capital, expertise, and vision take time to develop (Koka & Prescott, 2002). However, institutions can learn from the theory of collaborations as well as from the experience of other institutions, apply this learning to their own conditions, and expedite the development of their own international engagements.

The findings of this study, while certainly not the final word, are a contribution to our understanding of cross-border collaboration and might assist members of higher education institutions who are interested in engaging in this practice as they plan their strategies. Similar studies at other institutions should be conducted to expand our understanding of this topic through the experience of other colleges and universities. The comprehensive research university on which this study focused provided valuable lessons, but other institutions could make other important contributions as well. Moreover, due to its particularities, this university case might not apply to the conditions of other universities, and those institutions might provide other possible solutions to the challenges of establishing higher education cross-border collaborations. Either way, the conditions at this comprehensive research university offered a compelling perspective on the phenomenon of international higher education collaboration.

Organization of This Dissertation

This dissertation study has five chapters and one appendix that supplement the content of the chapters. Following this introductory chapter, the second chapter is the literature review. It presents the various scholarly sources that provide the lens through which this study approached the development of international collaborations in higher education. The study mainly used the literature of inter-organizational relations theory, which is informed by experiences of other types of organizations. The study predicted that this literature would also be applicable to the practice of international collaboration in higher education. Literature that focuses on higher education international collaborations, primarily from the Institute of International Education (IIE) and NAFSA: Association of International Educators, was informative and motivated the current study, but the majority of it is practice-oriented and does not allow the exploration of many aspects of this study. The third chapter addresses the study design, methods, and procedures. It explains the case method of research and how it was used to carry out this study. The fourth chapter reports the findings of the study and describes the application of the research methods based on the literature review to respond the research questions. It also presents some issues that were not contemplated by the initial research questions. Finally, the fifth chapter presents a summary, discussion, and conclusions of the study. This chapter is divided into sections that address each of the research questions and additional aspects of the study.

Chapter 2: Literature Review

Two main sources within the research literature informed the phenomenon of international higher education collaboration as it was approached by this study: literature specific to higher education collaboration, represented mainly by publications of two leading U.S. international education organizations, NAFSA: Association of International Educators (NAFSA) and the Institute of International Education (IIE), and literature of organizations and inter-organizational relations theory. This literature review focuses in particular on organizational and inter-organizational relations scholarship as these sources have a strong theoretical focus and were developed with contributions from various types of organizations, not just higher education organizations. The literature that focuses on higher education international collaborations, on the other hand, is heavily oriented to practice rather than theory.

Before continuing the exploration of higher education international collaborations, the study needs some evidence that supports their relevance. Adams, Gurney, and Marshall (2007) demonstrated the growth of international research collaborations between the five-year periods of 1996-2000 and 2001-2005, measured by the number of international joint publications. According to this metric, the United States grew 48%, France 30%, the United Kingdom 50%, and China 114%. It is worth noting that China's main collaborator is the United States. In addition, Narin, Stevens, & Whitlow (1991), Katz & Hicks (1997), Goldfinch, Dale, & De Roue (2003), Sooryamoorthy (2009) and Ordóñez-Matamoros, Cozzens, & Garcia (2012), also demonstrated that international research collaborations have a higher impact, are more cited, than domestic collaborations and independent publications. Next, according to the

American Council on Education's 2012 survey, *Mapping Internationalization on U.S. Campuses*(Mapping Internationalization on U.S. Campuses: 2012 Edition, 2012), international collaborations are rising. Among surveyed institutions, 47% increased their funding for internationalization, and 27% kept it steady despite overall budget cuts. In addition, 45% of these institutions are offering or planning to offer international collaborative programs to their students (American Council on Education, 2012). Finally, more and more institutions are systematically assessing internationalization efforts, such as requiring foreign language proficiency among their students, providing scholarships for education abroad, and developing guidelines for collaborations abroad (American Council on Education, 2012). Having established the relevance of higher education international collaborations, the study addresses the challenges of developing these collaborations.

As described in Chapter 1, the thematic distribution of the literature review stems from the challenges and/or broad questions of why higher education institutions engage in collaboration (stakeholders' individual interests), how to engage in collaborations (stakeholders' collective interests),what collaboration is (generation of mutual dependencies), how institutions engage in collaborations (approaches to create collaborations), how collaborations are run (management of collaborative relations), what types of collaborations exist or what are the purposes of collaboration (criteria for classifying collaborations), what makes collaborating internationally different (geographical, cultural, and resource differences), and what is necessary to engage in collaborations (conditions that allow collaboration). (See Figure 2.1.)

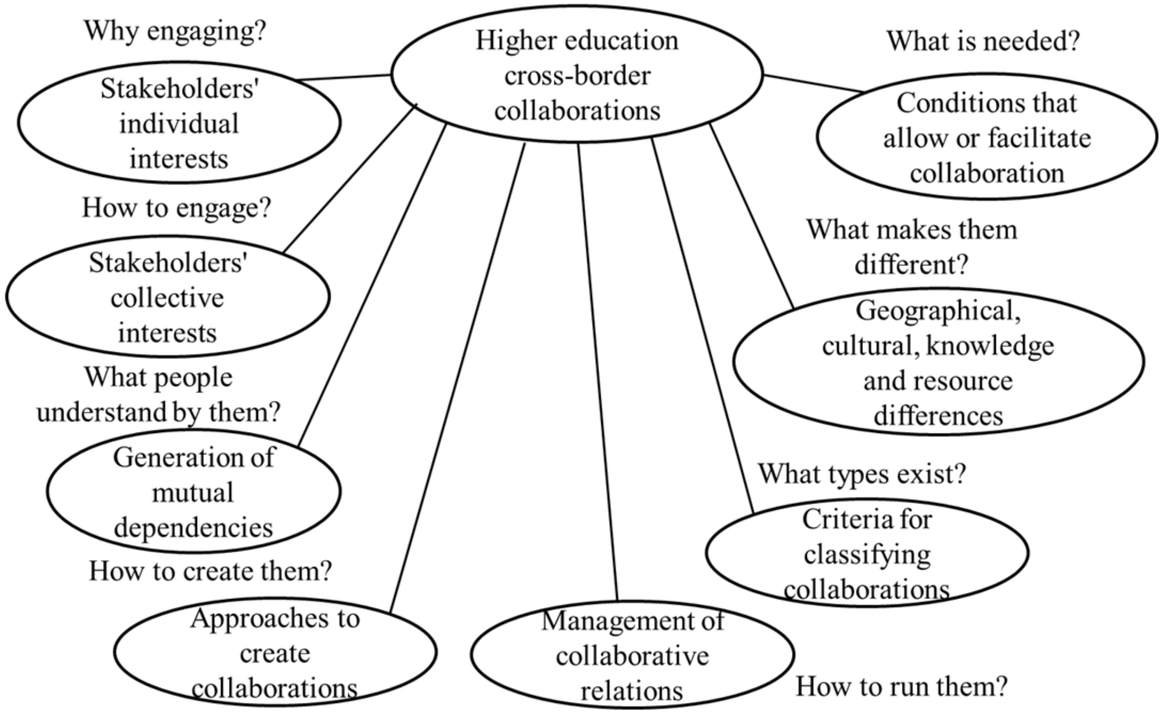

Figure 2.1 Challenges addressed by the literature review

To facilitate the review of the literature that informed this study, subsections include figures to illustrate the concepts that address each challenge or question. The visual representation of such concepts facilitates their examination and testing throughout the study, and it distinguishes existing concepts from new concepts or contributions found through the study.

The case study method of research has been the preferred method to propose conceptualizations in the literature of inter-organizational relations. When studying these conceptualizations it is also possible to go back to the case studies that originated such conceptualizations. The study of the cases that led to the conceptualizations explored in this literature review results motivating and inspiring in some instances (Ozcan & Eisenhardt, 2001), while the study of some other cases calls for safeguards when developing collaborations (Holm & Malete, 2010). This literature review is intended to provide a framework to address the phenomenon of collaboration in higher education by incorporating the conceptualizations derived from such varied case studies.

One important step before continuing with the study of the literature that addresses the different challenges on developing international collaborations in higher education is the reaching of a common understanding of these collaborations both by stating what it is and by stating what it is not. The literature interchangeably use terms such as international partnership, cooperation, coalition, contracting, outsourcing, network, cluster, alliance, association, joint venture, federation, franchising, etc. (Cropper, Ebers, Huxham, & Ring, 2008). The current study uses the term *collaboration* to refer to all the different possibilities of multiparty engagements in higher education to later provide more specific terms to particularize them.

The initial and most traditional definition of international collaboration in higher education is faculty and student exchanges, as these groups are fundamental actors in higher education (Sakamoto & Chapman, 2012). However, international education collaborations have grown in complexity and developed different focuses. Engagements such as research collaborations, joint courses, joint academic programs, twinning of programs, franchising of programs, testing collaborations, sharing of international academic resources, and branch campuses are also considered international higher education collaborations (Knight, 2012). A broad definition of international collaborations in higher education could be the generation of interdependencies among autonomous higher education organizations located in different countries (Altbach & Knight, 2007). This definition includes the majority of international engagements, but it also excludes some types of international collaborations, such as branch campuses, which are not autonomous with respect to the main campuses or the central administration of universities (Altbach & Knight, 2007). Collaboration certainly implies loss of control of some of the own activities in favor of getting needed resources or gaining participation in broader communities (Altbach & Knight, 2007). However, when acquiring such resources or gaining such participation implies the loss of an institution's own identity in favor of an external identity, the phenomenon becomes absorption rather than collaboration.

Collaboration implies that independent identities are at play. IIE and NAFSA promote international education as well as collaboration among higher education organizations around the world. International education and international collaboration by higher education organizations in many instances serve common purposes. However, these activities are not exactly the same thing. One can be carried by one single institution, such as when a college or university's faculty members develop international activities, while the other demands that at least two autonomous higher education organizations reach an agreement on the development of common and complementary academic activities. This common understanding of higher education international collaborations sets a common ground to explore the conceptualizations used to address each of the challenges of developing international collaborations in higher education.

Challenge 1: Why Do Higher Education Institutions Engage in Collaborations?

Collaborative relations are distributed across a wide variety of forces and interests, which vary across contexts and activities (Koza & Lewin, 1998). As there are many forces and interests at play, collaborations have multiple objectives and therefore multiple outcomes (Powell & Smith-Doerr, 1994). Collaboration can be driven by specific objectives, such as the need to gain access to distinct resources, including financial resources, knowledgeable faculty, savvy administrators, technically skilled personnel, technology, academic specialties, academic programs, curricular developments, fresh ideas, reputation, student market positions, experiencing foreign cultures, etc. However, collaborations can also be driven by a broad interest in cooperating, without a determined specific focus (Geringer, 1988). Collaborations generally emerge when organizations do not have complete control over the resources they need to develop their activities (Pfeffer & Salancik, 1978). In the following paragraphs I review the stakeholder interests that drive collaboration and theories that support such interests (see Figure 2.2).

Why engaging in collaborations?

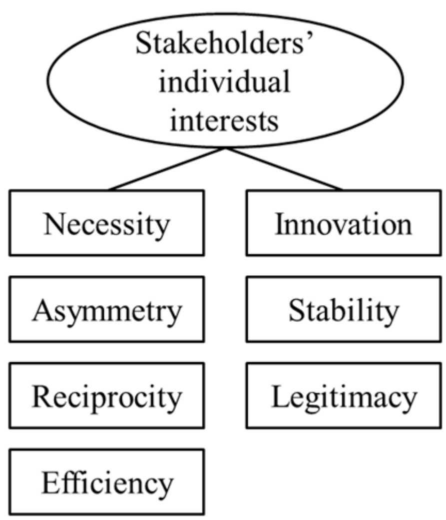

Figure 2.2 Challenge #1: Finding the Stakeholders' Individual Interests that Motivate Engaging in Collaborations

Individual motivators for collaboration. As is shown in Figure 2.2, there are seven concrete individual motivators for collaboration: necessity, asymmetry, reciprocity, efficiency, innovation, stability, and legitimacy (Oliver, 1990).

Necessity. As mentioned in Chapter 1, collaborations can be driven by concrete disciplinary or resource necessities or by mandates, such as the Colombian Ministry of Education's accreditation requirement that higher education institutions engage in international relations (Ministerio de educacion nacional, 2014). International collaborations can also be driven by the imminent necessity of certain faculty skills and expertise.

Asymmetry. Maintaining cognitive distances ensures long-lasting relationships (Burt, 1992; Nooteboom, 1999). Strong and lasting relations can also lead to reduced variety. Collaborations should lead to dissolution once their useful time is finished. Organizations should try to make deals about moderate innovations, not so small that collaborations are not worth making, and no so large that agreement becomes impossible (Nooteboom, 2008).

Reciprocity. In educational and research collaborations, universities must be able to offer desirable knowledge to get desired knowledge (Brown & Duguid, 1991). In addition, organizations need to maintain a cognitive distance that is not too large to impede communication and not too small that partners cannot offer anything new.

Efficiency. Collaborations also contribute to focus and specialization. Collaborations allow for the outsourcing of some processes and activities to enable partners to focus on priority activities—or even more profitable activities for an organization. By allowing specialization, "collaborations contribute to reduce duplication of efforts, improve coordination of activities, prevent inefficiencies, minimize costs, and improve responsiveness and effectiveness within a system" (Sanford & Milward, 2008, p. 158; see also Martin, Chackerian, Imershein, & Frumkin, 1983). These alliances contribute to the maximization of efficiency and influence on competitors. In this case, two criteria for the selection of partners are similarity and function complementarity (Lomi, Negro, & Fonti, 2008; McPherson, Smith-Lovin, & Cook, 2001; Ring & Van de Ven, 1992). Other collaborations use criteria such as advantage gain, similarity, and diversity (Powell, White, Koput, & Owen-Smith, 2005). Networks can increase efficiency by restricting alliances to "structural holes," saving connection efforts for substantive opportunities (Burt, 1992). Transaction cost economic theories state that organizations survive as a result of maximizing efficiencies (Cropper & Palmer, 2008; Nelson & Winter, 1982).

Innovation. Collaborations can be used to improve operations by learning better practices, developing economies of scale, increasing responsiveness to client demands, etc. Organizations in many instances need to open themselves to external contributions to get fresh ideas and innovate (Ahuja, 2000; Hagedoorn, 1993; Hagedoorn & Duysters, 2002; Hagedoorn & Schakenraad, 1998; Lundvall, 1988; Nooteboom, 2008; Rowley, Behrens, & Krackhardt, 2000).

Organizations can also collaborate to develop competitive advantages. These collaborations demand coordination of subunits within each organization exposing the own competitive advantages making them highly sensitive to leaks of information and conflicts of interests (Ring & Van de Ven, 1992). Another perspective on learning is the ability to understand other organizations to use complementary capacities and achieve common goals (Rowley et al., 2000; Zollo, Reuer, & Singh, 2002). Collaborations are not always meant to protect boundaries and reduce uncertainties; they can allow new adventures, allow participation, increase confidence, etc. (Chisholm, 1989; Gray, 1989; Mandell & Keast, 2008).

Stability. Organizations need to smooth turbulent environments (Hall, 1999; Pfeffer & Salancik, 1978). There are many approaches to study the role of stability in collaboration. Transaction cost approaches to economics focus on the different ways to manage uncertainty on the provision of needed resources (Koberg & Ungson, 1987). Scarce resources and conflicting interests among organizations lead to uncertainty on the provision of resources. Collaborations can be used both to increase stability on the provision of resources and to acquire legitimacy to have preferential access to those resources (Galaskiewicz, 1985).

Legitimacy. In many cases, building a long-standing, favorable reputation or social capital is more important than short-term profits. Overall wellbeing, stability, and mutual reliance become more important than short-term gains (Walker, Kogut, & Shan, 1997). Legitimacy is the ability to show trustworthiness. People, in many cases, do not make decisions based on actual improvements but on the ability to symbolize them (Lotia & Hardy, 2008; Waddock & Post, 1995). The reputation acquired in one context can also be used in another context (Arora & Fosfuri, 2000). The general goal in collaboration is to reduce uncertainty in the search for advantages (Galaskiewicz, 1985). In addition, when a resource is highly important, it makes sense to have redundant ties or redundant providers of such resource (Gilsing & Nooteboom, 2005, p. 623; see also March, 1991).

Collaborations can be used to improve one's own standing in an ecology of multiple organizations by gaining preferential access to both clients and suppliers (Meyer & Rowan, 1978). In a higher education example, on the client side, collaborations might allow preferential access to student markets that allow tuition premiums as well as recruitment in important student markets. On the supplier side, collaborations might enable faster and more economical access to information, knowledge, talented faculty, financial resources, technologies, methods, etc.

According to institutional theory, organizations interact with each other and with their environments. Organizations exert pressures on other organizations to conform to institutional norms, forcing them to develop certain activities and to behave in certain manners in order to be legitimate (Meyer & Rowan, 1978). Collaborations of organizations with other more legitimate or socially accepted institutions increase legitimacy. Legitimacy symbolizes increases on efficacy and efficiency even when such increases do not exist (Meyer & Rowan, 1978).

Challenge 2: How Do Higher Education Institutions Engage in Collaborations?

Co-learning, co-specialization, and co-option. There are three collective interests that drive engagement in collaboration: co-learning, co-specialization, and co-option (Dacin, Reid, & Ring, 2008; see Figure 2.3). Organizations need to engage in processes of co-learning to benchmark themselves and find opportunities for improvement. Co-learning allows communication or the reaching of "community of action" (Biesta & Burbules, 2003, p. 42). Organizations also need to engage in processes of co-option in order to promote coordinated actions on common interests (Biesta & Burbules, 2003, p. 29). Finally, in many cases it is not practical for organizations to do everything by themselves. Organizations need to engage in transactions and develop different levels of co-specialization to be efficient in the mutual attention of necessities (Dacin et al., 2008). These social interactions allow organizations to develop in a diversified market and foster fruitful collaborations.

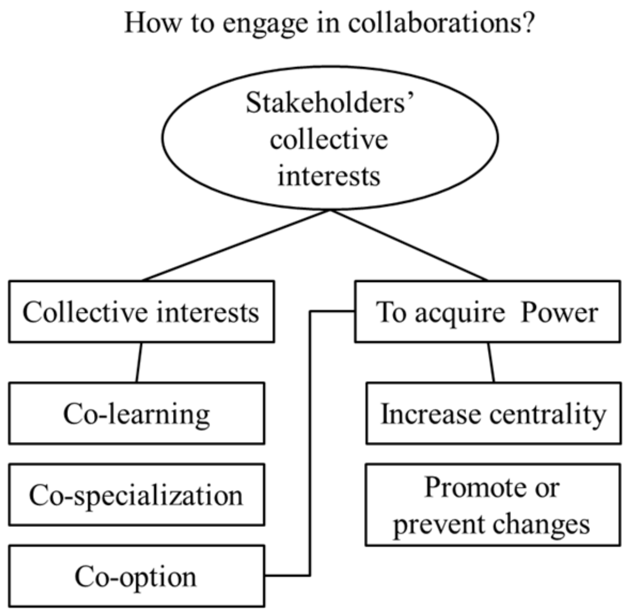

Figure 2.3 Challenge #2: Finding the Stakeholders' Collective Interests that Allow Engaging in Collaborations

Collaborations can have exploration and exploitation purposes (E. Beerkens, 2002; H. J. Beerkens, 2004; March, 1991). Collaborations for learning and exploration tend to be highly interactive and last for a short time, while collaborations for exploitation are not so interactive but tend to last for longer periods of time (Nooteboom, 2008). Domain theory studies how organizations engage in collaborations to tackle common problems (Gray, 1989). Organizations in a common domain meet to discuss and develop a deeper understanding of a problem, join resources, develop a common opinion, raise their voice, and act together to achieve goals that they would not be able to accomplish if they were acting separately (Huxham & Vangen, 2000).

Acquisition of power. Collaborations are one means to achieve different forms of power (Huxham & Vangen, 2000). Resource dependency theory provides one perspective on power (Pfeffer & Salancik, 1978). Organizations need power to gain participation in the negotiation of goals and the planning of joint activities (Gray, 1989; Hardy & Phillips, 1998). Power includes the capacity and resources to influence outcomes (Allen, 2003; Yeung, 2008). However, one does not need to have direct control over all necessary capacity and resources. The core principle of social capital establishes that one can gain access to the resources controlled by network peers for either personal or group gain (Bordieu, 1986; Coleman, 1988).

Network approaches to the study of collaboration focus on the selection of appropriate partners and the management of information. As the configuration of networks is highly diverse, much research views participation networks as a characteristic, rather than describing the complexity of each given network (Grandori & Soda, 1995; Kenis & Oerlemans, 2008). Power implies gaining control over others' activities, even when conflicts of interest with them exist (Aldrich, 1976). Having a central position in a network increases one's ability to establish relations with other agents since such a position allows one to generate a reputation and gain knowledge about other agents' advantages, resources, and possibilities (Kenis & Oerlemans, 2008; Wasserman & Faust, 1994). Generally, having close relations with network members who have high degree of centrality or status has a positive impact on others' activities related to such networks (Baum & Oliver, 1991).

Organizations that control the resources that are most highly demanded or that can reduce uncertainty the most have greater power in collaborative relationships (Pfeffer & Salancik, 1978). The importance of resources is based on their magnitude and criticality (Pfeffer & Salancik, 1978). Alliances about critical resources can reduce the autonomy of partners who need those resources and increase the autonomy of the parties that control them (Pfeffer & Salancik, 1978).

Centrality. According to social network theory, with increased centrality comes increased organizational power. Centrality represents a higher level of control over critical resources. Gaining legitimacy contributes to secure this power (Galaskiewicz, 1985; Oliver, 1990). Power, in many cases, does not depend on having direct control over needed resources. Instead, it depends on the capacity to influence those who have that control. This capacity stems from social relations. Network mechanisms can be explained as “flows of information, flows on influence and the construction of joint action” (Oliver & Myers, 2003, p. 448). The main forces that drive collaboration include interest in a partner’s knowledge and resources, desire to develop economies of scale, desire to create dependencies for other organizations, and ability to force advantageous deals with competitors (Gray, 2008; Zartman, 1981). The other concern is not about acquiring power to achieve outcomes, but about the conditions for transferring power to network peers (Himmelman, 1996).

Promotion or prevention of change. Collaboration can be used to promote change, as well as to deter it to protect existing power structures (Lotia & Hardy, 2008; Warren, Rose, & Bergunder, 1974). As an example, pressures for deregulation and privatization of the higher education sector in Colombia increased collaborative efforts both to advocate for deregulation and to prevent it from happening (Ruiz-López, 2011). Communication and resource exchanges allow organizations to identify partners and opponents according to political and economic changes (Burstein, 1991; Knoke & Chen, 2008).

Education as a field inclined to collaboration. Educational, technological, and research endeavors have specific characteristics that make them inclined to engagement in collaborations, including:

1. Capabilities are specialized and heterogeneously distributed;
2. Outcomes are highly uncertain by nature;
3. The generated value cannot be evaluated by tangible assets;
4. The ability to generate value depends on other related capacities. (Hui, Fonstad, & Beath, 2008, p. 255)

It is inefficient, and often impossible, to have diverse and specialized capabilities within a single organization. Specialized equipment and expertise are expensive, and different specialties have their own nuances, such as different priorities or value systems that make them difficult to manage by a single organization (Barney, 1999).

To address this issue, both specialized and ordinary products and services can be outsourced. Organizations usually look toward developing and controlling the most relevant and specialized sub-products and services within their chains of value (Hui et al., 2008). However, keeping these competencies in-house is not always possible or effective (Barney, 1999). In some cases, due to organizational complexity, core functions or processes need to be outsourced for an organization to remain competitive. The outsourcing of core functions represents a disruption in the way capitalistic market economies used to work (Hui et al., 2008). It does not mean that education needs to be outsourced. However, key assets such as specialized faculty members or researchers need to be shared with other organizations such as industries, consulting firms, hospitals, etc. This situation occurs because universities in some circumstances cannot and should not keep such valuable assets solely for themselves.

Collaboration as a dynamic changing field. "Human activities are driven by both bounded rationality and opportunism" (Hennart, 2008, p. 340; see also Simon, 1965; Williamson, 1975). It is impossible to foresee the interaction of all variables in an economic sector to calculate a decision. Behind human experiences there are events and structures that cancel each other and of which people are not even aware (House, 1991). Some opportunities pass, and new opportunities come. In addition, opportunism implies that people do not always fulfill their promises. People change previous choices and decisions to take advantage of new opportunities (Biesta & Burbules, 2003; Rorty, 1998). Collaborations allow for becoming both promiscuous and polygamous—promiscuous in the sense of dealing with many other organizations but not devoted to any of them, and polygamous in the sense of being devoted to many organizations simultaneously (Powell, 1990).

Challenge 3: What Do People Understand by Collaboration?

While different perceptions of collaboration exist, including collaboration as help and collaboration as the interaction of participants in a chain of value (Williamson, 1975), this study approached collaboration as the *generation of mutual dependencies*. Figure 2.4 presents the themes that contribute to this understanding of collaboration.

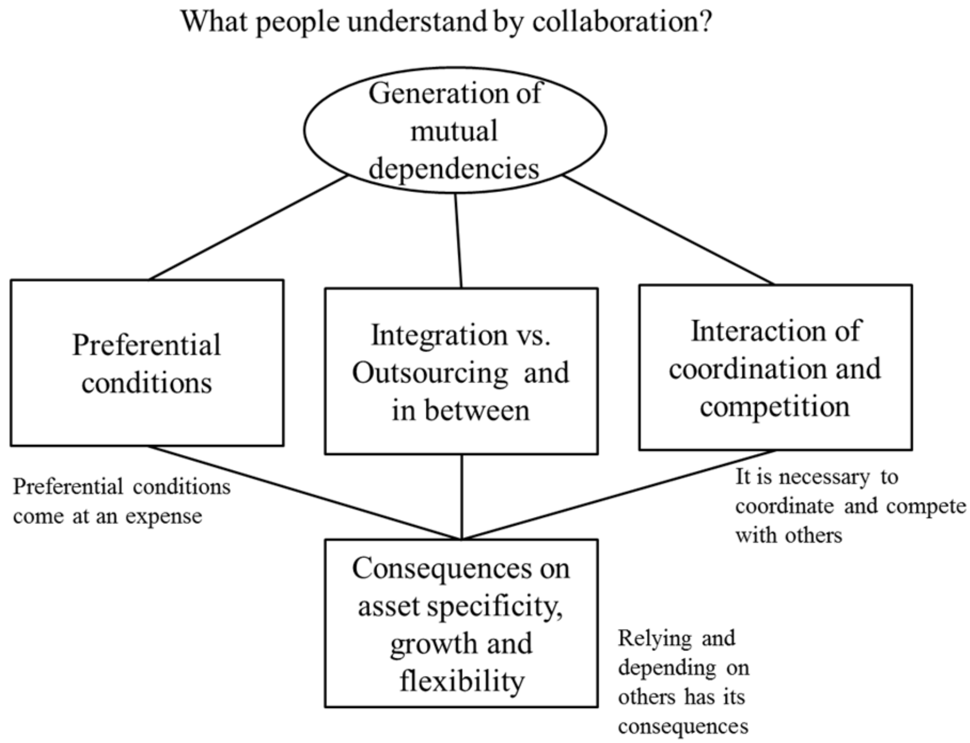

Figure 2.4 Challenge #3: Finding What People Understand by Collaboration "Generation of Mutual Dependencies"

Preferential conditions. Collaboration can also be referred to as preferential conditions in inter-organizational relations (Venkatraman & Lee, 2004). These preferential conditions depend on the different characteristics of transactions among organizations. It is better to approach these preferences as mutual preferential conditions or as mutual dependencies than as unilateral collaboration, as the latter seems to carry strong colonialist and unilateral dependence connotations (Migge & Léglise, 2007; Sharma-Brymer, 2009). Preferential conditions can be perceived in different ways: mutual preferential advantages, loss of profits, and unfairness. Perceptions depend on where organizations are located within their collaborations (Dacin et al., 2008; Garrette &

Dusauge, 1995). Prior research suggests that collaborators prefer fairness at the expense of higher gains (Camerer & Fehr, 2006).

Interaction between coordination and competition. Collaborations fall within the two extremes of total coordination and total competition among organizations (Hennart, 2008; Williamson, 1975). Collaboration allows organizations to harness some advantages but also to suffer some disadvantages according to where their inter-organizational relations lean the most, toward coordination or toward competition (Powell, 1990).

Collaboration lies at the intersection between coordination and competition. Theoretically, one single hierarchical system could coordinate all transactions among agents within that system (Hennart, 2008; Williamson, 1975). However, this coordination would reduce the agents' incentives to innovate and put forth their best efforts because there would be no rewards for improvement, and transactions would become prescribed. At the same time, also theoretically, a completely unsupervised market would give plenty of incentives to exert effort and become creative to compete (Hennart, 1993; Williamson, 1975). This competition would result in cheating and distrust among agents within the system, however. Agents within such a system would try to charge as much as they could to other agents, pay as little as they could to their providers, sell as much as they could (even if what they sell does not have practical use), and not buy some products and services that might be necessary. In such a system, agents would not be interested in attending to disadvantaged parties who would require resources to compete. Agents would not even be interested in providing post-sale services to their clients.

These two extremes are not sustainable (Hennart, 1993; Williamson, 1975). Intermediate solutions between these two systems exist, such as adding rules to previously pure price systems or adding incentives to previously pure hierarchical systems (Williamson, 1991). Hybrids can be used whenever cheating is too high or whenever motivation is too low. Collaboration, therefore, implies having both individual competition and collective coordination. Pressures to become more competitive and to coordinate collectively will emerge, and participating organizations, according to their characteristics and the characteristics of their environment, can be situated at different places on the spectrum of coordination and competition. Other coordinating mechanisms, such as knowledge and trust, are discussed later in this chapter.

Integration vs. outsourcing and the agreements in between. Transaction cost theory (Hennart, 2008) can be used to understand collaborations as organizations navigate two forces. One force looks toward integrating different processes of a chain of value, such as by merging different organizations into one hierarchical system. The second force looks toward outsourcing processes, even excising and selling previous processes that were carried within one single organization, to a market of new or alternative organizations (Williamson, 1975). Each strategy has advantages and disadvantages. Organizations can also reach intermediate solutions by signing contracts that allow them to retain some benefits of their previous inter-organizational relations.

According to changes in environmental pressures, organizations configure and reconfigure their inter-organizational relations to achieve an appropriate balance between autonomy and control (Pollitt, 2013). Collaborations are contingent upon the logic of value creation of an organization (Zaheer, Albert, & Zaheer, 1999). This logic of value creation depends upon the nature of the specific business; an organization's goals and resources; available partners; experience with previous collaborations; managerial capacity; and other factors such as preferences, culture, identity, external perceptions, and beliefs. All these factors are influential issues on the choosing of strategies such as merging, outsourcing, and/or excising (Zaheer et al., 1999). In addition, managerial intentionality and rational choice contribute to an organization's ability to cope with its environment and promote desired improvements and change (Cropper & Palmer, 2008).

Hierarchical mandates vs. market incentives to promote collaboration. Knowledge is a valuable asset that can be acquired through either licensing or integration. Knowledge transactions greatly depend on information asymmetries (Arrow, 1962). The probability of licensing one's knowledge increases with previous experiences on licensing (Davidson & McFretidge, 1984). When it is difficult to stipulate and enforce the rules of outsourcing, franchising, or licensing, it is difficult to monitor and control them. In this case, it is better to own such organizations or branches to be able to exert hierarchical authority and lower the incentives for cheating (Hennart, 2008). Within the higher education context, an example of cheating could be lowering the quality of a given program or course by hiring less qualified faculty. Paying fixed salaries reduces the incentives to maximize output, but it also reduces the incentives for cheating as people have predictable income. Employees who run branches are expected to exert less effort than independent entrepreneurs running franchises (Gibson, 1996). Drawing from the business realm, for example, McDonald's restaurant franchises, on average, make 10% more profits than restaurants that are directly owned by the company (Gibson, 1996).

Implications for asset specificity. Uncertainty does not matter when the specificity of an asset is low (Hennart, 2008). When the specificity of an asset is high, however, non-achievement of such specificity leads to market failure (Hennart, 1993; Williamson, 1975). In such cases, owning control of assets is preferable to ensure specificity compliance. In addition, efficiencies can be achieved through cost minimization and market integration. These two strategies can be achieved through either horizontal and vertical collaborations or integrations. Organizations usually look toward developing and controlling their most relevant and specialized sub-products and services within their chains of value (Hui et al., 2008).

Implications for growth. Organizations cannot grow indefinitely (Hennart, 1993). They are limited by their managerial and control capabilities. Instead of one single huge organization, many small or intermediate organizations acting independently can better attend to the different needs of a diverse and dispersed population (Williamson, 1975). One single government is unable to handle such diversity. It is very hard for one large organization to handle conflicting goals and local adaptations. It is better to let small local organizations to handle such adaptations.

Implications for flexibility. Collaborations allow more flexibility than integration (“Hold My Hand,” 1999). Networks usually result from resource exchanges that continue over long periods of time (Klijn, 2008). Systems that are extremely tightly connected with each other are difficult to manage and become extremely sensitive to disturbances (Simon, 1962). Loosely coupled systems prevent this type of problem (Weick, 1976). Loose ties allow more flexibility and innovation at different places within a system. Autonomy within each part of the system allows the renewal of both people and opportunities, as well as the development of local adaptations (Weick, 1976).

Change in inter-organizational relations. Inter-organizational dynamics can shift from hierarchy, to collaboration, to market, and later change to hierarchy again through processes of merging, integration, outsourcing, subcontracting, sale, and/or excision of productive units at different times (Sampson, 2004). These movements lead to one single hierarchical organization, markets in flexible and/or preferential conditions, markets in egalitarian conditions, or markets in disadvantageous and inflexible conditions (Kim, Oh, & Swaminathan, 2006). All these changes involve important transition costs (Sampson, 2004). Membership in some networks can also generate isolation from other networks. This effect can degenerate into stagnation and inertia (Kim et al., 2006).

Population ecology theories state that organizations survive as a result of selecting appropriate environments, as well as by adapting themselves to the environments in which they develop their activities (Cameron, 1984). According to this theory, excessive organizational change is detrimental to both survival and performance (Cameron, 1984; Cropper & Palmer, 2008; Kraatz & Zajac, 1996). Collaborations, therefore, are meant to contribute to cope with environmental pressures such as the restrictions on the supply of resources or new competitive pressures (Cropper & Palmer, 2008).

Good strategic choices are not enough to promote successful collaborations (Cohen & March, 1986). Successful collaborations also require good processes of negotiation and implementation at different levels of the collaborating organizations. Participants also need to be persuaded to collaborate (Cohen, March, & Olsen, 1972).

Challenge 4: How Do Organizations Create Collaborations?

Figure 2.5 illustrates the relations between the different approaches to developing collaborations. Successful collaboration development requires profound knowledge of collaborative activities, the organizations involved, and the conditions that affect such activities. This knowledge and expertise is often referred to as *relational embeddedness*. Other themes related to the knowledge of collaborative relations include reliability and trust, as well as the search for competitive advantage when examining difference, competition, and conflict. Relational embeddedness also results from the learning derived from positive and negative experiences of collaboration. Figure 2.5 offers a visual guide for navigating these themes.

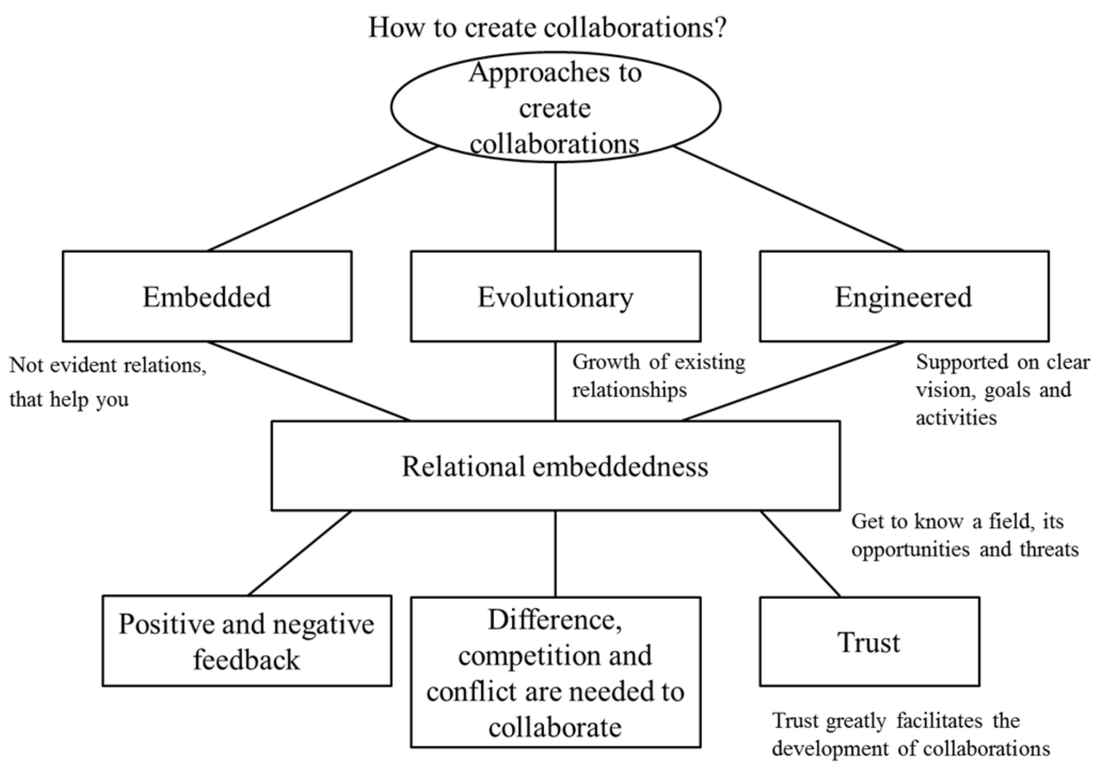

Figure 2.5 Challenge #4: Finding How to Create Collaborations

Active collaboration in any field requires the recognition of key products, services, manufacturers, regulations, and competitors that deliver similar products or services (DiMaggio & Powell, 1983). Context awareness, or *embeddedness*, is a valuable and strategic strength, while isolation is a weakness. In addition, culture, size, experience, structure, and task-related criteria are highly relevant factors for partner selection (Dacin et al., 2008; Park & Ungson, 1997). Network mechanisms can be explained as flows of information, flows of influence, and the construction of joint action (Oliver & Myers, 2003). Opportunity structures are asymmetrical, allowing better access to some actors than to other actors (Laumann, Galaskiewicz, & Marsden, 1978).

Relational embeddedness is the knowledge or awareness of the activities and intricacies of the people and organizations that are involved in collaborative relations (Granovetter, 1992). This awareness allows individuals and organizations to attend to their different necessities through collaboration within structural, temporal, and social frames (Jones, Hesterly, & Borgatti, 1996). Relational embeddedness can also be used to cope with transaction uncertainties (Jones et al., 1996). People develop relational embeddedness as they get to know each other through repeated interactions (Levinthal & Fichman, 1988). *Structural embeddedness* is the knowledge of the partner organization's structural organization (Granovetter, 1992). *Temporal embeddedness* is the knowledge about the partner's pacing and timing of activities and events (Clark, 1985). *Social embeddedness* is the knowledge of the partner's social interrelations (Granovetter, 1985).

Social capital plays a key role in the development of collaborations (Coleman, 1988). According to social capital theory, collaborations are about taking advantage of the benefits of a wide range of opportunities and possibilities available through one's social relations (Koka & Prescott, 2002). Studies of social capital through social exchange focus on appropriability and reciprocity (Adler & Kwon, 2002; Coleman, 1988). *Appropriability* concerns the use of relations for different purposes. For example, one could use friendships both to have a good time and to find business opportunities, or a partner could be more valuable because of his or her connections than by his or her standalone characteristics (Uzzi, 1996). *Reciprocity* is about the expectation of mutual exchange. Structural, temporal, and social embeddedness can be used to coordinate joint activities (Dacin et al., 2008; Uzzi, 1996). Mutual trust becomes an important coordinating mechanism, especially when it is based on knowledge and awareness of institutional relations rather than on personal attractiveness (Zucker, 1986).

Short-term collaborations are less likely to generate relational embeddedness and trust. In practice, collaboration leads to trust, not the other way around (Nahapiet & Ghoshal, 1998). It is impossible to develop trust if there is no previous collaborative experience. Information about collaborating organizations and collaborative relations can only become knowledge when participants learn to use it for their collaborative endeavors (Nooteboom, 2008). Learning gain in collaborations resides in the ability to understand each other to use complementary capacities and achieve common goals (Bruffee, 1999; Freire, 1970). Gaining experience and knowledge on building collaborations is likely to increase collaboration success (Nooteboom, 2008).

Trust. One particular aspect within the knowledge of collaborating organizations and collaborative relations is trust (Bachmann & Zaheer, 2008). There are two approaches to the study of trust: socio-cultural and calculative. According to Williamson (1993), trust should be granted to people whom one knows really well, such as family and friends, while in other settings and with less familiar people, trust should be calculated. Other studies emphasize more highly the distinction of the two general approaches toward trust: One is egotistically calculative, and the other is trusting reciprocative (Camerer & Fehr, 2006). One is based on an opportunistic approach, while the other relies on the tendency to reward good behavior (Camerer & Fehr, 2006).

Trust in a collaborative relationship is understood as the belief that the counterpart will behave in a predictable, positive manner (Dasgupta, 1988). Opportunism, in contrast, implies that people do not always fulfill their promises (Williamson, 1975, 1993). People change previous choices and decisions to take advantage of new opportunities, sometimes in unethical ways (Williamson, 1993). Not using trust, and only relying on surveillance, is detrimental to collaborations as surveillance is expensive and does not add direct value (Otatti, 1994). Organizations that trust do not need to spend excessively on oversight, meaning that they can reduce costs and outrun competitors (Hill, 1990).

Trust is deeply related to risk and is not needed when there is no risk. Trust is about the willingness to take risk as one has higher expectations for positive behavior than negative behavior in a situation in which both behaviors are possible (Zaheer, McEvily, & Perrone, 1998). People trust not because it ensures something for them. They trust because, according to what they know about alternative behaviors and their consequences, they believe that people will make a predictable set of positive choices (Luhmann, 1979).

Collaborations initially are highly calculative, but once participants gain experience and develop trust, they stop being so calculative and become more trusting (Saku, 1992). In modern society, where there are many different roles with high levels of specialization, we need to trust each other as we cannot learn and oversee all the complex functions processes and relations around us (Giddens, 1990), such as the work of "[m]edical experts, nuclear scientists, professors, air traffic controllers, and many other specialists" (Giddens, 1990, p. 543; see also Bachmann & Zaheer, 2008).

Approaches for creating collaborations. There are no universally attractive characteristics for partners (Killing, 1983). However, a good focal point from which to start searching for partners is to focus on one's own necessities (Cohen & March, 1986; Dacin et al., 2008). When searching for partners, the goal is to match partners with the characteristics of the collaborative activity (Williamson, 1991). This behavior maximizes efficiency and effectiveness. Due to regulatory or opportunity constraints, it is possible that some collaborative activities can initially be developed with inefficient partners (Williamson, 1975).

"Human activities are driven by bounded rationality and opportunism" (Hennart, 2008, p. 340). It is, in many cases, impossible to contemplate all the possibilities for partnering. Decisions are limited by the bounded rationality and knowledge (House, 1991). However, participants can change decisions as new opportunities appear or as previous opportunities are rediscovered (Biesta & Burbules, 2003; Rorty, 1998). There are three different theoretical approaches for the development of collaborations: embedded, evolutionary, and engineered (Doz, Olk, & Ring, 2000).

Embedded approaches. In this approach, collaborations are a sub-product of, rather than an aim in, the development of the regular activities of an organization. The development of collaborations does not depend on establishing specific relationships. The academic credit system is an example of this type of collaboration. It establishes a coordinating mechanism across colleges and universities for the recognition of previous studies at different higher education institutions. This system allows student mobility without having to make hundreds of agreements with higher education institutions around the world for the recognition of previous studies. Another example is the publication of open information through the Internet. People use information openly available through online without having to engage in a particular collaborative agreement. Instead, the agreement is implied or embedded.

Evolutionary approaches. Evolutionary approaches to collaboration, as proposed by Kanter (1994), can be compared to marriage. They follow the sequential evolutionary process of “selection and courtship, getting engaged, setting up housekeeping tasks, learning to collaborate, and finally change within each organization” (Kanter, 1994, p. 98). Spekman, Forbes, Isabella, and MacAvoy (1998) divide this process into seven evolutionary stages: “Anticipation, Engagement, Valuation, Coordination, Investment, Stabilization and Decision” (pp. 760-763). Both models agree that collaborations should lead to dissolution once the useful time of the alliance finishes.

According to Ahuja (2000) and Walker et al. (1997), organizations tend to develop collaborations with other organizations with which they already have relations in an incremental and evolutionary fashion. This situation reveals the importance of trust and social capital for the development of collaborations. Previous experiences in which partners get to know each other save time and effort in developing complicated contracts (Dyer & Singh, 1998). As parties learn to collaborate, they move from less complex engagements to more complex ones—for example, form simple memorandums of understanding to joint endeavor agreements (Ring, 1997).

In the course of the evolution of relationships, some characteristics remain, and other characteristics change. According to Aldrich (1979), who draws from Campbell (1969), the evolution of a given organization can be described in terms of "variation, selection and retention" (Aldrich, 1979, p. 265; see also Lomi et al., 2008). Trust leads to higher economic efficiency, and due to bounded rationality, the cost of losses and oversight cannot be completely calculated in order to compare calculations of losses with the development of trust (Kenis & Oerlemans, 2008). In general, trust facilitates economic transactions (Bromiley & Cummings, 1995; Vidotto, Vicentini, Argentero, & Bromiley, 2008). Organizations that gain the reputation of being trustworthy can attract better partners for building collaborations (Barney & Hansen, 1994). Trust can become a coordinating mechanism that is as effective as hierarchies or prices (Bachmann, 2001).

Engineered approaches. Gray (1985) proposes an engineered approach for the development of collaborations, composed of three sequential steps: problem setting, direction setting, and structuring. Her approach aligns almost directly with Commons' (1950) three phases: "(1) Negotiational psychology (inducements, intentions, purpose); (2) Commitments for future action (agreements, contracts, obligations, rules of action); and (3) execution of the commitment (administration, sovereignty)" (pp. 105-109). Simply agreeing to collaborate does not drive collaboration. Developing a commitment requires a real appreciation for the other's products, services, and/or points of view.

Contracts serve as blueprints for organizational relations (Mayer & Argyres, 2006). Organizations can use explicit mechanisms such as contracts or on spontaneous mechanisms such as the development of trust to manage their transactions (Ring, 2008; Ring & Van de Ven, 1992). A contract might also signal that parties cannot trust each other (Jap & Ganesan, 2000). Pursuing legally enforceable rights can actually damage a relationship (Ring, 2008; Ring & Van de Ven, 1992). In addition, objective performance measures are different from perceptions, and contributions from different parties in a relationship are not always comparable (Hibbert, Huxham, & Ring, 2008).

Contracts are also meant to prevent conflicts derived from misunderstandings (Williamson, 1987). For contracts to be legally binding, they must demonstrate that participants are competent persons, define benefits and loses, demonstrate agreement on the terms of a contract, and confirm that what parties agree to do is valid (American Law Institute, 1981). When these four conditions are met, a contract can be enforceable (American Law Institute, 1981).

In addition to these conditions, contracts usually specify amounts and types of exchanges and/or joint efforts among participants, how the objective of the contract is going to be managed in terms of resources and people in charge, and the conditions that will lead to contract dissolution (Macneil, 1980). The evolutionary and the engineered approaches are not mutually exclusive as collaboration managers are able to engineer better processes of collaboration as their knowledge and relationship embeddedness evolves (Ring, 2008).

Difference, competition, and conflict as sources for collaboration. Good collaboration also implies difference, competition, and conflict (Gross & Guerrero, 2000; Ray, 2008; Schruijer, 2008). Differences need to be used and encouraged rather than canceled through homogenization (Schruijer, 2008). There are optimal cognitive distances to establish successful collaborations. Too much distance does not allow communication, while too short distance does not allow learning (Nooteboom, 1999).

Access to non-overlapping partners allows for new ideas and perspectives without creating conflicts of interests (Burt, 1992). In addition, maintaining a cognitive distance ensures long lasting relationships (Nooteboom, 2008). Excessive levels of cohesion might also destroy diversity by normalizing thoughts and behavior reducing rather than enhancing innovation and creativity (Powell & Smith-Doerr, 1994). In the case of collaborations meant to increase efficiency, the aim is to restrict alliances to structural holes saving connection efforts for substantive opportunities (Burt, 1992). In the case of collaboration for exploration purposes, the logic is the opposite; it makes sense to have many redundancies in order to boost innovation and assimilation capacities from highly dissimilar partners (Rowley et al., 2000). In cutting-edge industries, the costs of exploration are as high as, or even higher than, the costs of exploitation (Abernathy & Clark, 1985).

Positive and negative feedback from collaborative experiences. In contrast to the standard practice of organizations to establish collaborations with organizations that they already know, inconsistent feedback from the environment and extreme uncertainty lead them to partner with strangers rather than with traditional connections that they already have (Baum, Rowley, Shipilov, & Chuang, 2005).

When collaborations are successful, parties gain credibility to initiate other collaborative endeavors (Gray, 1989). Participation in collaborative activities has a snowball effect as it often leads to more collaborative activities. When organizations become skilled in establishing collaborations, they can use those skills to establish other collaborations (Gulati, 1999). Participating in and learning about collaborations also help to generate a history of collaboration (Levinthal & Fichman, 1988). Highly experienced players are likely to become leading players in collaborative networks (Powell & Smith-Doerr, 1994). Participating in collaborations also depends on the socializing capabilities, the strength of current social connections, and the power or centrality of existing participants (BarNir & Smith, 2002).

Challenge 5: How Are Collaborations Run?

The theories that inform collaboration management can be practice, process, or structurally oriented (Hibbert et al., 2008). Some examples of such theories are leadership, management, management of relations, management of network and portfolios, the development of influence, and management styles. Partnership management concerns partner selection and trust building (Bromiley & Cummings, 1995). In addition, identifying, locating, evaluating, distributing, and integrating different tasks across multiple specialized organizations are also valuable strategic competencies for the delivery of complex products and services (Barney, 1999).

Many aspects need to be reconciled in the management of collaborative relations. Figure 2.6 visually navigates through these themes. The following paragraphs discuss each of the themes presented in this figure.

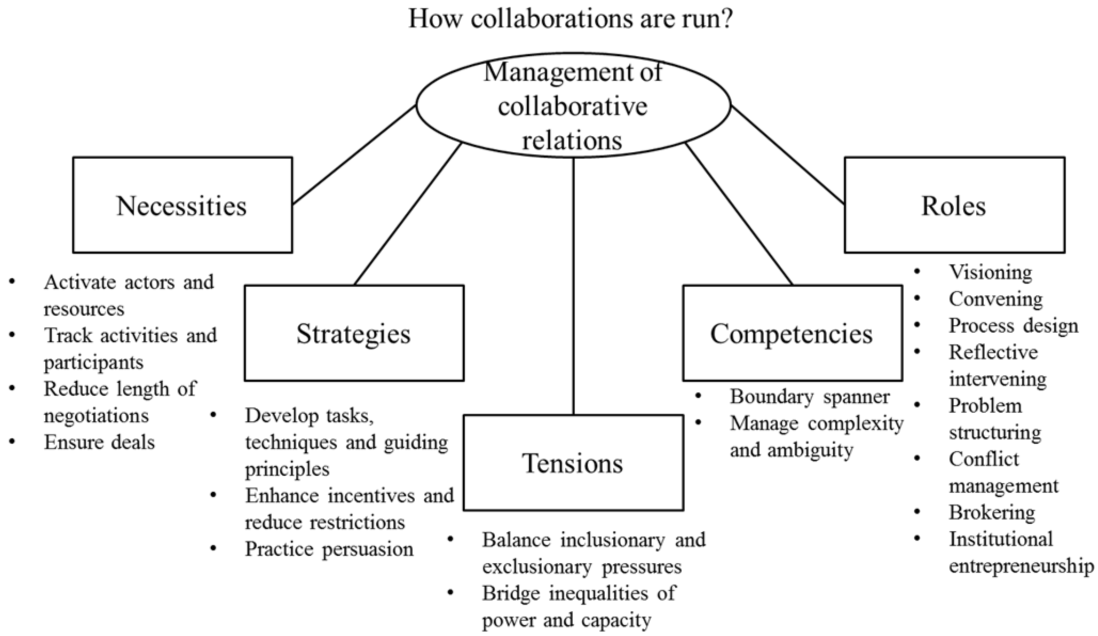

Figure 2.6 Challenge #5: Finding How to Manage Collaborations

Need for collaboration managers. Organizations in many cases require collaboration managers to activate actors, resources, goal achievement, and the flow of activities and interactions among participants. In almost any inter-organizational relationship, the goal is to ensure deep involvement and commitment of all participants, even though participants might want to participate in some aspects but not others, as there are different levels of power and capacity (Balloch & Taylor, 2001). Organizations that participate in collaborations often choose a coordinating central agent or organization based on its ability to effectively organize the joint activities of an alliance (Williamson, 1991). Transaction cost theories explain why some central agents or organizations are chosen over other agents or organizations to control an economic activity (Hennart, 2008). Controlling an economic endeavor requires raising other participating organizations' awareness of their needs and possibilities, reducing the length and number of negotiations, and ensuring that agreements are honored (Hennart, 2008).

Strategies to manage collaborations. Kickert and Koppenjan's (1997) perspective on collaboration management focuses on the strategic planning of alliances and related activities. In their approach, it is important to specify the tasks, techniques, and guiding principles that managing collaborations requires. Managers of collaborations can enhance incentives and reduce restrictions to promote collaborations (Huxham & Vagen, 2005). According to strategic choice, managerial intentionality, and rational choice, organizations cope with their environments to promote desired improvements and change. However, good strategic choices are not enough to promoting successful collaborations (Cohen & March, 1986). Successful collaborations also require good processes of negotiation and implementation at different levels of the collaborating organizations. Participants need to be persuaded to collaborate (Cohen et al., 1972).

Tensions of collaboration management. Collaborations involve many tensions (Hardy, Lawrence, & Phillips, 1998). Collaborations are accompanied by strong inclusionary and exclusionary pressures and by significant inequalities in power and capacity (Avelsson & Willmott, 2003; Lotia & Hardy, 2008). Institutional forces and power differences generate obstacles for collaborations. In addition, there are constant struggles among interest groups. When decision makers become aware of political complexities they can make better assessments of their collaborative endeavors (Avelsson & Willmott, 1996). Awareness of different interest groups is likely to lead to transparent and ethical processes of collaboration.

In general, the organizations that control the resources that are most in demand, or that can most effectively reduce uncertainty regarding flows of resources, have greater power in collaborative relationships (Pfeffer & Salancik, 1978). Communication and resource exchange allow organizations to identify allies and opponents according to economic and political changes (Burstein, 1976). Collaboration can be used to both develop processes of support and/or processes of resistance (Lotia & Hardy, 2008). An organization's power depends on its centrality and its associative capacity (Burt, 1992; Emirbayer & Goodwin, 1994; Kenis & Oerlemans, 2008). Relational capabilities contribute to create competitive advantages (Yoffie & Kwak, 2006).

Competencies of collaboration management. Other approaches to collaboration management focus on the competencies and behaviors of managers of collaborations and describe them as "boundary spanners." Boundary spanners should be able to manage complexity. They are in charge of influencing and negotiating, motivating, assigning roles, and managing interdependencies and accountabilities (Williams, 2002).

Different roles of collaboration managers. According to Gray (2008), the roles of collaboration managers can be grouped into these categories: "Visioning, convening, process design, reflective intervening, problem structuring, conflict managing, brokering, and institutional entrepreneurship" (p. 668). *Visioning* implies recognizing the potential benefits of collaborating. Collaborations require the development of shared understandings of the benefits of collaborating to coordinate joint activities. It might require the construction of shared strategy maps and the selling of that vision to the different parties involved. Visioning is necessary to clarify goals and expectations (Gray, 1989). *Convening* is the ability to motivate potential partners to participate. When different parties can identify with a common problem, they reinforce their creativity and their willingness to collaborate. *Process design* results from envisioning possible scenarios and proposing and evaluating possible solutions. *Reflective intervening* implies proposing evaluating and adopting changes to the collaboration arrangements. *Problem structuring* denotes the design of interactions among partners, the design of each partner's tasks, and attention to the overall design of the collaborative process (Gray, 1989). The goal is to clarify as well as possible what is going to happen throughout the collaboration process. *Conflict managing* includes creating mechanisms to handle disagreements and to prevent stagnation or inertia. This role can fall to a third party that is neutral to the conflicting interests. Parties must develop positive interactions to avoid mutual stereotyping (Amir, 1994). Further, *brokering* involves negotiating and sharing information among partners. Cultural fluency facilitates interactions across borders (LeBaron, 2003). Brokers can also become power levelers by compensating for power differences and allowing participation in common terms to reach fair agreements (Westley & Vredenberg, 1991). Finally, *institutional entrepreneurship* looks toward developing new institutional arrangements to cope with the demands generated by engaging into collaborations (Lawrence, Phillips, & Hardy, 1999).

Some approaches to collaboration management are extremely prescriptive. They overemphasize what is to be done but fail to communicate the reason for doing so (Melaville, Blank, & Asayesh, 1993). Millar, Choi, and Chen (2004) are of the opinion that trying to force guidelines might actually deter managers' ability to handle collaborations. In general, collaborations are sustainable when the gains derived from joining efforts are bigger than the efforts required to develop and sustain them (Demsetz, 1967; Hennart, 1982, 2008). For that reason, negotiations ought to be shortened.

Mapping out the structures of power. Collaboration can be seen as an agglomeration of organizations that want to increase their power (Huxham & Vagen, 2005). Collaborative discourses discipline actors and embody power (Hardy & Phillips, 1998). Power as capacity and resources to influence outcomes involves many questions that collaboration managers should consider: How is power exerted on oneself? How does one exert power over others? How is power being shared? How do people perceive the exertion of power? How can people join powers to increase its effects? What combinations of power could be negatively perceived? How does power change over time? Where is the use of power having negative consequences? Where is the use of power having its most positive influence? (Fiol & O'Connor, 2003).

It is also important to know which kind of power most effectively influences a given collaborative relationship. Is the power derived from the control of resources? Is the power derived from the ability to erect regulations? Or is it derived from the ability to influence others? (Knoke & Chen, 2008). Acknowledgment of specific sources of power contributes to participants' ability to analyze them, develop mechanisms for acquiring them, and develop mechanisms to manage them (Cox, 2001; Huxham & Beech, 2008; Medcof, 2001). There are also micro-power and micro-politics relations in day-to-day activities, even in informal settings. Despite immense differences in macro-power such as control of critical resources or the capacity to influence others, decisions are sometimes made on the basis of day-to-day micro-powers (Huxham & Beech, 2008; Spekman, Isabella, & MacAvoy, 2000). Finally, power can also disappear when parties become disinterested and return to their previous independent routines (Huxham & Beech, 2008; Mayo & Taylor, 2001).

Reconciling personal and organizational goals. Interpersonal and intergroup negotiations have some differences (Morley & Stephenson, 1977). Group representatives, such as collaboration managers, need to reconcile, and sometimes override, their personal interests in favor of their group's interests, or even in favor of their partner's group's interests (Adams, 1976). In addition to the relations that collaboration managers have with the organizations to which they belong, these managers also develop interpersonal relations with collaboration managers from other organizations. Usually, when collaboration managers are only driven by the interests of their own organizations, they end up developing tense and conflicting inter-organizational relations. On the other hand, when collaboration managers are only driven by their mutual interpersonal demands, their negotiations can lead to mutual complacency and even deception of their own organizations. When both interpersonal and inter-organizational demands are weak, no collaboration or agreement is likely to happen. Finally, when both interpersonal and intergroup commitments are high, collaborations and agreements are more likely to succeed (Adams, 1976). Both excessive conflict and complacency are detrimental to success, which is why they need to be balanced (Jehn, 1995). Collaborating organizations can act as one when they reach certainty and purpose. They can then take advantage of all the capacities of their members, become stronger, and exert more power and influence (Freud, 1922; Le Bon, 1896; MacDougall, 1920; Schruijer, 2008).

Challenge 6: What Types of Collaborations Exist?

Figure 2.7 provides a broad taxonomy to contemplate the many different possibilities of collaboration between higher education institutions. Other possible ways to classify collaborations exist, and this study was not designed to compete with other potential taxonomies. Rather, this study sought to illustrate different variables that can be used to discriminate between and analyze different forms of collaboration. Taxonomies are important as they serve as agreeable organizing principles. Organizations can put names to their activities in any way they want. However, coherent organizing principles contribute to identifying purposes and commitments to the proposed collaborative activities. Each of the ways to classify collaborations via this taxonomy is examined in the following paragraphs.

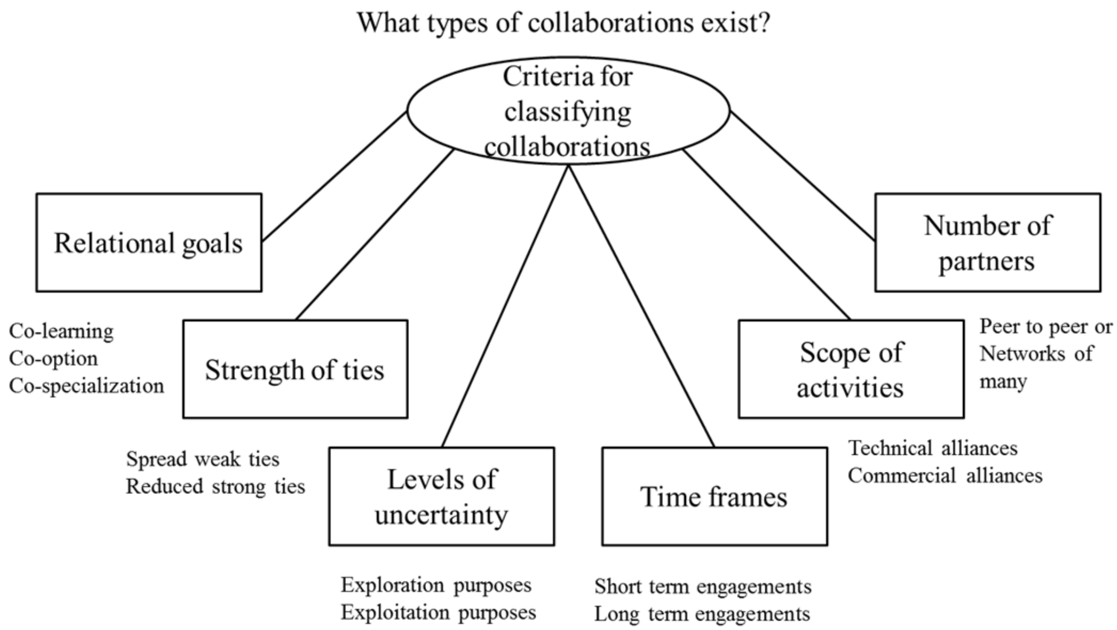

Figure 2.7 Challenge #6: Finding What are the Purposes for Collaboration "Criteria for Classifying Collaborations"

Relational goals. Three major goals drive the development of collaborations: co-specialization, co-option, and co-learning (Doz & Hamel, 1998). Collaborations are rooted in differences and need to maintain differences to persist (Gray, 1989). Collaborations are contingent upon the logic of value creation of an organization (Van de Ven & Walker, 1984). One must ask whether a specific collaboration is meant to generate faster transactions and innovation, create economies of scale, convene different experts, or allow flexibility and mobility, among other possibilities. One must also ask about the perceived gains that are derived from such collaborations (Dacin et al., 2008). The logic of value creation via collaboration depends upon the nature of the specific organization, the organization's goals and resources, available partners, its experience with previous collaborations, and managerial capacity, among other factors such as preferences, culture, and beliefs. Awareness of the competitive environment influences partner selection as well as choices in types of alliances (Gimeno, 2004).

Higher education collaborations depend on the complexities of individual academic fields and disciplines and the nature of higher education administration. Other variables also distinguish different forms of collaboration. They could be classified as being based on weak ties vs. strong ties, exploration endeavors vs. exploitation endeavors, indefinite duration vs. prescribed duration, continuous vs. being spurious, commercial purpose vs. technical purpose, two organizations vs. many organizations, informal vs. formal, embedded vs. complexly evident and independent, etc.

Classification according to strength of ties. For Granovetter (1973), four aspects indicate the strength of a tie: time spent together, emotional intensity, intimacy, and reciprocal services. Similarly, Gilsing and Nooteboom (2005) define the aspects or factors that determine the strength of a tie as scope of shared activities, frequency of interactions, duration of the relationship, trust, openness, and the extent of formal contractual control.

On many occasions, weak ties are more useful than strong ties. For example, when looking for a job, knowing many people superficially might be better than knowing a few people deeply (Schoenmakers & Duysters, 2006). Weak ties can be strong sources of collaboration (Granovetter, 1973). On the other hand, strong ties allow more awareness or embeddedness of an organization's possibilities (Rowley et al., 2000).

Some suggest that strong ties are far more complex than weak ties. One is for complex and deeper purposes while the second for simpler and superficial ones (Hansen, 1999). Others see strong ties as the means to increase performance in stable industries, while weak ties serve as the means to increase performance and dynamicity on highly changing and dynamic industries (Hansen, 1999; Moran, 2005).

Levels of uncertainty. For an exploration collaboration, its duration should be low to allow for regroupings and new combinations, and frequent interactions are necessary to offset investments and speed up innovation. Limited viability of contracts demands high trust, openness and low levels of legally enforceable control (March, 1991). Density and diversity are desirable to increase both innovation and absorption capacity (Nooteboom, 2008). In the case of exploration collaborations, having many redundancies is useful to increase the absorptive capacity, while in the case of exploitation collaborations, it makes better sense to limit the number of connections (Lane & Lubatkin, 1998; Rowley et al., 2000). Exploration to innovate has higher uncertainties than exploitation. Organizations tend to collaborate on exploration rather than on exploitation (Nooteboom, 2008). In cutting-edge industries the costs of exploration are even higher than the costs of exploitation (Nooteboom, 2008; Rowley et al., 2000).

On the other hand, exploitation networks are characterized by specific investments, long-term relationships, few but specific interactions, a narrower scope of interactions, and high levels of contractual control. As the scope of interactions is reduced and the activities are well specified in contracts, there is less need for trust and reputation and more need for coordinating mechanisms. If one already has enough partners for a specific productive purpose, adding new partners becomes a spillover for the existing partners (Lorange & Roos, 1992; Nooteboom, 2008). Diversity and density need to be reduced to ease communications and minimize operative costs. However, too much mutual adaptation increases stability and reduces costs but hinders innovation and flexibility. It also damages the relations with other clients and providers (Johnsen & Ford, 2005; Lamming, Cousins, & Notman, 1996).

Classification according to timeframes. When the dynamism of collaborative activities in a partnership diminishes, organizations need to decide whether to let these activities diminish (in anticipation of revitalizing them when they need them) or to terminate those partnerships (to reduce the efforts associated with sustaining them). Decisions regarding continuing collaborations depend on the costs to sustain them and on the criticality of the products, services, or benefits derived from such partnerships (Ozcan & Eisenhardt, 2001). Collaborations should lead to dissolution once their usefulness finishes. Collaborations are also temporary when the reasons for collaboration are temporary projects (Jones & Lichtenstein, 2008).

Classification according to the scope of activities. Technical alliances are better received by the public than commercial alliances. Technical alliances are supposed to generate more value to customers (Das, Sen, & Sengupta, 1998). Alliances in some cases can have a higher impact on the stock market than takeovers (Dacin et al., 2008; Das et al., 1998).

Classification according to the number of partners. One of the complexities of organizational relations is the fact that these analyses are simultaneously macro and micro analyses. They are macro when compared with the study of specific activities, and they are micro when compared with the study of the evolution of a sector of the economy or the impact generated by governmental policies (Lomi et al., 2008). There are ecologies of organizations and interrelations among them (Hannan & Freeman, 1977). According to Aldrich (1979), the evolution of a given organization can be described in terms of variation, selection, and retention (p. 265). Studies about the evolution of collaborative relations are also studies of the historical changes in social, market, cultural, and organizational systems (Hannan & Freeman, 1977; Powell et al., 2005).

Challenge 7: What Motivates Partnering Internationally?

The success of economies is characterized by the "holy trinity" of technology, organizations and territories" (Bathelt & Gluckler, 2003; Bathelt, Malmberg, & Maskell, 2004). The study of networks and power relations facilitates the discovery of the economic geography of a given discipline or sector (Taylor & Asheim, 2001; Yeung, 2005). Some of the elements that explain why organizations agglomerate in certain places are the presence of interrelated organizations, high levels if interaction among these organizations, sharply defined domination of resources and coalitions to control them, and mutual awareness of organizations' capabilities contribute to facilitate the development of collaborations (Amin, 1994; Yeung, 2008). (See Figure 2.7.)

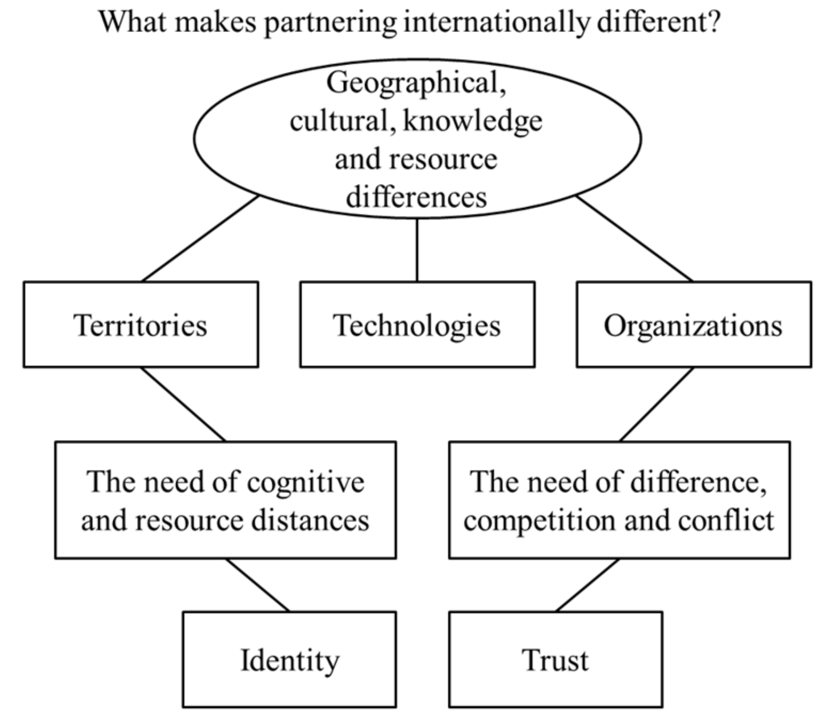

Figure 2.8 Challenge #7: Finding What Motivates Partnering Internationally: Geographical, cultural, and resource differences

In the 1950s, economic geography concerned the discovery of organizational behavioral patterns according to space (Dicken, 1990; Hayter & Watts, 1983; Krumme, 1969; Yeung, 2008). The Marxist radical influence of the 1970s shifted the focus of economic geography toward industrial geography (Yeung, 2008). During the late 1980s, interests shifted to networks of interrelated organizations (Chiristen, Eskelinen, Forsstrom, Lindmark, & Vatne, 1990), which also implies spatial or geographical awareness of the opportunities at different places (Dicken & Thrift, 1992). It is important to understand the role of network relations in global capitalist economies to find the territories that facilitate the development of certain disciplines or activities (Yeung, 1994).

Interaction between cognitive distances, power centrality, absorptive capacities, and ties density. Both high cognitive distance and high power centrality contribute to increases in innovation, but such progress comes at the expense of low absorptive capacity, such as the inability of partners to understand and interact with each other. Absorptive capacity can be addressed through high network density, such as when using various agents in meetings, agreements, learning activities, and exploration endeavors (Gilsing & Nooteboom, 2005; Gilsing, Nooteboom, Vanhaverbeke, Duysters, & Van den Oord, 2008). One perspective suggests that an organization's power depends on its centrality and its associative capacity (Burt, 1992; Emirbayer & Goodwin, 1994; Kenis & Oerlemans, 2008). Another perspective states that power relies on the day-to-day practice of people who have the capacity to influence outcomes (Yeung, 2008). High centrality increases the exposure to innovation, but it might also cause information overload (Gilsing et al., 2008). Other partners without such high cognitive distance might contribute to process that information. There are optimal cognitive distances, as too much distance does not allow communication, and too short distance does not allow learning (Nooteboom, 1999). There is a tradeoff between variety and homogeneity in that one leads to innovation but causes instability, and the other, despite not promoting innovation, generates stability and trust (Gilsing et al., 2008).

Collaborations are rooted in differences and need to maintain differences to be sustained (Gray, 1989). Maintaining cognitive distance ensures long-lasting relationships (Nooteboom, 1999). Differences need to be retained, or even actively created, to allow exchanges (Vansina, Taillieu, & Schruijer, 1998). Having access to non-overlapping partners allows all parties to gain new ideas and perspectives without creating conflicts of interest (Burt, 1992). Mutual understanding does not imply homogenization. Diversity is necessary as it allows the division of labor. In addition, variety is an important source of innovation (DiMaggio, 1997; Nooteboom, 1999, 2008). The law of requisite variety states that the complexities of systems need to match the complexity of their environments (Ashby, 1969). Therefore, geographical and cultural differences are likely to lead to diverse solutions to common as well as complementary problems. Putting together alternative contributions increases variety of thought and innovation. On the other hand, excessive levels of cohesion might also destroy diversity by normalizing thoughts and behavior, reducing rather than enhancing innovation and creativity (Powell & Smith-Doerr, 1994). Strong and lasting relations can also lead to reduced variety. Familiarity increases trust but reduces variety (Gilsing et al., 2008).

Politics of collaboration. Collaborations serve processes of co-learning, co-specialization, and co-option. With respect to co-option, as stated in a previous section, collaborations can also be used to develop processes of resistance. For example, concerns about the spread of communism in Latin America led to collaborating on the region's development through the Inter-American Development Bank (IDB). Once the Soviet Union collapsed, the IDB changed its focus to the protection of human rights (Fukuyama, 2004).

Conflict and collaboration. Managing diversity requires understanding of the complexities of conflict and collaboration. Within collaborative relations there are constant struggles between interest groups. In addition, participants might react aggressively because of unfulfilled expectations. In their extremes, conflict and complacency are detrimental to the success of collaborations, which is why they need to be balanced (Jehn, 1995).

Good collaboration also implies difference, competition, and conflict (Gross & Guerrero, 2000; Ray, 2008; Schruijer, 2008). Differences need to be faced rather than suppressed (Schruijer, 2008). According to Forsyth (1990), a group is represented by two or more people influencing each other. A group cannot always be equated with an organization. An organization involves shared goals, structure, identity, and interdependencies among individuals (Schruijer, 2008; Vansina et al., 1998). It is also possible to talk about intergroup behaviors when two different groups interact with each other while working on joint goals (Vansina et al., 1998).

According to Freud (1922), people form a group when they identify with the leader and other group members. Consequently, in many cases, despite not being in complete conscious agreement, people behave in accordance to their group affiliations and accept the suggestions of their group leaders. Belief congruency theory states that similarities in belief systems lead to favorable attitudes between groups (Rokeach, 1960, 1968). A psychological perspective can be helpful to address collaboration problems such as “Distrust, Negative attitudes, Poor communication and Stereotyping” (Schruijer, 2008). Psychological perspectives, namely Sherif’s (1967) realistic conflict theory and Tajfel and Turner’s (1979) social identity theory, can also address conflict between groups, as well as their reconciliation and combining of efforts.

According to dominance theory, groups differentiate to the level at which they can accept intergroup hierarchies. People need to justify the current order before they can accept it (Jost, Banaji, & Nosek, 2004). On the other hand, the cognitive approach assumes that human rationality is bounded, so conflicts and negative behaviors are the result of failures to understand each other rather than the result of objective differences (Schruijer, 2008). In many cases, the responses of people to objective circumstances are a function of subjective perceptions (Stouffer, Suchman, Devinney, Star, & Williams, 1949).

Groups that are highly diverse are more prone to external hostility. However, according to Freud (1922), external hostility contributes to generate cohesion among members. A group coalition can act in a unified manner when it reaches certainty and purpose, which allows it to take advantage of all the capacities of its members, become stronger, and gain the ability to exert more power and influence (Freud, 1922).

Identity and collaboration. People struggle to maintain or create a positive self-image. It is expected that people will change group membership when they do not feel that they identify with a group any longer because the group image is negative, unstable, or illegitimate (Schruijer, 2008). Almost everyone tries to avoid punishment and maximize well-being and gains. A positive self-image is associated with such desired outcomes (Thibaut & Kelley, 1959). This desire leads to the need to build a positive self-image according to group affiliations and to obtain validation by others.

Trust as a geographical and cultural disposition. Levels and processes to acquire trust differ across borders; people in different contexts rely on different mechanisms to build trust. Some rely on institutional contracts, others rely on personal relations. There are two approaches to the study of trust: socio-cultural and calculative. Some societies tend to be trusting, while others tend to be calculative. At a macro level, trust societies are better positioned for collaboration, as they ease friction and reduce hurdles in negotiations, and trust reduces expenses for inspection (Kenis & Oerlemans, 2008).

Trust leads to higher economic efficiency, although due to bounded rationality, the cost of losses and oversight cannot be completely calculated to compare them with the savings of trust (Bromiley & Cummings, 1995; Otatti, 1994). In general, trust facilitates economic transactions (Fukuyama, 2004). Short-term collaborations are less likely to generate trust. People trust not because it ensures something for them. They trust because they believe that, according to what they know about different alternatives of behavior and their consequences, the people whom they know will make a predictable set of choices for them (Luhmann, 1979).

Culture as a result of geographical and historical differences. People around the world have developed different social organizations to attend to their specific necessities. They have different histories, values, and beliefs. They have developed different solutions to procure food and shelter and to defend themselves from local threats such as weather, diseases, predators, or geographical challenges. They also have different advantages, such as the availability of different foods and other resources. All these circumstances have led to different social organizations that have been perpetuated and reinforced by the traditions at each place (Hofstede et al., 2010). People tend to believe that only one optimal and fair social organization is possible—the one that they have learned or developed. However, reality shows us that people in other places have developed other possibilities of social organization.

One of the challenges in establishing cross-border collaborations in higher education is to take advantage of the immense cultural, institutional, and resource diversity available around the world. Different higher education systems, with different values, have reached different solutions to common as well as complementary problems. One must be aware of such diversity to be able to engage into fruitful international collaborations and partnerships.

Challenge 8: What is Necessary to Engage in Collaborations?

Understanding the conditions that allow or facilitate collaboration allows higher education institutions to identify such conditions and use them when they can and/or develop such conditions if they are not available. In general, favorable political and social climates promote collaborations (Mattessich, Murray-Close, & Monsey, 2001). The characteristics of desirable partners include teaching and learning abilities; similarities in culture, knowledge processing systems, and structures; shared membership in social communities; and similar compensation systems. The ability to teach and absorb knowledge especially facilitates suitable partnerships (Lane & Lubatkin, 1998).

As has already been described in previous sections of this chapter, the conditions that allow collaboration could be summarized as willingness to collaborate; presence of interrelated activities and organizations; knowledge about collaborating organizations and the nature of the collaboration activities in a certain discipline or activity to define the patterns of domination and coalition; expertise or skill in the management of collaborations; cognitive distances that allow processes of specialization, exchange, and mutual interdependence; control of critical resources; high levels of interaction with other organizations; and relations with agents or organizations that enable access to critical talent and resources controlled by other organizations (see Figure 2.9).

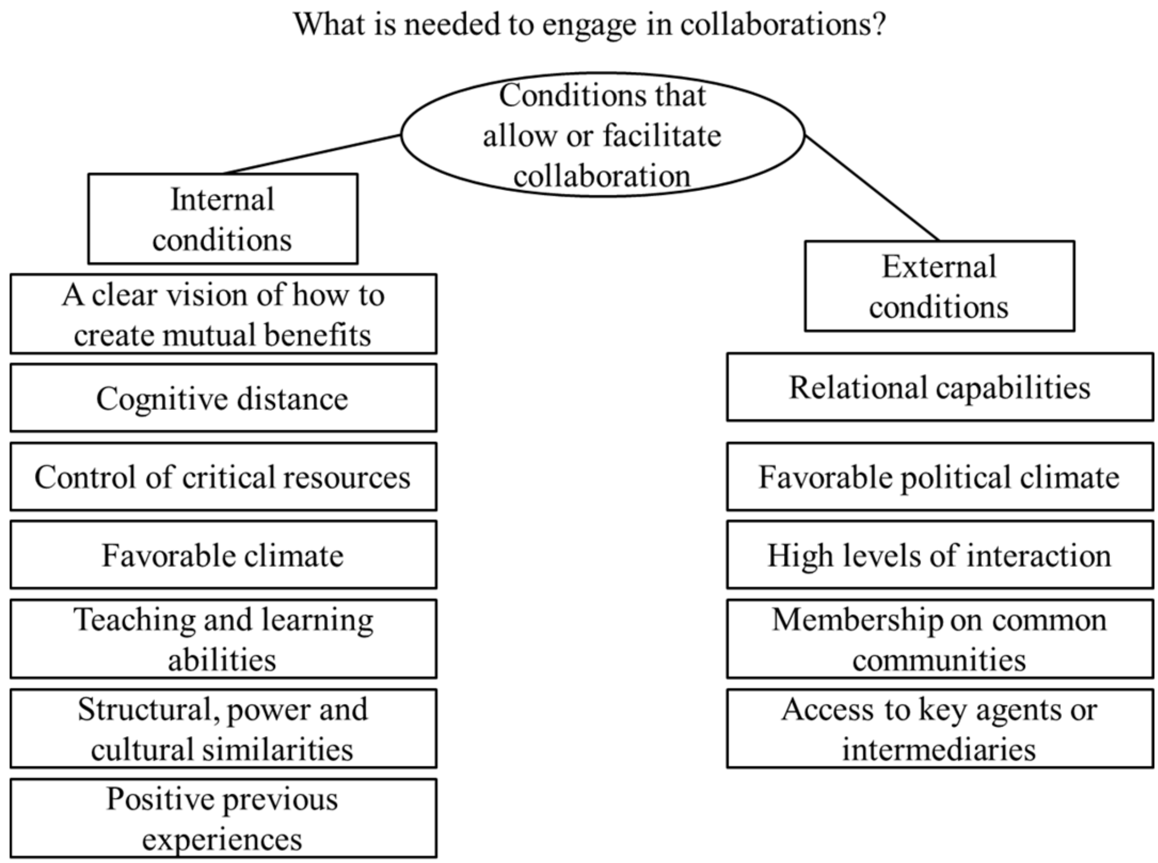

Figure 2.9 Challenge #8: Finding the Conditions that Allow or Facilitate Collaborations

Some of these factors could be summarized as being in a good place, or finding the way into a good place, within the opportunity structures of collaborative activities (Laumann et al., 1978; Pfeffer & Salancik, 1978). It is done by creating some dependencies and escaping some other dependencies (Knoke & Chen, 2008). In general, being big or growing allows access to both advantages and opportunities (Knoke & Chen, 2008; Van Rossem, 1996). Organizations must develop their relational capabilities as well as their inner characteristic strengths. They must be able to offer desirable resources, such as knowledge, to be able to receive other desirable resources (Brown & Duguid, 1991).

In practice, establishing clear goals and guidelines for processes is far more controllable that than controlling the goals and processes of others. In addition, different contributions are not always comparable (Hibbert et al., 2008). Centrality and negotiation abilities reflect the complex dynamics of independent actors collaborating across networks (Diani, 2003). In some cases, developing a clear vision of how to create value with a collaboration generates similar rewards to being in control of critical resources (Ozcan & Eisenhardt, 2001).

The main factors that deter collaboration can be classified as internal and external. The internal factors are inertia, which prevents collaboration formation; fear of loss of control; fear of loss of support; and internal conflicts. The external factors are government disincentives, power differences, cultural unawareness, and previous history of conflict or distrust. If collaborations are based on certain factors or conditions, they should be discontinued when those circumstances are not present or cease to exist (Hibbert et al., 2008; Mattessich et al., 2001).

Concluding Remarks

Returning to Figure 2.1, researchers in the field of collaboration have made significant efforts to address the challenges contemplated in this figure. They have proposed some remarkable explanations to the challenges of determining why higher education institutions engage in collaborations (stakeholders' interests); explaining what collaboration is (generation of mutual dependencies); guiding how to engage in collaborations (approaches to create collaborations); determining how collaborations are run (management of collaborative relations); illustrating what types of collaborations exist (criteria for classifying collaborations); learning what makes partnering internationally different (geographical, cultural, and resource differences); and showcasing what is necessary to be able to engage in collaborations (conditions that allow collaboration.

Research in social sciences is an ongoing conversation that keeps changing and evolving (Biesta & Burbules, 2003). The challenges of developing and strengthening international collaborations in higher education have not been solved (Hudzik, 2011; NAFSA, 2013; West, 2012). Complicating these challenges is that they seem to be dependent upon the conditions of each nation, each institution, and even each discipline. This literature review is intended to be used to study and asses the previously mentioned diversity of collaborative engagements. The findings of this study present in a cross-case synthesis of the approaches that a large research university has used to address such challenges.

Chapter 3: Study Design, Methods, and Procedures

"Determining an actor's reasons or motives or so forth is an interpretive or hermeneutical activity" (Phillips & Burbles, 2000, p. 72). Human actions are purposeful and based on individuals' own reasoning. This reasoning is heavily influenced by their beliefs, cultural practices, previous experiences, and education.

The challenge of the interpretative task is that, as some have suggested, there could be as many valid interpretations as there are interpreters. This situation is not important in matters such as art. In matters of art, people can take any interpretation they want without causing any good or harm to anyone (Phillips & Burbles, 2000; Van Manen, 1990). However, in other matters, such as investment, public, or institutional policy, a misinterpretation of a given phenomenon can cause harm, or at least not all the desired good. In such cases, not all interpretations are correct. Interpretations can be suboptimal and even mistaken.

Some interpretations are better at promoting desired improvements than other rival interpretations. Therefore, we arrive at the question, "What features allow an interpretation to be judged as valid?" (Phillips & Burbles, 2000, p. 76). The validity of an interpretation relies on the evidence that supports it. Valid interpretations depend on the quality of the warrants being offered; the appropriateness or logical rigor of the research design that was followed; the questions that were asked; the observations that were made; and the steps that were taken to eliminate rival hypothesis or interpretations. (Phillips & Burbles, 2000, p. 82)

Methods

The case study method of research is one approach to qualitative research. Qualitative research can be described through process theory as it aims to relate incomes and outcomes through well described logical, analytical explanations. The case study method allows the researcher to identify aspects of a phenomenon that have already been explained by previous studies and theories, as well as to discover new aspects for which there is no previous theorization (Yin, 2009). New analytical interpretations contribute to make sense of similar problems in different settings, thus increasing our knowledge and understanding of a subject or question (Maxwell, 2004).

Procedures

The procedures to develop this study followed both sequential and parallel orders. The study began with a literature review, but additional literary sources were added throughout the research process. Data collection followed development of the literature review. The data for this study consisted of interviews and documents related to the topic of international collaboration at a comprehensive research university.

The next step was the analysis of the data (see Chapter 4). In this process, existing theories were applied by matching them with interview and document data. In addition, explanations were developed for those pieces of data that did not fit the theories described in the literature review. The final step of the study was a synthesis of its findings (see Chapter 5). The next paragraphs describe each one of these procedures in detail.

Literature Review

An initial literature review is required for any research study, but it does not have to be finished. Knowledge of the subject of higher education collaboration is necessary to engage effectively in the collection of data about this phenomenon. Knowledge of the subject matter allows locating information-rich participants and other data sources. It allows the researcher to ask better questions. Chapter 2 illustrated the theories and existing research that this study used as to create the theoretical framework for selecting participants and developing interview questions.

Collection of Data

Data are the sources from which we can draw ideas that help us to make meaning. We need to “borrow” from others’ experiences to achieve a deeper understanding of the phenomenon under study. For the purpose of this study, this borrowing was done by engaging in conversational relations with participants in international collaborations. To start or facilitate these conversations, we need to be able to draw from our previous experiences as well as from our knowledge about the studied phenomenon. This knowledge was previously acquired through experience as well as through preparation of the literature review.

Interviewing is more advantageous than other methods to gather data about lived experiences. Talking, in the majority of cases, is freer and easier than writing. When writing, people are more critical to themselves than they are when speaking (Van Manen, 1990). When speaking, people are more spontaneous.

The study also used alternative sources of data such as evaluations, strategic plans, and records of current and previous international collaborations at the research site, as these documents are publicly available through the university's web page.

The gathering of data is composed of various sub-phases or activities: recruitment of participants, interviewing of participants, transcribing of interviews, and the gathering of relevant documentation. The study sought the participation of university executives and faculty members who were involved in international collaborations and who were interested in contributing to this line of research. It is implied that the participants are highly competent professionals in their disciplines as well as in their roles as facilitators of international collaborations.

Each interview lasted about one hour. Participants were asked to take part in four interviews. The data were recorded using a smart phone as the electronic audio recording device and were transcribed in to Microsoft Word electronic files to facilitate their use and analysis. The audio files were deleted once they were transcribed.

Next, the study also used publicly available documents also to prevent violations of privacy. The data from the documents contributed to the triangulation of findings and the illumination of factors that contribute to promote, develop, and sustain cross-border partnerships at a comprehensive research university.

Analysis

The next phase was the analysis of data. There are five possible approaches to qualitative analysis within the case study method: pattern matching, explanation building, time series analysis, logic models, and cross-case synthesis. The study reconciled existing theories on higher education collaboration with these data through pattern matching. The study identified the theories and factors found in the literature that matched the phenomenon as it was described by the interviewees.

The next approach is explanation building. The study developed interpretations of the aspects found in the data that do not fit previous theories. The literature review was updated throughout the research process. In addition, the study generated some original contributions. The study also looked for logical patterns of cause and effect of the phenomenon of collaboration in higher education and developed a cross-case synthesis of the international collaborations at this comprehensive research university.

The analysis of the data was aided with NVivo qualitative analysis software. The literature review, data collection, and data analysis were continued until the study reached a comprehensive picture of the international collaborations at this university, or in other words, when the study reached information saturation.

Organization of Findings

Finally the study reports its findings. The findings of the proposed research were reported throughout the project in the methodological audits, through discussions with the research participants, and in courses that dealt with specific parts of the research. In particular, partial reports were given in the researcher's Qualitative Methods II course, departmental proposal course, and comparative and international education courses. An initial presentation of progress was given in the proposal defense, and the final report was compiled prior to the dissertation defense. It is also anticipated that some other publications will follow.

Potential Benefits

The findings of this study provide valuable insights from the experience of a comprehensive research university that is collaborating internationally in many disciplines and through different types of engagements. The knowledge gained from these experiences could be applied to other institutions and types of collaborations.

The exploration of international collaborations at a comprehensive research university offers various benefits. First, it contributes to a better understanding of international collaborations, including disentangling the different interests in and perspectives on these collaborations. Second, this research allows an opportunity to document of some of the processes and activities that participants have been developing and that may have evolved from their original intents and therefore have not been documented yet. Third, this research allows practitioners in the field to compare their experiences in international collaboration with those of participants in this study.

Limitations of Qualitative Research

Knowledge is contingent upon the finding of better explanations from a post-positivist perspective (Phillips & Burbles, 2000) or better strategies and solutions from a pragmatist perspective (Biesta & Burbles, 2003; Rorty, 1998). Research is work in progress. Some explanations proposed by this research are dependent upon the conditions at this comprehensive research university. These explanations might fail to generalize to other conditions. Institutional conditions frame how people see problems and how they address them (Peters & Burbles, 2004). Researchers and practitioners want to focus their efforts on those aspects of reality that affect their practice and that they can control (Carr & Kemmis, 2004). There are many causes or factors beyond people’s reach or that might not make sense to people (House, 1991). Unless researchers and practitioners can find how the parts of complex realities connect to outcomes, they can not promote improvement or gain freedom (Freire, 1970; House, 1991). This dissertation study sought to report on international collaborations at this university, knowing that the conditions of such collaborations might not generalize to other institutions or settings.

Case Site Selection

The comprehensive research university at which this study occurred is one of the largest comprehensive research institutions in the United States, and it has a long history in international collaboration. Those qualities facilitated the examination of the phenomenon of international collaboration, as it is an institution that deals with many disciplines, partners, and types of engagements. This university centralizes the information about international collaboration in one office. One of the initiatives of this office is the Global Collaboration Network (GCN), which looks toward supporting university's different collaborative efforts with other universities around the world. The availability of multiple international collaborations in multiple disciplines with different trajectories at one single institution through one office allowed for the cross-synthesis of multiple cases of international collaboration.

This institution has about 230 collaborative agreements with higher education institutions around the world. This broad spectrum of collaborative relations allows many types of collaboration to be explored simultaneously. In general, the university has teaching collaborations; research collaborations; and common advocacy collaborations, with some collaborations involving two or more of these types of collaborative relations. The collaboration agreements have varying degrees of formalization. Collaborative agreements could be about mere intents for collaboration and broad memorandums of understanding, as well as about specific memorandums of agreement. It has collaborative agreements with different numbers of participants. There are peer-to-peer agreements as well as networks of many collaborators. The diversity of these arrangements also allows for examining collaborations with different time frames. Some collaborations are endeavors of specific purpose and specific length, and some are open-ended endeavors. Finally, this university offers institution-wide collaborations that allow the examination of strong, focused ties with peer institutions. This variety in the composition of collaborations makes it an appealing environment to carry out this research.

The institution under study does not provide information on the distribution of its international collaborations activities. However, based on the conversations with participants, a rough estimate is that 70% are research collaborations, 20% are student exchanges, and 10% are institution-wide strategic agreements. Administratively speaking, international activities funded by research are referred as research collaborations. Collaborations funded by tuition are referred as student exchanges or study abroad programs. According to faculty members, in some collaborative arrangements, there is no differentiation between international teaching, service, and research, as the transition among these activities is fluid. In some other cases, these activities are completely compartmentalized. Some activities are directed at some programs, while other activities are directed at other programs, and they are funded differently, even if the university is collaborating with the same institution. Finally, the studied institution does not have branch campuses and does not franchise programs to or from other institutions. However, it has some international collaborative agreements for capacity building.

Selection of Participants

Higher education institutions are complex organizations of people with multiple interests (Cohen & March, 1986). As this dissertation study was an exploratory cross-case synthesis, it progressively found people who were involved in different forms of international collaboration at this comprehensive research university through a snowball recruitment process. This study sought to enroll information-rich participants who were also willing to participate in the proposed research.

During the study, representatives reported higher education cross-border partnerships to be highly faculty-driven. However, the study has also identified international collaborative efforts at different levels and units of the organization, as well as across different colleges and programs. There were institution-wide drivers or rationales for international collaboration, as well as varied disciplinary or college-level rationales for international collaboration. The study sought to engage institution-wide representatives as well as participants from various colleges to explore these varied forms of collaboration. Universities have developed various approaches to address international collaborations. Some universities centralize all activities; other universities distribute them. The university under study does both. It has a centralized and a distributed organization, especially in those colleges with much international collaboration. The study was designed to make sense of this variety of interests and approaches to international educational collaboration, within a common framework.

The representativeness of the study participants depended on their information richness (Yin, 2009, p. 144). Participants who represented key functions in the development of international collaborations were selected. This sample of information-rich participants contributed to reaching information saturation in addressing the proposed research questions.

In general, the recommendation is not to use more than four or five cases in a single case study research project (Creswell, 2007, p.157). The goal of case study research is to generate a rich description of a phenomenon. This study sought to achieve a rich description of each one of the different possibilities of collaboration. The cases for the case study research are the different types of collaborative relations. During the research process, the study found that nine information-rich participants were enough to develop these rich descriptions. The study aimed at developing a rich description of the different types of collaborative relations to develop a comprehensive response to the proposed research questions.

Contextualizing to demonstrate the appropriateness of the selected participants in a study, as well as avoiding disclosing personal identifiable information that could be traced back to individual participants according to the IRB requirements, is a challenge. It is like contextualizing but not contextualizing too much at the same time. The study engaged nine participants. Five participants were full-time executives whose sole purpose was to contribute to the development of international collaborative activities at the university level. Of those five participants, one contributed to overall strategic planning. The second participated in the promotion of study abroad programs and student exchanges. The third participant belonged to the group that is responsible for assessment, development, promotion, and negotiation of collaborative agreements with other institutions. The fourth participant traveled to maintain collaborative efforts on the ground. The fifth participant contributed to the process of staffing participants in the overall support of international collaborative activities. The next two participants were full-time executives within the two colleges that are most active in international collaboration. The final two participants were faculty members with a strong inclination toward doing international collaborative work.

With this distribution of participants, one could suggest that college- and faculty-level efforts in international collaboration were underrepresented while university-wide efforts were overrepresented. However, this perception is not accurate as the role of the university-wide representatives was to gather, organize, and channel the perspectives and interests of faculty members, students, and executives across the institution. Therefore, engaging these executives eased the task of reaching out to multiple faculty members, students, and executives to achieve information saturation in addressing the research questions.

At the college level, it is important to note that not all colleges have full-time international collaboration managers. In some colleges within the research site, the people in charge of managing and promoting international collaborations must integrate these tasks with other responsibilities, and they are not as active as the managers who participated in this study. The participants chosen at the college level represented the colleges that have highest level of collaborative activity according to the information system of the university office in which global engagement is centralized.

Process of Developing This Dissertation Topic

This dissertation study started with the researcher's broad interests in how comprehensive research universities in the United States develop joint graduate programs and student exchanges. The principal investigator (PI) started to nurture those professional and research interests in his first course on qualitative research methods and a subsequent course on research design. The PI started to collect literature on the topic and began to think about the design of a potential study of international collaborations with higher education institutions.

The PI started to discuss this topic with Pennsylvania State University faculty members (Leticia Oseguera, Robert Hendrickson, David Post, and Roger Geiger) and used personal connections to contact another expert in this area, Isabel Londono, a former director of Colfuturo as well as a former director of international relations at Universidad de los Andes. She connected the PI with Fernando Remiers at Harvard University to continue the discussion of this topic.

Dr. Londono and Dr. Remiers recommended that the PI attend the 2013 NAFSA: Association of International Educators conference to learn about different partnering efforts across higher education institutions from all over the world. The PI attended that conference with Dr. Londono and two executives from the university where he works, as they were also interested in the topic. At the conference, the PI was truly overwhelmed by the more than 8,000 attendees from different institutions around the world who shared his interest in international higher education collaborations and by the wide variety of possibilities of collaboration.

After the 2013 NAFSA conference, in the fall 2013 semester, the PI enrolled in a comparative and international adult education course, and in the spring 2014 semester, he took a comparative education pro-seminar. In those courses, Dr. Ladi Semali helped the PI to focus his research interests and connected him with people in a comprehensive research university who participated on international collaborations.

In spring 2014, the PI applied for and was offered a part-time research assistant position for the office that centralizes international collaborations at the institution under study. In that semester, the PI carried out a pilot qualitative research study in his Qualitative Research Methods II course. In this pilot study, the PI explored the feasibility of the what ultimately became the dissertation study presented here. The pilot provided hands-on practice in gathering data and carrying out qualitative analysis with the case study method. The PI contactacted an authority in the field of organizational collaboration, Dr. Barbara Gray, to consult her about the literature underlying the proposed research. The PI also meet professors and executives who have a great deal of experience in international collaboration both academically and through multilateral organizations such as the World Bank and UNESCO.

In summer 2014, the PI attended another NAFSA conference, this time less overwhelmed by the 10,000 participants and with a more refined research purpose. At this conference, the PI engaged with other researchers who had similar interests.

In the fall 2014 semester, the PI finished developing the research rationale of the study through his departmental proposal course. The PI also completed the current literature review for the dissertation proposal and requested a program review. In the program review, with the feedback of all members of his dissertation committee and his advisor, the PI finished articulating the elements needed to put together a dissertation proposal. After receiving approval for the dissertation study, the PI carried the study for about eight months and arrived at the findings offered in Chapter 4.

Pilot Study

The initial research questions of the pilot study were:

1. Why do universities engage in international collaborations?
2. What do people understand by collaborating?
3. How are these collaborations created?
4. What types of cross-border collaboration exist?
5. What makes partnering internationally different?
6. What makes such collaborations sustainable? Moreover, especially
7. What knowledge, strategies, institutional behaviors, attitudes, or other specific conditions allow higher education institutions engage in international collaborations?

The pilot study found some answers to these questions through a literature review as well as through interviews. In short, the answer to why collaborations were created was that stakeholders have strong interests in collaborating. The broad answer to the question of what collaboration is was the generation of mutual interdependencies among different autonomous entities. Three broad approaches to creating collaborations were found. Various ways of classifying collaborations were also examined. Partnering internationally is different in the sense that there are significant cultural, knowledge, and resource differences.

The pilot study found that some scholars and participants were strong advocates of collaboration in higher education, while other scholars and participants were dubious, almost suspicious, about it. Regarding sustainability of collaborations, the pilot study showed that collaborations should not be extended beyond their useful time.

Sustainability is not a goal by itself (Gilsing et al., 2008; Vansina et al., 1998). In the same vein, collaboration is not a goal by itself. Collaboration is a means to get needed resources and expertise. These needs and the capacity to attend to such needs are fundamental conditions for collaborating. However, there are differences in power and influence for getting such needed resources. These differences make some parties more needed for collaboration and some other parties more capable of collaborating—and therefore more in control of such collaborative activities.

In the beginning, the pilot study saw collaboration as “help” and the market as the opposite, “not help.” However, through the process of developing the literature review and through participant interviews, it became clear that we were all immersed in different relations of interdependency or different chains of value. When optimally articulated, markets, as well as policies and strategies, become efficient ways of promoting coordination of efforts as well as mutual improvement through competition. These two characteristics are driving forces of collaboration.

According to the findings of the pilot study, the development of international collaborations in higher education seems to depend both on the ability to create collaborations as well as on controlling certain critical resources or skills. To connect the literature and practice of collaborating, the dissertation study sought to identify the extent to which previous theories of collaboration apply to the international collaborations at a comprehensive research institution. It also sought to determine the extent to which the practice of developing international collaborations depends on the mastery of certain collaboration skills and the extent at which this practice depends on controlling some critical resources or skills. Finally, if the skills of creating collaborations play a significant role, then the next natural question would be how such practices or competencies can be learned or developed.

Research Protocol

Using the literature review as a guide, the dissertation study used four interviews of approximately one hour each to address the second, third, and fourth research questions. (See Appendix A for a detailed description of the interview protocol and the corresponding concepts.) As a reminder, the literature review presented in Chapter 2 addressed the first research question, *What theories inform the development of international collaborations?*

The first and second interviews addressed the second research question: *To what extent do the theories of international collaboration apply to the practices of international collaboration at a comprehensive research university?* The second and third interviews were meant to apply the theoretical framework from the literature review within the university that served as the research site.

The first interview was generally the first face-to-face meeting of interviewees and the PI, or their previous face-to-face meeting had been very brief. Therefore, the PI needed to ask general questions about the interviewee to contextualize the interview. The PI also explained the broad purpose of the study and the specific purpose of that interview. In the second interview, the PI asked more specific questions about the interviewees' activities and addressed doubts from the previous interview.

The third interview addressed the third research question: *To what extent can the practices of creating cross-border collaborations in higher education be learned or developed? And to what extent do such practices depend upon having or controlling certain critical resources?* This interview focused on the geographical, cultural, knowledge, and resource differences that motivated the development of collaborations, as well as the skills and criteria that collaboration managers use to develop their partnering activities.

At this point, the PI was analyzing the data from the previous two interviews, exploring the theoretical framework. The researcher asked about some aspects from the literature that had not been touched by the interviewees. By approximately the second half of the third interviews, the PI finished the exercise of bridging the conceptual framework with the practice of higher education collaboration as reported by interviewees. The PI introduced some additional questions to the third and fourth interviews to collect the opinions of interviewees about that bridging and the framework that he had developed.

The fourth interviews focused on the last research question: *How can the competency of creating cross-border partnerships be learned or developed?* These interviews were about learning to collaborate—how people became skilled in the development of collaborations, and how other people could acquire those skills. In these final interviews, the PI summed up the findings derived from the literature and previous interviews and discussed them with the participants before asking the questions initially proposed for this round of interviews.

This fourth interview followed a similar pattern to the third interview in the sense that the researcher was very familiar with the collaboration activities under discussion as well as the theories behind them. However, at this point the PI, rather than expanding the exploration, tried to bring the study to its conclusion. The PI presented and discussed his findings with the interviewees, asking for their evaluation and feedback. In each of these interviews, the PI used some reference questions derived from the literature and the researcher experience, as well as some improvised questions that were the result of the flow of the conversations during the interviews. Appendix A provides the interview protocol for the four proposed interviews, which were organized according to the conceptual framework (see Figure 2.1).

The study also included document analysis and cross-references across interviews to triangulate findings derived from the literature and the interviews.

Informed Consent

The study included nine information-rich participants who were heavily involved in international collaborations at their university. Their consent to participate was implied once the prospective participants responded to recruitment e-mails and agreed to participate in the study. In addition, a written explanation of the proposed research, the process of participation, potential risks, the measures taken to protect their identity and privacy, and the process to abandon the research were given to participants in an informed consent form. It was made clear that their participation was voluntary, and that they could withdraw whenever they wanted and have their contributions removed from the study. The interviews were carried in the participants' offices or work places, which were usually closed and private spaces in which information could not be inadvertently disclosed to other people.

No changes or updates were reported to the office of human research protections (IRB) after the PI permission to engage in the dissertation study. No foreseeable harm or discomfort was detected. In addition, all reports from the research study were shared with participants to allow them to detect any information that could be harmful to them and to prevent violations to confidentiality. All the data were kept in the PI's password-protected personal computer. Finally, besides to the opportunity to share their interests with someone who has a common interest, there was no explicit compensation for the participation in the research.

Confidentiality, Privacy, and Data Management

Participants' personal identifiers were changed. However, information needed to provide context to the study, such as length of collaborations, reasons to collaborate, number of participants, and duration of participation, was kept to support the findings of the research. As the number of information-rich participants was just nine, the researcher's recall was enough to identify participants. There was no need of a master list to map personal identifiers with fake ones. In the event of any publication or presentation resulting from the research, no personally identifiable information will be shared. This condition needed to be in place to maintain an expedited IRB status. The audio recordings were deleted once transcribed. The transcripts and documents analyzed were stored in the PI's password-protected computer. These files will be destroyed three years after the investigation finishes, approximately September 2018. Only the researcher and his dissertation advisor had access to this data. The PI sought to keep the participants' identifiers confidential to the extent permitted by law. However, it was possible that other people may find out about their participation in this research study. For example, the following people/groups may have checked and copied records about this research.

- The Office for Human Research Protections in the U. S. Department of Health and Human Services
- The Institutional Review Board (a committee that reviews and approves research studies)
- The Office for Research Protections.

Some of these records could contain information that personally identifies participants. Reasonable efforts were made to keep the personal information in the research records private. However, absolute confidentiality cannot be guaranteed. Finally, data gathered for this study were not transferred to other researchers.

Adverse Event Reporting

No unanticipated problems appeared over the course of this study. The PI had the option of contacting his dissertation advisor if unanticipated problems emerged. If these problems were not resolved at this level, he would have gotten in touch with the IRB office. In accordance with applicable policies of the Pennsylvania State University, the PI had to report to the IRB any observed or reported harm (adverse event) experienced by a subject or other individual, which in the opinion of the investigator was determined to be (1) unexpected and (2) probably related to the research procedures. Harms (adverse events) are submitted to the IRB in accordance with the IRB policies and procedures. The project was audited by the PI's dissertation advisor. In addition, the PI allowed study-related monitoring, audits, and inspections by the Penn State quality assurance program office(s), IRB and government regulatory bodies, of all study related documents (e.g., source documents, regulatory documents, data collection instruments, study data etc.). The PI ensured the capability for inspections of applicable study-related facilities (e.g., pharmacy, diagnostic laboratory, etc.).

Chapter 4: **Findings**

The study proposed four research questions:

1. What literature informs the development of collaborations?
2. To what extent does the literature of international collaboration apply to the practices of international collaboration at a comprehensive research university?
3. To what extent can the practices of creating cross-border collaborations in higher education be learned or developed? To what extent do such practices depend upon having or controlling certain critical resources?
4. How can the competencies of creating cross-border partnerships be learned or developed?

The response to the first research question was developed in Chapter 2, the literature review. The development of this literature review was an interactive process as it had a dynamic interplay with the data and the interpretations of the PI. An initial literature review contributed to the development of the research proposal. However, during the research process additional resources were incorporated as a result of new insight from the data. In addition, in the midst of the study, some resources that were included in the literature review lost relevance. In practice, some concepts from the literature review became more relevant as they contributed to making meaning of the data, while others lost significance as they could not be applied in this process. In this chapter, concepts that originated in the literature are distinguished from participants' voices and the PI's interpretations via citations of the sources that originated the ideas.

The study involved four interviews of nine participants who are engaged in international collaborations at one of the largest comprehensive research universities in the mid-Atlantic region of the United States. This institution maintains about 230 collaborative agreements with other higher education institutions around the world. This broad spectrum of collaborative relations allows the exploration many possibilities for collaboration. The availability of multiple international collaborations in multiple disciplines with different trajectories at one single institution facilitates the cross-synthesis of multiple cases of international collaboration. This comprehensiveness supports the reliability of the findings.

The nine participants were involved in a variety of positions related to international collaboration. These participants' voices are the major data source for this study. These voices are differentiated from the interpretations of the PI and the conceptualizations from the literature by the use of quotations and italics to distinguish them. Their quotes are also attributed to specific participants. Each participant, named with a pseudonym, is identified by a description of his or her international collaboration activities the first time he or she is mentioned on each section. This description contextualizes the ideas communicated by their voices. Participants' identities were protected by using pseudonyms and by making sure that other people fit into the broad description of these participants' activities.

Five participants are full-time executives at the university-wide level. Kasinsky participates in the overall strategic planning of international activities. Renata promotes and develops study abroad programs and student exchanges. Oliver is involved with assessment, development, promotion, and negotiation of international agreements. Greg travels and maintains collaborative efforts on the ground. Jacky provides logistic support to international collaborative activities. Two other participants, Lisa and Andres, are full-time executives at the college level. They support and develop international collaborations within two of the most internationally active colleges at the university. The remaining two participants, Ben and Oscar, are highly experienced faculty members with long trajectories of international collaborative work. Choosing participants from different positions promised a variety of perspectives and a comprehensive response to the proposed research questions.

The research design included four interviews of each participant to respond to the remaining three research questions. The first two interviews were intended to respond to the second research question. The third interview focused on the third research question, and the fourth interview concentrated on the fourth research question. The study initially included a set of questions for each interview. However, new questions were added and some questions were removed throughout the study as a result of changes to the findings and interpretations of the PI. Appendix A includes the interview original protocols and the questions asked to interviewees.

The largest section of this chapter addresses the second research question as the process of exploring this question led to the development of the core findings. This process facilitated the development of a chain of reasoning that explains international collaboration in higher education. Exploring this question also provided the initial leads to elucidate the answers to the third and fourth research questions and to examine other aspects relevant to the development of international collaborations in higher education that were not contemplated through the initial research questions.

The current chapter has seven sections. The first three sections cover the second, third, and fourth research questions, and the remaining four sections introduce additional aspects relevant to the development of international collaborations in higher education that were not part of the initial design but emerged from the interviews:

1. Findings on research question 2: Reconciling the literature and participants' perspectives at a comprehensive research university
2. Findings on research question 3: Limitations to the development of international collaborations in higher education
3. Findings on research question 4: Learning to develop international collaborations in higher education
4. Additional findings: Compartmentalization of collaborative relations
5. Additional findings: Repurposing collaborative relations
6. Additional findings: Negative extremes in developing international collaborative relations
7. Additional findings: Mistakes in developing international collaborative relations

Responding to these three questions and developing the additional aspects have both theoretical and practical consequences. The proposed chain of reasoning and the suggestion of three types of collaboration to explain the phenomenon of international collaboration in higher education are significant theoretical contributions. The finding concerning limitations to developing collaborations and the finding about the practices used to create collaboration or learning to collaborate has the potential for concrete practical impact. The exploration of additional aspects related to collaboration, such as compartmentalization of collaborative relations and the repurposing of collaborative relations, presents both the advantages and disadvantages of dealing with collaborative relations separately vs. integrating or repurposing them. Finally, the study warns practitioners about the risks of falling into negative extremes and frequent mistakes in developing international collaborations in higher education.

In the presentation of these findings, the study wants to draw a clear distinction between the literature, the voices of participants, and the interpretations of the PI. It is sometimes difficult to identify whether a particular concept or distinction was drawn from the literature, the result of a contribution from participants, or the result of an interpretation of the PI. Sometimes research findings can suggest that a study is trying to force data into a pre-developed framework from the literature rather than be the result of an ongoing research process. To facilitate that distinction, the study will guide the reader throughout the research process.

Another important aspect of distinguishing between the literature, the voices of participants, and the interpretations of the PI is reaching of a balance between clarity and accuracy. Pulling all the quotations that support a distinction proposed by the researcher often generates more confusion than clarity. Research is not a straightforward, linear process. The PI had to explore many leads from both the literature and the contributions from interviewees before reaching promising leads. Once the researcher has found that direction, he or she determines if it is possible to support it with the data and/or the literature. Research leads need to be supported both with quotations from participants and/or from ideas from the literature.

Nine participants were interviewed for this study. Two participants were interviewed four times, four were interviewed three times, and three were interviewed once, for a total of 23 interviews of approximately one hour each. Some participants only participated in the initial interviews, while others only participated in later interviews. Interview transcripts range from 30 to 60 pages each, which means that the study draws from approximately 1,035 pages of transcript material. It would be impractical to try to illustrate all the ideas derived from these 1,035 pages. It would also be impractical to try to illustrate the almost innumerable pages of literature that the PI studied in order to develop the current study. As a result, in many instances the process of research needs to be narrated rather than described detail by detail to achieve an adequate balance between clarity and accuracy.

Findings on Research Question 2: Reconciling the Literature and Participants' Perspectives at a Comprehensive Research University

This section responds to the second research question: *To what extent does the literature of international collaboration apply to the practices of international collaboration at a comprehensive research university?* The literature of collaboration, and particularly the literature of international collaboration in higher education is disarticulated. Independent contributions were not integrated and interrelated.

The main benefit from addressing this research question is the integration of various independent perspectives into one comprehensive conceptual framework that addresses different aspects of developing different types of higher education cross-border collaboration. A second contribution from the study is the development of various logic models that, when integrated, constitute a whole chain of reasoning that integrates the concepts that address the different challenges to developing international collaborations in higher education. These contributions draw the ideas of various scholars into one single framework.

The broad finding regarding this question is that there are three well distinguished types of collaboration: clients, partners, and friends. In addition, this study found that the concepts used in addressing the challenges for developing collaborations can be articulated according to each type of collaboration in three chains of reasoning that provide consistency to the proposed conceptual framework. This contribution allows the proper distinction and allocation of concepts across challenges and types of collaboration. The next sections of this chapter illustrate step by step the process that led to developing this broad conceptual framework.

Description of the research process. At the initial stages of the study, the PI developed very complex concept maps to try to make sense of the different aspects of the development of international collaborations in higher education. Some of these concept maps can be verified in the literature review. These initial stages showed divergence and disarticulation rather than cohesiveness, articulation, and logical connections among conceptualizations.

The study also found conflicts of interpretation among participants. The responses from participants in some instances were more divergent than convergent; they were far from a single cohesive interpretation. For example, when participants were asked about the conditions that support or sustain collaboration, some participants talked about certainty as the necessary condition to create or sustain collaborations. Others talked about uncertainty, others about affinity, and still others had interpretations that mixed these three concepts. During the first two interviews, participants did not converge to a common understanding of international higher education collaboration.

Renata, the executive who manages study abroad programs and student exchanges, offered a rational, generalizable explanation of the conditions that sustain collaborations: *"For a student who comes here, my office pays their tuition. We are billed for their tuition. So, when one of our students goes there, we collect that tuition and it offsets for we've already paid. okay, so we never go out of balance by more than three semester places. We take two students from [an international university] who come here for a full academic year. That's four semester places. So we would have to get four of our students to go for a semester each to [an international university] to stay in balance. And if we don't collect any of those, if we don't have any students who go, we are out of balance…. It's unfortunate because most of the universities we partner with, their students really wanna come here, and most of them will come for a full year, and they're eager to come here. They see the value of coming here, but we have to say, we have to freeze the exchange until we have some outgoing students."*

Ben, the faculty member whose specialty is international community and leadership development, said that the application of a rational, widely generalizable policy is not always possible. It needs to be studied and articulated according to the conditions at each place, as those conditions are uncertain. Different places have different things to offer and different conditions, and collaborations need to be adapted to different circumstances. Trying to force a policy or regulation where it does not apply is detrimental in the long run: *"I think we, we know from practice and from some research that that top-down solutions don't work. Some, some bureaucrat in Washington don't* *know the uniqueness of this place. If they have never been here it is tough. They can't design a program 'one size fits every community in the world' and that doesn't work terribly well…. I think for the sake of the university, bureaucrats is just counting things."* It appears that reality is far more complex or enriching as participants prefer to see it.

Lisa, one of the executives who supports and develops international collaborations at one of the most internationally active colleges, said that affinity is the condition that sustains collaborations: *"Partnerships can often times live and breathe on the commitment of maybe two individuals. And when those two individuals leave a lot of times the partnerships furthers away. Okay, so I think if you want lasting sustainable institution to institution partnerships. Yes you have to have committed people at doing the work, but if those people leave can you still keep that partnership going?"* She said that partnerships are sustained by the commitment of participants.

These three participants provided three different explanations of what sustains collaborations. This trend was repeated in the process of exploring the concepts that contribute to many of the studied challenges. Participants were giving three different answers, and sometimes participants mixed two or three different key concepts in their answers. For example, again when asked about the conditions that generate sustainability, Kasinsky, one of the executives who participates in the strategic planning of international activities said: *"We need to have a critical mass of faculty involved, because if it's just a few then when the research they're working on finishes, then the partnership dissolves. We don't want that, we want these partnerships to persist, so to make them persist to be sustainable, you want a lot of different linkages. So what's critical here is, is having multiple links into an institution around different disciplines, and what's critical there* *are faculty champions who are going to make it happen at each side."* Kasinsky's response mixes three dimensions or conditions that sustain collaborations: certainty, uncertainty, and affinity. A scale or critical mass, as he proposes, is something measurable and certain. The idea of research initiatives depends on innovations and creativity and is therefore uncertain. Finally, having champions at each side might depend on personal commitment or affinity.

Distinguishing these aspects or conditions was not a straightforward process. It took some time to realize that responses from participants and contributions from the literature could be organized in three groups. These three concepts or three sets of concepts can be studied independently, as shown by the three initial responses. These concepts can also be studied or addressed in an inter-related fashion, as shown by the fourth response. The PI initially did not know whether some participants were mistaken, or whether they were talking about different things, or whether participants had radically different interpretations of the idea of collaboration. The PI was initially looking for one single consistent and convergent response that addressed or responded to each one of the proposed challenges and that could be supported with the perspectives of participants. However, the study found different as well as overlapping responses. Developing an explanation of this mixture of interpretations was hard. The study really reached a turning point when the PI found that participants as well as contributions from the literature were referring to three types of collaboration or three ways to understand collaboration instead of one single explanation.

Participants were talking in one way or another about three different types of collaboration. Lisa, one of the executives who supports and develops international collaborations at one of the most internationally active colleges, clearly pointed at that distinction: *"I think that the other piece of sustainable partnerships is that they are not only top-down."* Not all collaborations are precise and calculated. Some are, but others are not. Next, Lisa observed, *"So you have the bottom-up interest that the groundswell of interest from faculty and a lot of times it's grad students pushing things."* A second type of collaborations is based on an idea, a hypothesis that needs to be explored. Finally, *"partnerships can often times live and breathe on the commitment of maybe two individuals."* There is, therefore, a third type of collaboration that does not depend on calculations or on hypothesis or ideas. This third type depends on the personal commitment of participants.

Lisa saw collaborations as top down, bottom up, and top meets bottom. For the PI, it looked as if there were two major types of collaboration and an intersection among these two types, as shown in Figure 4.1. The study began to assign the conceptualizations from the literature and to code contributions from participants in these three categories. A distinction between concepts started to emerge, and the matching between the literature and the data also became easier. However, still there was some confusion. For example, an intersection between top down and bottom up as proposed by top meets bottom should have characteristics of both of top and bottom. However, this combination of characteristics did not exist.

As the type of collaboration described as top meets bottom does not represent an intersection between top-down and bottom-up types of collaboration, then it must represent a different type of collaboration. The analysis confirmed the existence of three well distinguished types of collaboration as participants referred to three different well distinguished concepts or sets of concepts to address the studied challenges throughout the study. The PI considered many names to describe the three relations that the literature and the data were proposing and determined that "clients, partners, and friends" better describe the three different types of collaboration. This new conceptualization is shown in Figure 4.2. Later on, participants explicitly used these terms to describe the collaborations in which they participated.

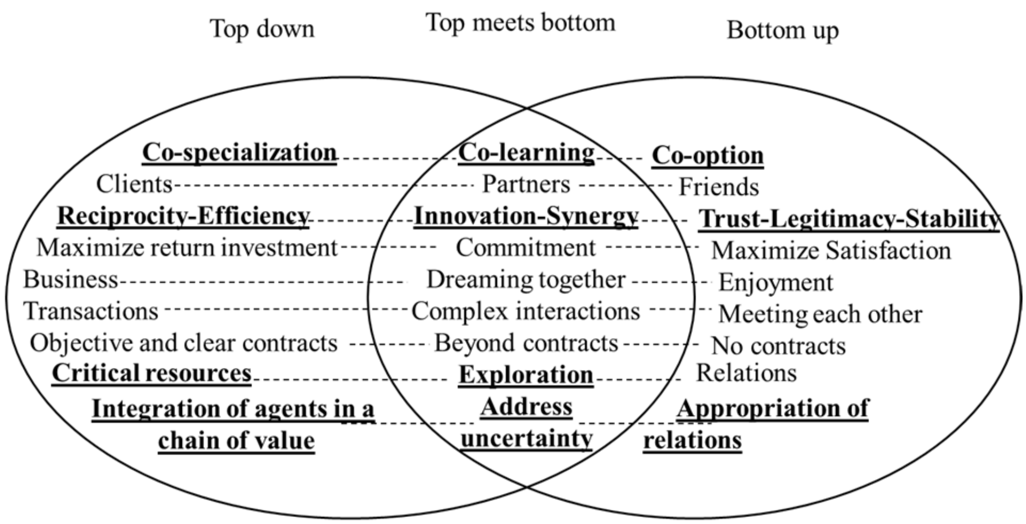

Figure 4.1 Collaboration can be three different things. Contributions form the literature are both underlined and in bold to distinguish them from the interpretations of the PI. The dashed lines connect concepts and interpretations addressing common challenges.

Some study participants, in some instances, indicated a belief that there is only one type of collaboration. Specifically, some saw all relations as client-provider relations. For example, Jacky, the executive who supports the logistics for international collaborative activities, said, *"I am either the client, or am buying the product, or I am doing both. And I'm offering a product to someone and they are buying a product from me."* Others tended to see all relations as partnerships, although they acknowledged different types of partnerships. Lisa, one of the executives who supports and develops international collaborations at one of the most internationally active colleges, said, *"And* *people understand that that's the type of partnership. It is when they don't understand what type of partnership they are entering into and maybe they have expectations or don't have expectations that aligned or don't align with the type of partnership. So if you are talking about types of partnerships. But if that is completely clear yeah, sure, then that is fine if both sides understand the same, then that is right, right."* Others viewed collaboration more as friendship. Ben, the faculty member whose specialty is international community and leadership development, said: *"I am more concerned about having really good people to work with. Probably 75% or 80% of the people I work with, they are not just colleagues, they are very, very close friends."*

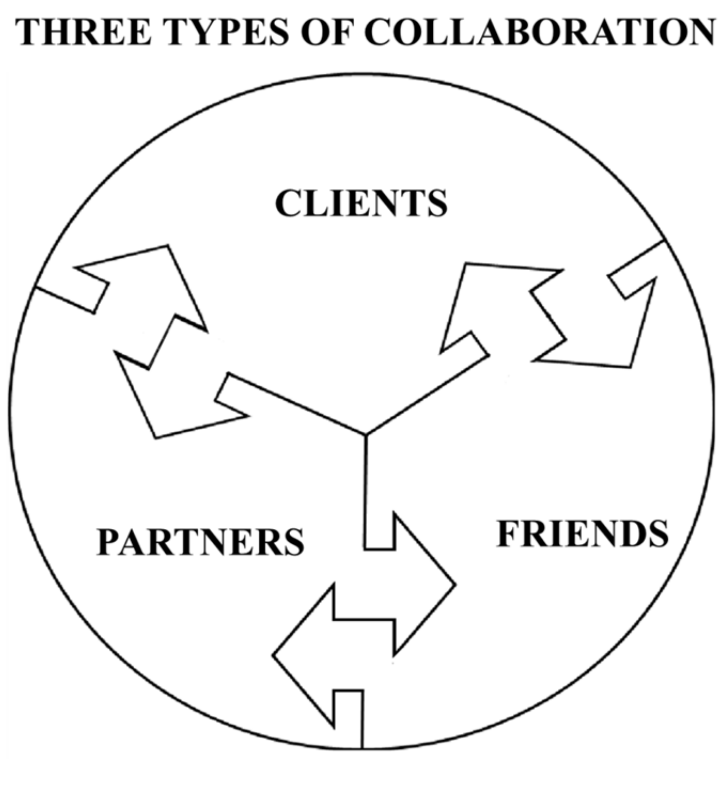

Figure 4.2. Three well distinguished types of collaboration.

Distinguishing between three different types of collaboration greatly facilitated matching concepts from the literature with contributions from interviewees during the coding process. Having this distinction also allowed the reinterpretation of concepts derived from the literature as well as contributions from participants. Throughout the study, the PI developed various frameworks to try to make sense of the data and the literature. Having different frameworks allowed interpreting and reinterpreting of the reality of international collaboration at a comprehensive research university. However, only this current framework allowed a systematic matching between the data and the literature. As Bolman and Deal (2008) point out, “A common affliction of leaders is seeing an incomplete or distorted picture as a result of overlooking or misinterpreting important signals” (p. 4). Making sense depends on the framework or lenses used to study a phenomenon. The study considered many ways to look both at the data and at the literature before reaching a cohesive framework.

Building models that match real situations takes effort, time, practice, and feedback. A methodological advisor once said at the initial stages of the study: “You should be making some progress because I am getting less of a headache trying to understand your study.” Having a good framework is like finding appropriate lenses or appropriate shoes. They might be so good that one might even forget about their existence. They become natural. However, when they are missing, one feels the disorientation, discomfort, and even pain caused by their absence. Before reaching a framework of three types of collaboration and a chain of reasoning that connects the concepts addressing the different challenges, the study explored many relations that now do not make sense. They made sense at some point, but they left the feeling of something being forced and/or something missing, a situation that has been resolved with the current framework.

Conceptual framework. In responding to the second research question the literature review initially proposed six challenges in developing international collaborations in higher education. However, during the study the PI found that there were eight broad themes or challenges in developing these collaborations. The literature review was also updated accordingly to reflect these changes. The concepts that contribute addressing these eight different challenges can be viewed in Figures 2.2 to 2.9 of the literature review. Applying the literature of collaboration to a comprehensive research university is a complex task, as there are many concepts that contribute to address the different challenges of developing international collaborations in higher education. The application of the literature implies finding segments of data that convey the meaning or interpretation of many concepts. This abundance of concepts makes the process of coding overwhelming. The untangling of these complexities as a result of establishing three different types of collaboration and a chain of reasoning to integrate different challenges is one of the major contributions of the study.

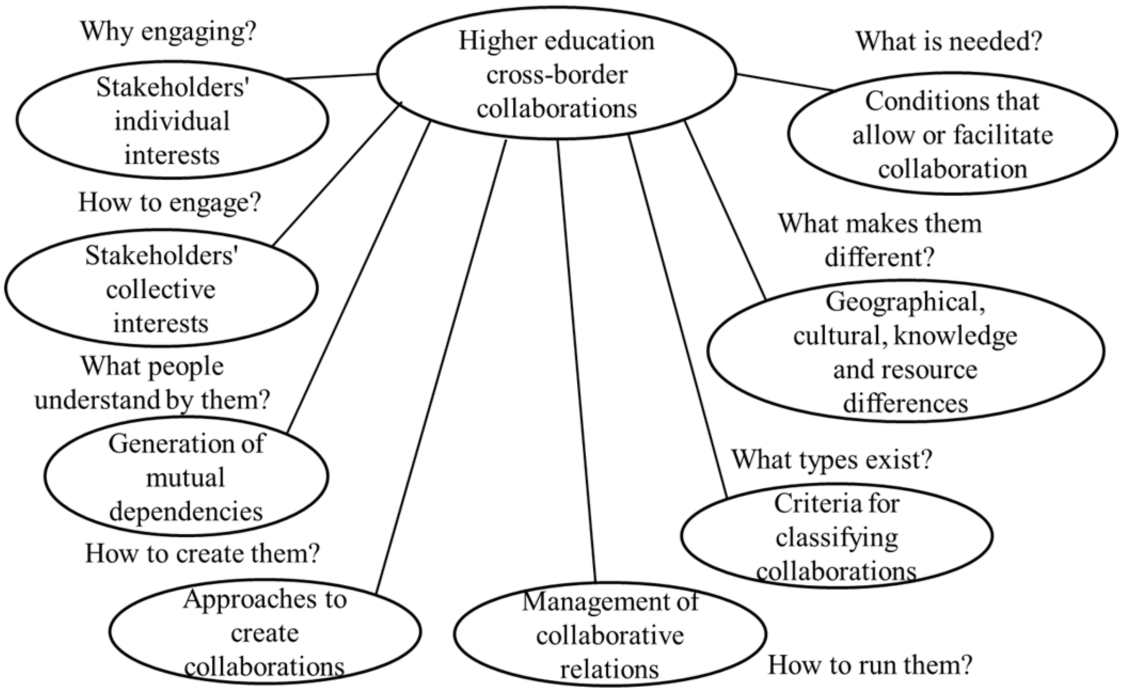

Figure 4.3 Challenges on developing international collaborations in higher education

Coding the data according to the eight challenges. This section describes the interrelations between the literature, the voices of participants, and the interpretations of the PI. The literature review presented various concepts that help to address each of the eight challenges of developing international collaborations in higher education. The study needed to match such previous conceptualizations with quotations or segments of the data to develop an interpretation of the reality of international collaborations in a comprehensive research university. However, developing a conceptual distribution that allows reconciling the literature with the data was not a straightforward process. This process was more similar to building a puzzle. One finds a logic to allocate some initial concepts, then the allocation of these initial concepts contributes to develop new logics that contribute to allocate some additional concepts or pieces of the puzzle until the whole conceptual distribution is reached.

The first initial logic was that as there are three types of collaboration, and some challenges had three concepts to addresss them, then one of these concepts should correspond to each one of the three types of collaboration. On the challenges that initially had less than three concepts to address them, some concepts must be missing. It might be possible to find in the data what those concepts are, and the study might be able to confirm such concepts in the literature. On the challenges that had more than three concepts, these concepts could be arranged in three groups. There might also be combinations of characteristics of the concepts used to address challenges. Some challenges had more than three concepts to address them, and still according to the contributions of participants some additional concepts might still be missing. The study sought segments of data that could contribute to both demostrate concepts found in the literature review and to find or develop additional concepts that are not available yet. The study also offered the possibility of discussing with participants in later interviews whether this distribution of concepts made sense.

A second turning point appeared when the study found the analytical relations that connect the eight studied challlenges. The rearrangement of the conceptual distribution led to finding interconnections among the studied challenges. The challenges for developing international collaborations in higher education were explored in an arbitrary order as presented in the literature review. The study found that this order does not represent the analytical connections among these challenges. The study found that the challenges for developing international collaborations in higher education are interconnected by dependance or cause-and-effect relationships. The integration of these relations allowed developing a whole chain of reasoning. This chain of reasoning is presented in Figure 4.4.

The finding of these analytical relations combined with the distribution of concepts among three types of collaboration contributed to triangulate the location of concepts. Some concepts were easier to assign to challenges while others were easier to assign to a type of collaboration. Having two sets of logics one to find the appropriate challenge and the other to find the appropriate type of collaboration allowed generating a cohesive conceptual framework. This framework allowed allocating existing concepts as well as finding quotations from participants illustrating the missing concepts. The illustration of such missing concepts allowed finding them in the literature. Such findings allowed completing both the conceptual framework and the literature review. The resulting conceptual framework or taxonomy is presented in Table 4.1.

Analytical Relations That Integrate the Challenges of Developing Higher Education International Collaborations

After many trials and errors, exploring many distributions and analytical relations, both theoretically and practically by interacting with participants, this study found three broad types of collaboration and identified analytical relations integrating the concepts used to address the eight challenges for developing collaborations. The interrelations among challenges give consistency to each type of collaboration and the clasification in three types of collaboration distinguish concepts within each one of the challenges. These two logics allowed allocating concepts both according to types of collaboration as well as according to challenges on developing collaborations. The chain of reasoning is illustrated in Figure 4.4 and is explained in the following paragraph.

Geographically distributed advantages make universities from different regions of the world attractive to each other (Bathelt & Gluckler, 2003; Hofstede et al., 2010; Williams, 2002). These natural advantages can be envisioned as favorable conditions that allow collaboration among universities (Lane & Lubatkin, 1998). When assessing these favorable conditions, universities find that such conditions can contribute to realize their independent interests (Bordieu, 1986; Mattessich et al., 2001; Oliver, 1990). In order to realize these individual interests universities need to find collective interests that allow them engaging in collaborations (Dacin et al., 2008). Such collective interests and natural advantages indicate the purpose of a given collaboration (E. Beerkens, 2002; Lane & Lubatkin, 1998; March, 1991; Williams, 2002). This purpose describes a known relation or type of collaboration. This purpose also prompts the appropriate approach to realize it (Doz et al., 2000; Dyer & Singh, 1998; Gray, 1985; Walker et al., 1997). These approaches require different types of management skills and tasks that support them (Cohen & March, 1986; Cohen et al., 1972; Kickert & Koppenjan, 1997; Williams, 2002). Finally each type of collaboration offers different practical, symbolic, and emotional outcomes that generate diffferent understandings of what collaboration means to participants (Camerer & Fehr, 2006; Hennart, 1993; Hui et al., 2008; Williamson, 1975).

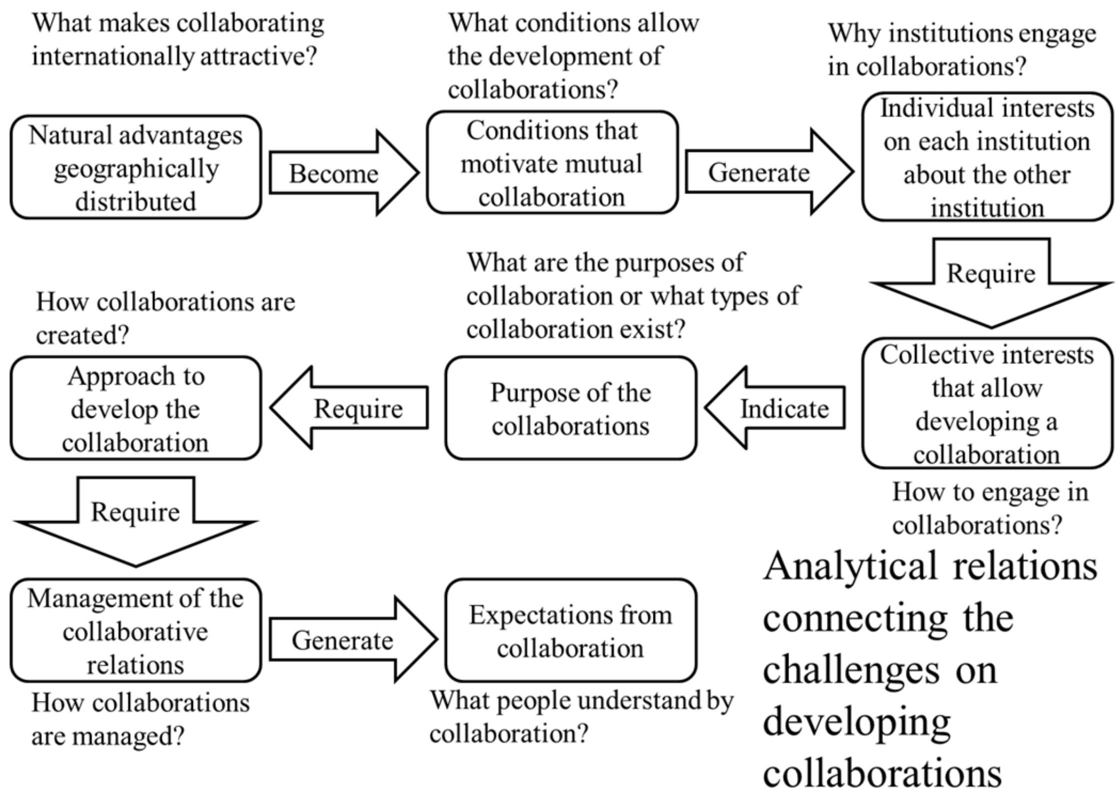

Figure 4.4. Chain of reasoning interrelating the challenges for developing international collaboration at a comprehensive research university.

Eight challenges to developing international collaborations and three types of collaboration in higher education. The phenomenon of collaboration can be examined through the concepts used to address the eight challenges to developing international collaborations in higher education. This phenomenon can also be examined through the concepts used to address each of the three proposed types of international collaboration in higher education. Table 4.1 presents both the challenges and the different types of international collaboration in higher education. In this table, the challenges are placed in the rows of the table and the types of collaborations are placed in the columns. Table 4 allowed the pulling of contributions from various scholars to develop a comprehensive framework. The integration of different literary sources to address common challeges as well as common types of collaboration represent the building of a framework that contributes to explain the different forms of international collaboration and the different challenges on developing international collaborations in higher education.

Table 4.1
Eight Challenges and Three Types of Collaborations

Challenges	**Clients**	**Partners**	**Friends**
Why internationally?	Other resources (Bathelt & Gluckler, 2003)	Other methods, knowledge or skills (Williams, 2002)	Other values or culture (Hofstede et al., 2010)
What conditions allow collaboration?	Certainty on the control of needed resources (Lane & Lubatkin, 1998)	Uncertainty on solving problems, finding or creating innovations (Lane & Lubatkin, 1998)	*Affinity on interests and values
What are the Stakeholders' individual interests? Why they collaborate?	Because they want to attend necessities, increase efficiencies, acquire complementary resources, gain brand recognition, and reach stability on exchanges (Oliver, 1990)	Because they want to innovate, solve problems and learn complementary skills (Oliver, 1990)	Because they want to gain preferential conditions (Mattessich et al., 2001), develop high levels of interaction, and gain access to key intermediaries (Bordieu, 1986; Coleman, 1988; Oliver, 1990)
How to engage in collaborations?	By co-specializing each other to develop exchanges with what we have or do for what we don't have or don't do (Dacin et al., 2008)	By co-learning from each other or by co-learning together (Dacin et al., 2008)	By co-opting or influencing each other coordinating activities looking for mutual benefits (Dacin et al., 2008)
What is the purpose of collaborations?	Production "make profits" (E. Beerkens, 2002; Lane & Lubatkin, 1998; March, 1991)	Exploration "make discoveries or creations" (E. Beerkens, 2002; Lane & Lubatkin, 1998; March, 1991)	Networking "make key contacts" (Williams, 2002)
What are the approaches to create collaborations?	Designing, Engineering exchanges (Doz et al., 2000; Gray, 1985; Walker et al., 1997)	Finding embedded opportunities (Doz et al., 2000; Walker et al., 1997)	Evolve as a result of interactions (Doz et al., 2000; Dyer & Singh, 1998; Walker et al., 1997)
How to manage collaborations?	Envisioning and designing the process of exchange (Kickert & Koppenjan, 1997)	Caring assessment and research to either find or create opportunities (Williams, 2002)	Facilitation, guiding and persuading each other (Cohen & March, 1986; Cohen et al., 1972)
What is collaboration?	Integrating the other into a chain of value by both coordinating and competing (Hennart, 1993; Williamson, 1975)	Solving each other's problems or creating opportunities to each other (Hui et al., 2008)	Establishing trusted connections that allow access to people and opportunities (Camerer & Fehr, 2006)

* Affinity appears to be a new concept introduced by the current study.

The next sections provide rich descriptions of the challenges on developing international collaborations in higher education. These descriptions explain how the literature, the data and the interpretations of the PI were reconciled in addressing each challenge. Later sections focus on providing the rich description of the three types of collaboration. There are many segments of data that illustrate the concepts that address each of the challenges as well as each type of collaboration. Some of these segments of the data will be used as quotations to support the proposed conceptual distributions as well as to provide a rich description of challenges and types of collaboration. Each challenge and type of collaboration can be studied independently. However, in order to emphasize their analytical connections, challenges will be presented in the order proposed by the chain of reasoning that interrelate challenges instead of the order they were explored in the literature review.

Challenge 7: Finding what motivates partnering internationally. There are three well differentiated geographical advantages that motivate partnering internationally: Resources (Bathelt & Gluckler, 2003); methods and skills (Williams, 2002); and interests and values (Hofstede et al., 2010). First, in some cases, interviewees pointed at specific resources that they needed from other higher education institutions abroad. When asking why higher education institutions engage in collaborations, Lisa, one of the executives who supports and develops international collaborations at one of the most internationally active colleges, said: *"We need access to unique sites. We need access to ... unique populations. We need to leverage funding, and issues know no boundaries."* Kasinsky, the executive who participates in the strategic planning of international activities, when asked the same question, said: *"There are very good departments in other places, very* *good universities in other places, doing cutting-edge research, and so it makes sense to collaborate.… There we also have some complementary strengths as well.”* For these two participants, in these instances, collaboration is driven by needing as well as by having concrete resources.

Second, circumstances and histories at different places led people and organizations to developing different and complementary solutions to common problems. As Kasinsky also said: “*The university has to operate at a global scale because that global scale is impacting everybody’s daily lives so that is becoming a critical part of education….We are recognizing more and more that you cannot solve all these problems without bringing that diversity together so these partnerships bring you leverage resources, they bring global multiple perspectives on issues they bring new sources of funding and they open avenues for our students to gain global competency and global literacy.”* Lisa explained: *“So invasive species, something very important for agriculture…. You’ve got the Asian long-horned beetle invading the U.S. because it came on an Apple box from China. So you need collaboration with China to figure out how to stem the problem. A huge disease came in from Western Europe and wiped out all the lot of our tree fruit. Because we had collaboration with Western Europe, we knew how to stop it, from actually wiped. It wiped out Europe, but it was prevented from wiping out the U.S., because we had collaborations with Western Europe.”* According to these participants, collaborations are driven by knowledge, methods, skills, and perspectives that allow partners to address common and well as complementary problems.

Finally, these same conditions and solutions led to different cultures and frames of mind. On this aspect, Greg, the executive who travels and maintains collaborative efforts on the ground reported: *"How is your belief system? And your way of doing things, how do they clash or how are they similar…? The more we interact with people, the more we realize we have common goals and interests."* Moreover, Ben, the faculty member whose specialty is international community and leadership development said, *"I think to place students back and forth between universities, that makes for a better outcome of students and all that kind of stuff."* According to these participants, collaborations depend on having common and complementary interests and values.

These three groups of geographically distributed advantages have been proposed by Bathelt and Gluckler (2003), Hofstede and associates (2010), and Williams (2002). Each focused on this challenge from a different perspective, which in turn could be attributed to a different type of collaboration. The integration of these three ideas contributes to broadly address the challenge of finding what makes partnering internationally different: geographically distributed advantages. These geographical advantages are presented in Figure 4.5.

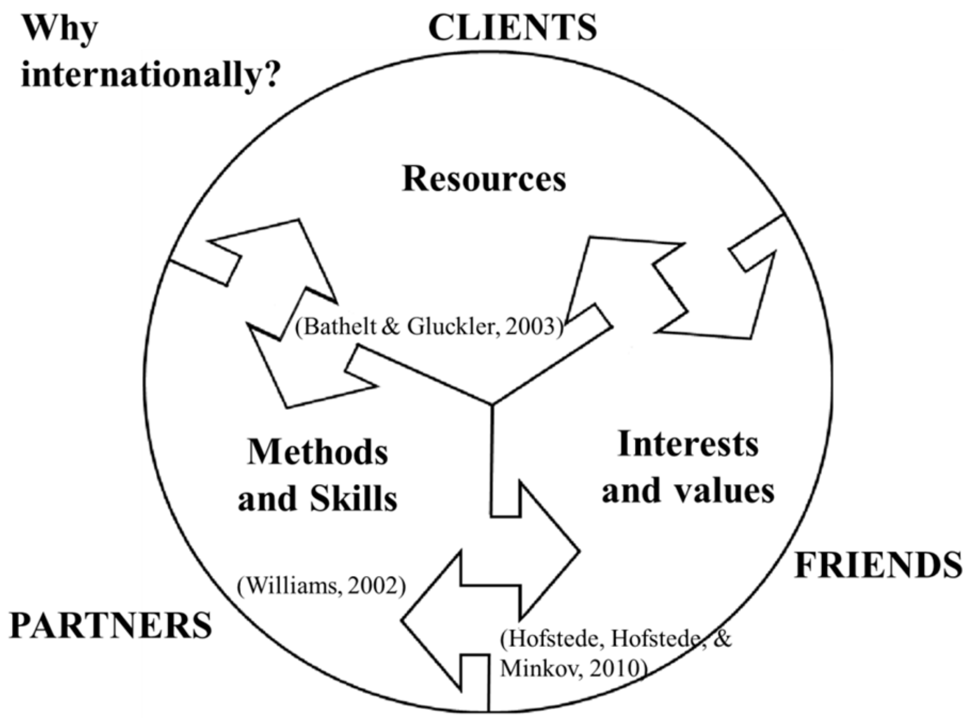

Figure 4.5. Geographically distributed advantages that drive international collaboration in higher education.

Challenge 8: Finding what is necessary to be able to engage in collaborations. There are three groups of conditions that allow collaboration: Affinity; certainty (Lane & Lubatkin, 1998); and uncertainty (Lane & Lubatkin, 1998). First, personal commitment, interest in understanding other peoples' frames of mind, common as well as complementary goals, values, previous positive experiences, membership in common communities and connections to trusted members or social capital are conditions that contribute to generate mutual affinity and relational capabilities. Ben, the faculty member whose specialty is international community and leadership development, said: *"I am more concerned about having really good people to work with. Probably 75% or 80% of the people I work with, they are not just colleagues, they are very, very close friends."* Interest in understanding other people's frame of mind was noted through statements such as: *“I think the people that like to travel, the people that like to encounter different cultures, the people who like to get out from their comfort zone … but also people who like people who force them to do even better work than they would do on their own and show them new ideas and engage in good debate.” “I want to get out and understand why people are acting in a certain way. I want to understand what they are doing and why I want to be able to tell their story.” “They have been really enthusiastic about working with interesting people and interesting people in different places that are very different from our selves. It can be in lots of ways. It can be incredibly different culturally or it can just be in incredibly different schools of thought.”* Regarding common and complementary values Ben said: *“I mean, the ones I work with they are a lot better than I am, you know, I think they got good families, they got good kids, they earned the respect of their colleagues.”* In addition, Greg, the executive who travels and maintains collaborative efforts on the ground, said: *“I think there is sort of philosophical pieces.” “What are some of the priorities that you have? What are some of the things that’s on your, your wish list?” “[Andres] and [Kasinsky] travel and they just try to … it’s exploring, it’s trying to see where those philosophies might align.” “One of those things this university looks is are we dealing with, are we working with a peer institution.” “You are trying to identify who are good partners but also who are appropriate partners…. There are some personalities that just don’t fit.” “Not because they don’t have value, but because it’s going to be very difficult for their priorities to align, alright.” “So there were different priorities…. I realized that that’s not a priority. Then you don’t make it a priority. You don’t go after the big grant…. In that case you focus on how could you enhance their teaching.”* In terms of membership in common communities and connections to trusted members or social capital, certain conditions contribute to relational capacities. Ben said: *"I think that one of the good things I have been able to do is to sort of creating this network of, of friends and students and colleagues and the whole same thing of my book.... But you know create this network of, of people that we can, that we can plug into, that we can get people connect with each other."* These quotations in convey in different ways the concept of affinity as a necessary condition to develop collaborations.

In addition, according to Oscar, the faculty member whose specialty is development of international technology-based ventures, collaborating depends on having social capital or relational assets. *"Through kind of partnerships that lead to other partnerships." "And then you would go up to those people, but even then you would almost never cold call somebody…. So then you say: 'Okay, how can I, whom do I know that is going to introduce me to this person in the … ministry?'" "I would say clear goals and social network, social, social capital, I am not going to say this is a network, but social assets, you know, similar social assets and clear goals, alright, so when I go in, in a university."* Ben, the faculty member whose specialty is international community and leadership development, also offered a hypothetical example, *"There is amazing work going on in Colombia that is similar to this, but I don't have any contacts there. Then I usually start with the international office to see if there is anyone on campus here who is doing work in Colombia and then reach out to them…. Now with the role in [a multilateral organization], I'm, you know, very often I coordinate within that [multilateral organization]…. They have a presence on every country…, so I use that,* *those networks now to, to get connected."* These quotations explain how affinities allow access to people and opportunities.

Next, a clear vision of how to create benefits, controlling critical resources, and common perspectives of power and value allow development of transactions. On this issue Ben said: *"Sometimes I go to places where it's a very, very precise reason for going, you know. I'm invited there to be part of a research project that, that looks at this, this and this." "They may be working with me because they have agendas or whatever else. The same goes with funders. Some of these funders have very clear reasons why do they partner with the university. I mean especially when you get into natural resources and stuff."* Moreover, "*If I put in funding for graduate students in my grant, and I partner with some small school in Texas for example, they got to do the same. And for them it might be a major burden."* According to Ben, collaborations can also be driven by desire for control of certain needed resources, as well as by a certain rate of exchange.

Finally, cognitive distances, diversity in approaches to address common and complementary problems, teaching and learning abilities, hypotheses on the solution of problems, creation of new opportunities, and structural and power differences motivate mutual exploration, experimentation, and learning. For example, Lisa, one of the executive that supports and develops international collaborations at one of the most internationally active colleges, said, *"Issues know no boundaries." "So maybe... Well, we have common adversity, we have a common goal, and that common goal is due to the world we live in, and so it only makes more sense for us to work together to address that common goal because collaborating is much stronger than not."* On commitment of participants, Lisa also said: *"Partnerships can often times live and breathe on the* *commitment of maybe two individuals." "It is not programs and research being forced upon them. It is things they develop on their own. You know, working with foundations or government or academia or whoever, but locally based because people take on ownership of it."* Collaborating internationally might be difficult, *" but I was able to get some commitment from some other people and we actually got funding for our project from USAID. And the project had a vision."* Oliver, the executive who carries assessment, development, promotion and negotiation of international agreements, reported: *"It isn't purely bottom up. But we understand that the value of relationship, and the sustainability of relationship comes because there is someone again at the ground level, the ground floor, that is actually doing the work and keeping it going."* On cognitive distances Oliver also stated: *"To the student, or to the researcher, there is the benefit of other ideas, perhaps unique ideas, where other expertise that isn't our expertise, and then very practically, in the education at the educational level. If you are going, if you are studying Spanish, if you are studying Spanish culture, you are going to learn better if there's an immersion in that Spanish culture."* Greg thought of: *"Where I look around the university, and I see what does the university has to offer to the world, what are some of the things that we do really well? And start to target those things, and as I'm traveling and talking to my partners, I'm saying what are some other things that do you are, that you are lacking?"* According to Ben, *"They are about all kind of things. Some of them have been about sharing knowledge and resources."* On hypothesis or projects that contribute to address such uncertainties, Ben reported, *"A lot of times we sit around with all these colleagues and come up with ideas you don't know if you are going to get the funding and you don't know if you are going to get the students. A lot of this is* *just a leap of faith. You know, it might happen." "If you are doing good work, and if you are working with good people and coming with really good ideas and doing things for the right reasons…, all that stuff comes, and it does. I am convinced of that." "I think it brings new ideas, fresh ideas, but it also helps support any of this kind of thing."* According to Lisa, *"There is a kernel of an idea that with the help and guidance of administrators can grow into something. So you have the bottom-up interest, that the groundswell of interest from faculty, and a lot of times it's grad students pushing things. It's very interesting…. Sometimes the students lead the faculty to some the new ideas and new ways of doing things…. So the institution has to have a vision of what it wants to accomplish … so that when the faculty and the people come to you with a good idea, and they are willing to do the work and to dedicate their time, you can put it all together. If you can meet those two, you are good." "The web of possibilities coming out of that core…, there's a skill set that I am starting to call, this isn't fancy enough term, we would have to come up with the new term for it, but … complex vision or complexity…, something that really captures this notion of people who can build programs, have a more complex vision capability to be constantly like an octopus trying to bring in more and feed more and reach out at the same time…. It's kind of the interconnectivity of things the complexity of things."* According to the previously quoted participants, collaborations are also developed to address uncertainties by solving each other's problems and/or creating innovations.

Two of these three groups of conditions that allow the development of collaborations have been proposed by Lane and Lubatkin (1998). They suggested two broad conditions to develop collaborations, certainty and uncertainty. Certainty could be attributed to client-provider relationships and uncertainty to partnerships. The third group of conditions could be related to the concepts of affinity and relational capabilities. According to this study's literature review, the concept of affinity has not been used in the literature of collaboration. Other researchers have approached this group of conditions as cultural understanding and agreement of values (Hofstede et al., 2010). Still others have approached them as previous positive experiences and membership in common communities (Schruijer, 2008). However, the concept of affinity has not been pointed out yet. Schruijer (2008) noted relational capabilities, but relational capabilities without affinity have no use. Ben clearly said: *"I am more concerned about having really good people to work with. Probably 75% or 80% of the people I work with, they are not just colleagues, they are very, very close friends."* These conditions are presented in Figure 4.6.

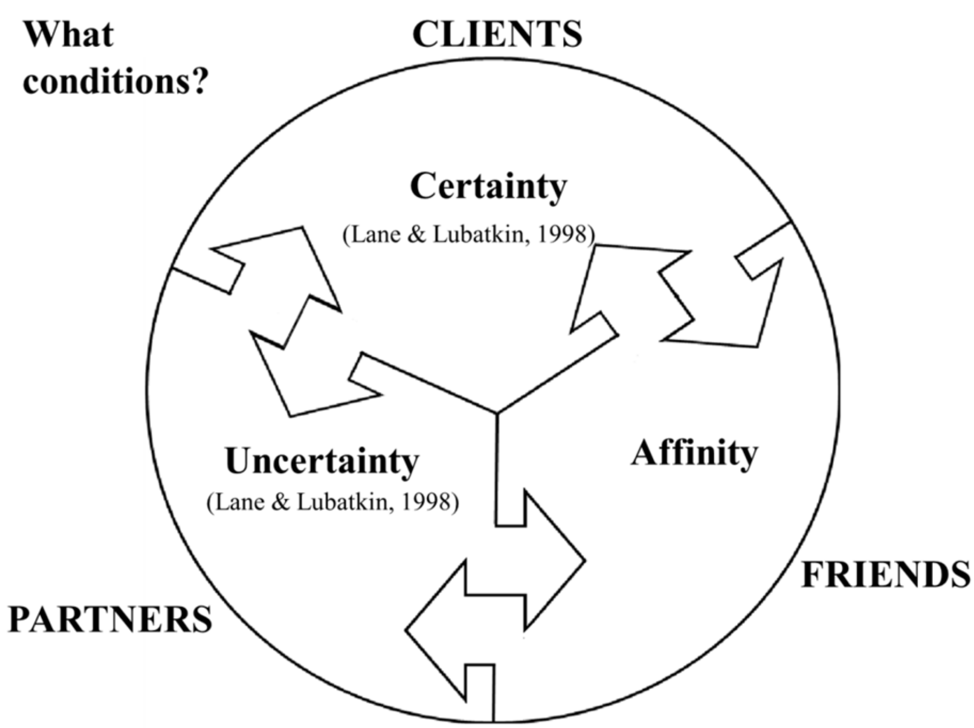

Figure 4.6. Conditions that promote international collaboration in higher education.

Challenge 1: Finding why higher education institutions engage in collaborations. There are three groups of reasons for engaging in collaborations: High levels of interaction and access to key people (Bordieu, 1986; Coleman, 1988; Mattessich et al., 2001); efficiency and necessity (Oliver, 1990); and Innovation or problem solving (Oliver, 1990). Affinity and relational capabilities lead to gaining access to preferential conditions, developing high levels of interaction, gaining access to key intermediaries, and facilitating one's own development as well as the development of others whom one values. For example, on gaining preferential conditions, Greg, the executive who travels and maintains collaborative efforts on the ground, said: *"So we do research along with them. Our students are working on the research. But because we're doing research in their parks they have a, they give us 50% off on accommodation."* Or, according to Lisa, one of the executives who supports and develops international collaborations in one of the most internationally active colleges, *"And now we send students there every summer program, and they set it up for us for free, because we are their partner…. They don't charge us to set up these programs for our students, okay, so we have a long term benefit from two people initially coming together with an idea."*

Concerning high levels of interaction, Ben, the faculty member whose specialty is international community and leadership development, said, *"I go to their conferences, and they go to mine…. I see entirely different ways of doing work that I wouldn't have before."* Or, according to Lisa, *"Thank goodness for technology, to help that, to help us continue in these contacts internationally…. So thank goodness for email and Skype and all those tools that we have now. You know, to keep the contact fresh and new things."*

On gaining access to key intermediaries, Ben also said: *"Get me connected in to field faster. I spent probably a couple years getting, looking connections and getting established." "I do everything in my power to try and connect them with people that can help them get the job done.... I'll get you plugged in with my old student there or one of my colleagues or whatever…. I will get you connected today with somebody that I know there, and if they couldn't do it, they will help get you connected with somebody that did."*

Collaborations help an institution to gain legitimacy, but according to Oliver, the executive who carries assessment, development, promotion and negotiation of international agreements, *"what we're getting is a tangible … and an intangible benefit that isn't about are the numbers, exactly, the same going back and forth" "There are other benefits, that maybe are not as tangible, when you do international partnership building and collaborate with other countries."*

On promoting or preventing changes, Oscar, the faculty member whose specialty is development of international technology-based ventures, said: *"I want to improve the human condition, and I want people to be happier. I want them to have more freedom, to have more liberty, I want them to be happy. So I mean, yeah, I mean there is no a give and take."* When Lisa shared the story of a top university executive's promotion of an international collaboration, she explained that this person *"was pushing me very hard to have a partnership with [a university] in Mexico. So it's top down. You know me, I don't like top-down pushes. I thought it is not going to work."* Quotations in this subsection convey the concepts of gaining preferential conditions and developing high levels of interaction.

Next, transactions attend to necessities, increase efficiencies, acquire complementary resources, get brand recognition, and increase stability. In terms of attending to necessities, Lisa, one of the executives who supports and develops international collaborations at one of the most internationally active colleges, said: *"We can't, we need access to unique sites, we need access to ... unique populations."* Or as Kasinsky, the executive who centralizes the strategic planning of international activities, said, *"A local university simply doesn't have the lab facilities to do the analysis that might be necessary, until we can provide some."* He continued, the university might engage in collaborations *"where we have resources that somebody else doesn't, or they have resources that we don't, and, and this is quite often with filling gaps."*

On increasing efficiencies, Lisa said: *"We need to leverage funding."* Ben expanded on this point: *"In all the NGOs and all the government agencies, budgets are tight. So I think there is the idea that partnerships are a very good at making sure that we are not duplicating efforts. We are maximizing resources and that sort of thing."* In other situations, *"We realize we are doing the same kind of work, and it would probably make more sense for us to partner." "Just the ability to have partners cuts down the cost and its easier for me to do a comparative research study if you are willing to conduct it in your country, and I am willing to conduct it in my country, and that sort of thing." "Different places partner together because there is a lack of resources, and there is no sense to me developing a project if you already developed something, and if I can partner with you." "If you have ongoing relationships, I'm noticing that there are things that you can get around without just money."* Lisa provided an example of this situation: *"A lot of those short-term embedded programs, and we do them very inexpensively because we do* *them with partnerships on the ground. We don't hire a contracting firm to set up our itineraries, we work with our partner."*

In the case of reciprocity, Ben said: *"Almost everybody I work with, it's clear that … if we do a grant or a project, all our names go into the publications…. Whoever writes the most is first author, not the one who is most prestigious or whatever. If you write the most, you are the first author. If I write the second most, I am the second."* According to Kasinsky, *"We build our partnerships where there is something, there's some something mutually beneficial about it. So it is not one way. We don't do it. We don't tend to partner with people and simply give." "Partnerships work better when there is a two-way exchange." "If we're talking about an exchange program with another university, so you are already registered in a university abroad and you are spending a year here or something like that, then there are ways of doing exchanges so that money doesn't change hands…. It has to be balanced because it has real costs on each side."* According to Lisa, reciprocity *"is this notion that people come to the table, and they each can identify something that they're going to get out of the partnership." "It is a win-win, a plus-plus…. So that's probably the most important thing and that the partnerships come, even though, that they may not be seen as in an equal state of development, whether it's in terms of program development or whatever."* According to Oliver, the executive who is responsible for assessment, development, promotion, and negotiation of international agreements, *"There is an idea of parity or … reciprocity to make sure that the exchange is even. Partially because there's a dollar figure attached to that." "In some cases, we know we're looking for reciprocity, and it is not sustainable if we don't. It depends on the type of agreement."* In addition, according to Oscar, the faculty member whose specialty is development of international technology-based ventures, when asked about reciprocity, he said: *"Yeah, yeah, they do, they always do, that's human nature to judge what you put in and what others. But some of the best collaborators take a longer time scale, and they are not always saying…, 'Look, Fernando, I am going to help you only if within the next three days you are also going to help me.'"* The quotations in this subsection illustrate the concepts of necessity, efficiency, and reciprocity.

Finally, research contributes to find alternative ways that people have developed to solve problems that become innovations at other places. In addition, the combination of contributions from different places also becomes an innovation for everyone. As Ben , the faculty member, said about collaborators, *"Some of them are bringing entirely different schools of thought for me to understand and incorporate into my work, and it is always forcing me to look at things from a completely different angle, which is, I think, is nice." "There is people coming to campus here that are bringing the best ideas and the best new practices and experiences and everything else to share to people here, and we go to share them what we have to other places." "Try to take the best of ideas from there and use them here, and if they're interested to share the best of ideas, the best practices that we have from here, you know."* In some cases, according to Greg, *"They need to be thinking about who is the expert in a particular field, and that expert might be in South Africa. That expert might be in Germany. That expert might be in Brazil." "So … working with other partners allows us to do that a little bit better than if we were just working with colleagues in the state or just American colleagues. But it gives us a larger pool of expertise that we can all contribute to on the service side of things." "So a place like [a known university in Africa] or [a university known in Korea]. They may have,* *maybe some of, some unique perspective, on how they're doing. Maybe they are doing something that nobody thought of, in the area of global health, or whatever any of the other themes are, and so, there definitely is a benefit to the university to partner with them."* In addition, according to Oscar, *"You are always trying to get a whole bunch of people who think differently, who want different things to come together, and say, 'Okay, how can we address this together, this problem together, because it's a very complicated problem that requires all our expertise and interest?'"* These quotations depict the concepts of innovation and problem solving.

Organization theory scholar Christine Oliver (1990; not the interviewee) proposed an interesting conceptualization of different individual interests for engaging in collaborations: necessity, reciprocity, efficiency, legitimacy, asymmetry, stability, and innovation to convene such motivators. However, she did not point out other concepts that also motivate collaboration, such as gaining preferential conditions, developing high levels of interaction, gaining access to key intermediaries, and facilitating the development of the people whom one values. These concepts have been proposed by Bordieu (1986), Coleman (1988), and Mattessich et al. (2001). Grouping these concepts together provides a broader understanding of individual interests for engaging in collaborations. In addition, there are different associations of these concepts according to the different types of collaboration. Necessity, reciprocity, efficiency, legitimacy as brand recognition, asymmetry of resources, and stability on prices are concepts that convey clear motivators for developing client-provider relationships. Next, asymmetry on skills and opportunities for innovation are concepts that convey relationships of partnership. Finally, gaining preferential conditions, developing high levels of interaction, securing access to key intermediaries, facilitating the development of the people whom one values, legitimacy as common agreement on values, and stability as reaching common understandings are concepts that convey relationships of friendship. The integration of the contributions of various scholars to address this challenge, as well as the distinction of the applicability of these concepts according to the different types of collaboration, is another contribution of the study. These contributions are summarized and presented in Figure 4.7.

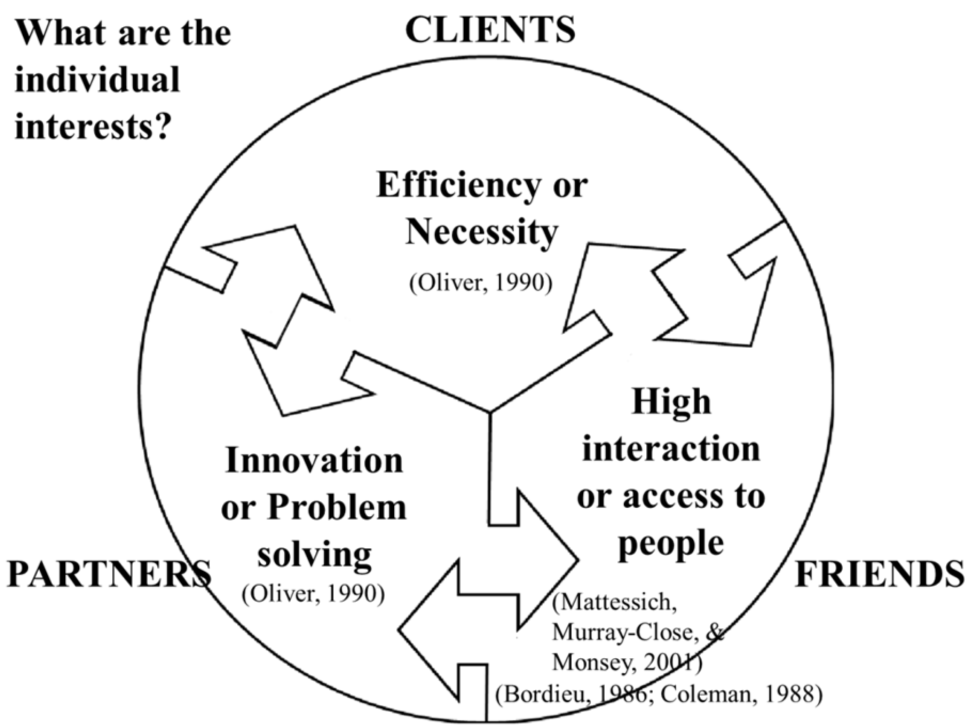

Figure 4.7. Individual interests that drive international collaboration in higher education.

Challenge 2: Finding how to engage in collaborations. There are three broad collective interests to engage in collaborations: Co-option, co-specialization and co-learning (Dacin, Reid, & Ring, 2008). The driving collective interest for relations of friendship is co-option. Participants shape their behaviors and decisions and connect with other people based on their common interests, values, and frames of mind. Friends might assume different roles and informally share information with each other, but what sustains their relationship is their agreement on common core values as well as the sharing of common interests. Co-option was reported by Ben, the faculty member whose specialty is international community and leadership development, as influencing decision makers: *"I would say it's probably more, more the faculty and, and people doing international work are guiding the process. But guiding it in a very structured way."* Greg, the executive who travels and maintains collaborative efforts on the ground, also said, *"You could also influence the, their strategic planning and make it a priority for them…. I agree, but that's down the road."* Lisa, one of the executives who supports and develops international collaborations in one of the most internationally active colleges, added, *"Advocating for people with good ideas and investing in people and programs that would benefit from international partnerships, whether that was in research or teaching programs."*

Co-option can also be seen as influencing students. Oliver, the executive who is responsible for assessment, development, promotion, and negotiation of international activities said, *"It's not sustainable if students don't go, and students won't go if they don't have a professor that potentially is pushing them, saying…, 'This is a great trip, and I am going along. You're gonna, you're gonna experience this, and this, and this while you're there.' That's what makes them sustainable." "I am going to experience that. I want to see how I can embed that and make it a portion of my course."* These quotations provide different interpretations of the concept of co-option, or the development of mutual influences, either to develop interests or to change decisions.

Next, to engage and sustain client-provider relationships, parties usually need to develop well-structured agreement about co-specialization. Co-specialization allows the development of sustained exchanges by establishing mutual dependencies on the resources with which each participant is specialized. In client-provider relationships, participants generally do not want other participants to learn too much about what they do. Participants want to retain control of their core activities and the generation of value. Participants want to promote coordination of activities to increase efficiency in their transactions, but they aim at gaining independence from each other in their decisions and often times, if possible, to dominate transactions. Co-specialization can be seen through contributions, such as Ben described: *"Some places just have things that others do not, depending on what field we are working in. I mean, actual physical machinery or statistical programs, you know…. Sometimes it's just with programs that those responsibilities get assigned to one institution because they are really good at it. They can do evaluation much better than some other place can, or they can do data collection better than another university. So maybe sharing a resource, but also maybe sharing skills. Some places are just they got their strengths and other places don't. Other places have different strengths and they get assigned those."* Co-specialization, as illustrated by the previous quotations, allows the development of exchanges.

Finally, as participants in partnerships are exploring, experimenting, and learning from each other's contributions, co-learning is their major collective interest and the preferred means to engage in these types of collaborations. At different times, participants might assume different roles, contribute different resources, and defend different interests. However, those who have key knowledge or master critical skills are the ones who generally propose projects, convene participants, and assume a brokering role, making it more evident that co-learning is the major collective interest in these types of collaborations. Co-learning was reported by Ben: *"We are learning as much from Zambia than they are learning from us. So it is a sharing of knowledge, of research, of ideas all that." "I might have an idea for doing a project that I think it is or a research or whatever that I think is complete. And I might have a colleague in … Ireland or wherever that has their idea of a complete project, but when we actually sit down and put them together it becomes something bigger than the sum of its parts." "So they always come challenging my ideas, and I am challenging theirs. And they are always introducing me to literature and studies and research and methods and things that I wouldn't have ever seen." "I think the best thing to narrow it is the ability to have sharing of research and knowledge and expertise." "I got programs that I use worldwide, but they got to be adapted for each individual culture and things like that." "If I go to sub-Saharan Africa, and they are dealing with poverty or famine or whatever else, I am in the place learning as much as I left, you know…. There's a context, there is reasons for things to go on, and we're not there to save places…. We are there to learn from each other and then share what we got, and them to share what they have and find our way through these crises we have and everything. That is kind of the way I see a lot of it." "Some of things that I'm completely ashamed of here, you've done very well, and work with you, and say, 'How do I fix them? How do I, how do I take the best practices of what you've learned?'"* Oliver also said, *"Learning from what other schools do well. Trying to incorporate that and in some cases what we do well. So we, we improve where we can and we, we forge ahead in those areas either where nobody's has done it before, or where we are already doing it* *well."* Co-learning, as shown by the previous quotations, allows engagement in collaborations through the mutual exchange of ideas and approaches.

The three collective interests of co-option, co-specialization, and co-learning were proposed by Dacin et al. (2008). The availability of three concepts addressing this challenge gave the initial leads that there might be three well distinguished types of collaboration. Here the contribution of the study was the demonstration of the applicability of these three concepts in the case of a higher education institution and the assigning of each concept to a different type of collaboration. No additional theorization was made. Previous scholars already identified three concepts or three groups of concepts to address this challenge. Here the study did not have to reach to various scholars to group different contributions to address three types of collaboration on one common challenge. Even these concepts contributed to theorize about the need of additional concepts on addressing the challenges that had less than three concepts were available. It also prompted the need of making three groups of concepts for those challenges that had more than three concepts available to address them.

Here the main contribution of this study is the assigning of each concept or each group of concepts to the respective type of collaboration. Another contribution is the distinction between individual and collective interests. Individual interests serve as individual motivators. They represent the attractiveness of collaboration. However, they do not allow engagement in collaborations. Organizations do not engage in collaborations unless there are mutual gains. Collective interests allow collaborations as they propose mutual gains. Figure 4.8 presents the allocation of collective interests according to the three types of collaboration.

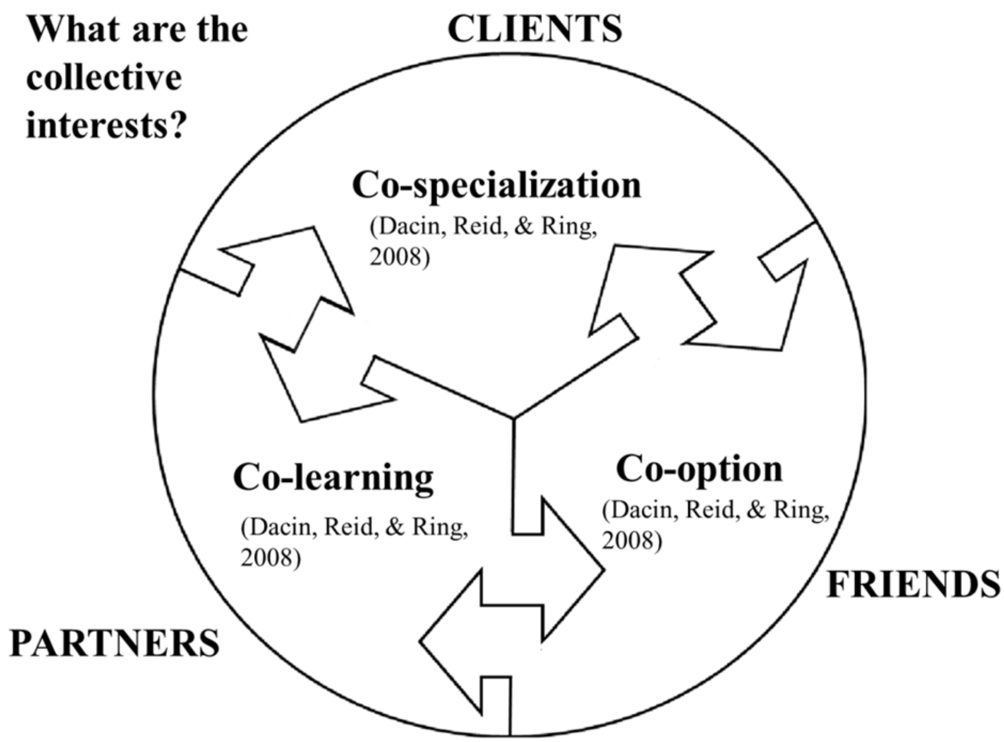

Figure 4.8. Collective interests for engaging in international collaborations in higher education.

Challenge 6: Finding what types of collaborations exist. There are three broad types of collaboration: Networking (Williams, 2002); production (Beerkens, 2002; Lane & Lubatkin, 1998; March, 1991); and exploration (Beerkens, 2002; Lane & Lubatkin, 1998; March, 1991). Friendships are intended for networking, dealing with good and likeable people, in addition to advocating for common purposes and goals in accordance with one's values and frame of mind. This purpose was drawn from Ben, the faculty member whose specialty is international community and leadership development, when he said, *"Get me connected into field faster. I spent probably a couple years getting, looking connections and getting established." "Or if we develop a program that can be distributed throughout the entire university or World Bank network…, some of these places have tremendous local networks. The university is heavily ingrained in many* *communities throughout the state, many programs and agencies, and everything else…. So being able to tap into those networks, I think, is really important."* Lisa, one of the executives who supports and develops international collaborations in one of the most internationally active colleges, also added, *"A lot of the best ideas actually come from kind of these random connections that happen…. You can actually start mapping out the contacts that are happening in each kind of research area of the world." "There is also a skill set in terms of networking and looking for cross-pollination and then feeding that to grow something else. So I think this notion of seeing existing opportunities as breeding ground for new opportunities and looking to grow those, those kind of successful linkages into additional linkages is this, I guess I will call it kind of a networking skill."* Networking or relational capabilities are an elusive purpose of collaboration. It is the purpose that allows the development of the other two purposes of collaboration, as demonstrated by the previous quotations. Networking certainly allows access to people and opportunities. For that reason this purpose might have been overseen by some previous scholars.

Next, client-provider relationships serve productive purposes. According to Ben, some relations are about *"hiring universities as consultants to do product development for them or program development for them." "It's not at all uncommon for funders, governments, foundations, and corporations to come to the university and say, 'We want you to develop this project for us so we can use it at government programs or whatever else.' So in those settings they are just hiring the university to develop programs for them that they can use…. All of those are good. They are just different … because part of that money goes to the university. The indirect costs and things, that's what keeps the lights* *on and keeps the new computer coming every couple of years."* Collaboration is not disinterested giving. Disinterested giving is philanthropy. Collaboration, according to the previous quotations, is about productive purposes or the mutual exchange of products and services. At one point, the PI conflated philanthropy with production as the purpose of collaboration.

Finally, partnerships are generally intended for exploration purposes. For example, Lisa said, *"If you want to look at this crop that only grows in Brazil, you have to… do your work in Brazil. Or if you're looking at … a health zone, if you are looking at malaria or other things, you've to go to sub-Saharan Africa, or southeast Asia, you know, places that are heavily influential. So I think that a lot of our funding has … an international dimension to it that distribute to the university."* According to these quotations, collaboration also involves allowing mutual exploration to either develop innovations or to solve each other's problems.

Exploration and production as the purposes for collaboration were showcased by E. Beerkens (2002), Lane and Lubatkin (1998), and March (1991). They did not, however, contemplate networking as the purpose of relationships of friendship. During this study, this concept was proposed by interviewees and later confirmed in the literature by Williams (2002). Integrating these contributions completes the framework on finding the purposes for developing collaborations. The criteria for classifying collaborations according to their purposes are presented in Figure 4.9.

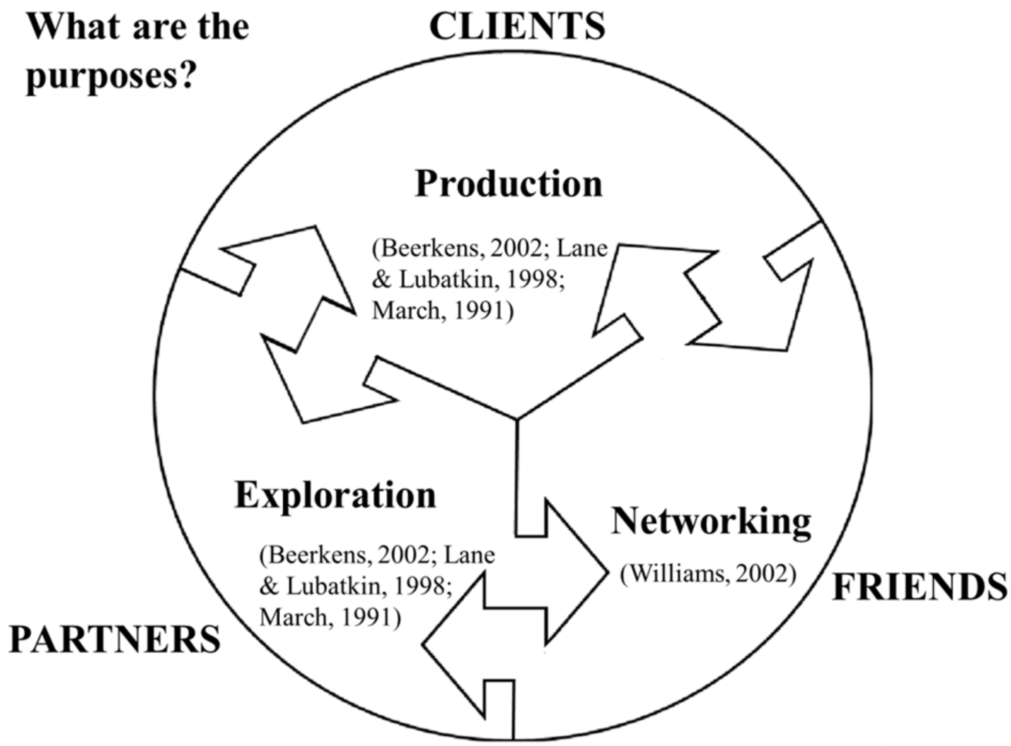

Figure 4.9. Criteria for classifying international collaborations in higher education according to their purposes.

Challenge 4: Finding how to create collaborations. There are three broad approaches to create collaborations: Evolutionary, engineered and embedded (Doz et al., 2000; Walker et al., 1997). First, friendships evolve through time in various planned and unplanned interactions. In these interactions people and organizations identify other people with their aspects of mutual identification and differentiation. Participants in the study shared various stories about how their relationships of friendship evolved. For example, Ben, the faculty member whose specialty is international community and leadership development, recalled: *"I started working there probably 20, over 20, years ago, just doing my own research and other things. And the one university there that had a good reputation in my area…. So we start seeing each other at professional meetings, we started exploring ways where we could do complementary studies. We started exploring* *ways in which we could share students and bring students to each other's places, and then if we are doing all these things, we should have an MOU because we are doing research and teaching and outreach….. Those little tiny things build up."* According to Greg, the executive who travels and maintains collaborative efforts, on the ground, *"No one or no culture changes before they are ready to change." "Having a relationship, sustaining a relationship, does not mean that you are going to have a product quickly. It means you are thinking about long term. It means you are thinking about what you, what you care about, what I care about, and we are going to work together." "You need a vision, but you need to keep testing the vision and allow it to evolve….. The master plan will never be perfect. You just need to get it good enough so that you can start for it to evolve, get the other partners involved, see how they respond…. The partners' priorities become important to you, then the master plan adjusts."* In addition, according to Kasinsky, developing collaborations *"requires investment of time and effort. You have to … visit each other. Once you've made some initial connections, and things are going, you can use the phone, you can use Skype. There are ways of connecting, but without sitting down face to face and sort of exploring ideas and topics and getting to know each other, it is hard to make things happen."* Lisa, one of the executives who supports and develops international collaborations in one of the most internationally active colleges, also offered a story to illustrate this point: *"Probably about seven years ago, two professors came to me, friends, and one from [another university], and said, 'We wanted to do a project together.' So we looked, they described what it was…, told them our ideas, we got money. Started this program, the money ran out, but we had so many linkages by that time, that … here's the core project, but there's this new thing, this new thing, this new thing, and* *so we've kept that partnership going despite the lack of funding. And now we send students there every summer program, and they set it up for us for free, because we are their partner…. If you have a good partnership, you should expect the snowball effect."* According to Oscar, the faculty member whose specialty is development of international technology-based ventures, *"First you build a relationship, and if an opportunity comes around, you see if you can leverage that." "I do not always think how this is supposed to reciprocate. I just want to know somebody and what they do. And if there is a way I can help them, because the more people you help, the more of it comes back to you, and the more people will help you."* According to Ben, *"I think a lot of places are just sort of stumbled into doing international work, you know. That you know I have no intention of doing international work, but I met you and we became friends and we did some work. Very rarely, I think, is there a plan for new faculty or even students who want to do international work, is just sort of been. It happens by accident…. I spent a long time getting myself kind of established to do international work."* The previous quotations show various stories relating the evolution of collaborations as relations of friendship.

Second, client-provider relations can ideally be engineered by optimizing the fitting of different parts of a chain of value. Lisa, one of the executives who supports and develops international collaborations in one of the most internationally active colleges, said, *"What is our expertise? Where are our holes? Who do we need to partner with to fill those holes?" "okay, I said these are the people who need to be in the room, so let's get together. Who is going to do what? What are our roles? Responsibility, who is going to do this background? … I got an intern who can do this background piece, and we do it as a team."* Oliver, the executive who is responsible for assessment, development, promotion, and negotiation of international activities, also added, *"There are different schools that have different strengths…, so the nature of the relationships, whether it's research, or educational exchange…, or dealing with a global problem changes with each university you're dealing with."* Renata, the executive who promotes and develops study abroad programs and student exchanges, said, *"We are going to map out the curriculum. The curriculum matched. So our students know, if they go on this exchange, they will graduate on time, and this is how the courses will count…. Where there's a real lock step curriculum. And students are very reluctant to go to another place if they think it's going to delay their graduation."* These quotations show how collaborations not only evolve, but how they can be engineered by developing appropriate calculations and designs, according to the necessities and availability of collaborators.

Finally, partnerships are based on finding embedded, hidden relations or innovations that, once discovered or created, offer individual advantages to participants as well as common benefits to partners. Lisa provided some comments that illustrate this kind of relationship: *"Here is somebody who has a really good research program in chemical ecology, boy that program could be world renowned if we could find partners for that person, around the world, to really elevate it to a world class program." "You still have to have people interested in doing what it is, you know, that are willing to go, and you have to have the finances to keep it going. So, as broad and deep as they may get. There are still a very, you know, basic tree underneath to hold it together."* Oliver said that with some universities, *we wouldn't ever think of directly partnering…, but because they have a strength on this topic, we will all work together on this topic. So ... they can be, what we call, thematically, they're driven by a theme rather than by a* *university to university relationship."* Ben added, *"They know what they could do locally and what the culture was like." "The unique context of the place, whether it is natural resources or history or whatever else, that they can use for social and economic development and other things."* According to these quotations, collaborations can also be discovered. Collaborations are discovered when one can find beneficial embedded opportunities.

Ring, Doz, and Olk (2005) proposed three approaches to create collaborations: evolutionary, engineered, and embedded. These three concepts also seem to convene three well distinguished types of collaboration. However, the assigning of these three concepts to each type of collaborations is puzzling. The PI was unsure about the appropriate assignment of these concepts among the three types of collaboration. The PI already knew that client-provider relationships convene certainty; partnerships convene uncertainty; and friendships convene affinity. Engineered collaborations and certainty align with each other without too much effort. However, in the case of embedded and evolutionary collaborations, these concepts could be assigned both to partnerships and to friendships. Values and interests can be embedded in each person, and research can be seen as evolutionary. However, when talking with participants, it became clear that relationships of friendships were more evolutionary than embedded. One of the participants made clear that friendships evolved through planned and unplanned interactions. In addition, another participant made clear that opportunities to develop partnerships were generally embedded in nature or the result of creativity. They depended on the ingenuity to either find or create opportunities. Therefore the concept of evolutionary collaboration matches more closely relationships of friendship, and the concept of embedded collaboration matches better relationships of partnership. Another contribution of the study was the applicability of these three concepts in the case of higher education institutions. No additional theorization was made. Previous scholars already grouped three concepts or three groups of concepts to address this challenge. Here the study did not have to reach to various scholars to group different contributions to address three types of collaboration on one common challenge. However, the assigning of these three concepts to different types of collaborations represents a contribution from the study. The approaches to create collaborations are presented in Figure 4.10.

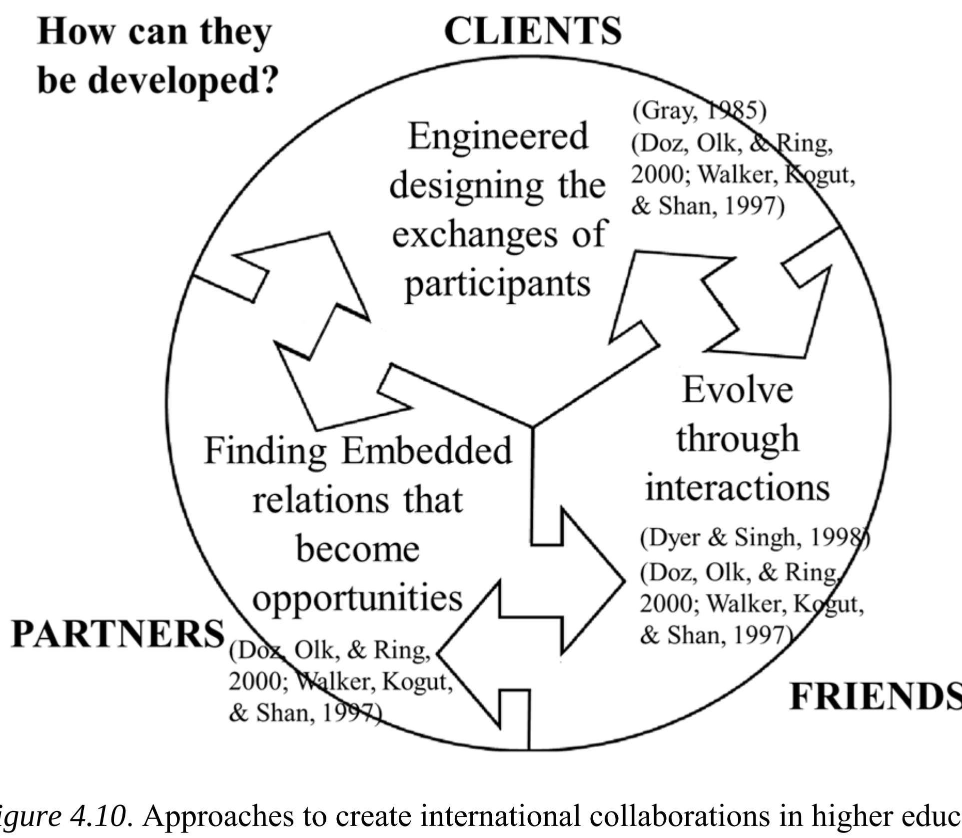

Figure 4.10. Approaches to create international collaborations in higher education. Doz et al. (2000) grouped all the conceptualizations for addressing this challenge. Gray (1985) focused on a client-provider approach, while Dyer and Singh (1998) focused on a friendship approach.

Challenge 5: Finding how collaborations are run. There are three distinct sets of skills necessary to manage collaborations: Facilitation, guiding, persuasion and trust building (Cohen & March, 1986; Cohen et al., 1972); visioning and design (Kickert & Koppenjan, 1997); and assessment and research (Williams, 2002). Managers of friendship collaborations facilitate and guide each other's activities, connect participants to opportunities and to other trusted participants, and persuade each other according to core values. Greg, the executive who travels and maintains collaborative efforts on the ground, clearly said, *"So a lot of what I do is … as a facilitator, to work with all these different stakeholders…, help the process along,.."* Lisa, one of the executives who supports and develops international collaborations for one of the most internationally active colleges, also described the importance of *"success through partnership and facilitating others' success through advocacy and through international partnership development for program growth." "So one of the things that by the college investing in this position was able to do is this notion of facilitate." "We have guidebooks of how to put these programs together…. Budget preparation, visa issues, risk management, advice in terms of what are the policies? Are there safety concerns? What paperwork do you have to fill out? We can answer all those questions. We can be the point of negotiation for different agreements. So we interface…, have the unique skill set and expertise and knowledge to be able to facilitate."* Oliver, the executive who is responsible for assessment, development, promotion, and negotiation of international agreements, added, *"Both in terms of making sure that people are aware that we are here to help them is to serve, so to speak, whether it's an international student, an international scholar, or a* *faculty member that wants to go abroad to help with that. And then also to help to make our relationships with international institutions get deeper."*

The importance of persuasion also emerged through some of Oliver's comments: *"What's important to me for my campus, or what's important to you for your campus, so the faculty member that comes to you might sell you, to use that expression, in a different way than he might use to sell me."* Greg added, *"You're coming into their space and so they still need to be convinced, or it needs to be explained to them. Why this partnership makes sense how does it benefit them? Who are the people that would be involved? They still need that to be explained to them. They still need time to process that. They still need more of an engagement in order to see it happen before they can fully commit and that that's how I have seen the relationships kind of function." "Rather than me coming in and saying this is what the university wants to do and this is the way we think you can support it, but being able to come in and have ongoing conversations and figuring out what people value? What our company values? What the university values? What are the things that are the top three things that we want to do? And if we can help to achieve those things, then the relationship will last a lot longer than if you go in and you have one project and the local entities are in it, but they're not really invested in it."*

Connecting participants to opportunities and to other trusted participants was noted when Oscar, the faculty member whose specialty is development of international technology-based ventures, said: *"So it's emergent, the more relationships you build the more opportunities emerge from it…. In a way, with a philosophy of engagement that is similar to mine, and I can find more people like them…. I would love to meet somebody in Colombia who was interested in taking a technology and getting it into the hands of* *small farmers and helping them grow more vegetables make more money." "Very little money, generally. It's much more about ground resources contacts access to people, credibility, very practical things. But a lot of these are opportunities for both sides to gain something. So it's much more of that social capital and opportunities."* The quotations offered in this section convey in one way or the other the concepts of facilitation, guiding, and persuasion of each other.

Second, the goal for collaboration managers in client-provider relations is to envision the processes by which participants can increase the generation of value as well as to develop such processes in practice. This necessity was noted in statements by Oliver: "*okay, and now I want to make that a part of my course. Every one of my students that take this class are required to take a three-week trip, to meet with me to go to such and such an area. Then, in order for that to happen of course, for the most part, particularly if you are involving students and that involves credits, that's when you need to start to put together some kind of agreement .... Where you lay out how things are paid for." "We are going to send our students there, we are going to send our faculty, we are gonna exchange with those countries, and we're gonna build an international university. Not on the basis of where our buildings are, because those are expensive to maintain, but where our people are, where the work our people do, where the effect of the work our people do is felt." ""Value is measured, there has to be a practical value, I guess, because somebody is gonna review it, and they asked that question: 'What's the value? ... How is the university benefited? And how has that the theme that we're trying to deal with? How have we benefited that theme?' So it has to be articulated, but it would be articulated differently for each, for each partnership…. Is it a trip to England because,* *where is the best place in the world to study Shakespeare? England, am I right, to see Stratford-upon-Avon to see where he wrote his things? And so, when you talk about selling the idea of a, of a partnership…, my commitment to that area of education translates to ... a value to the student, to the university, to the college, etc.” “We have our agenda, we have certain focus areas that we are interested.… We try to work with them but only if it is practical…, but if I see an opportunity to make a difference in something else, even if it is out of my comfort zone, I am still going to go into it.”* These quotations illustrate the rational processes of envisioning, designing, and exercising control over resources in order to develop collaborations.

Finally, managing partnerships demands a willingness to take risks and manage complexity. It requires assessing opportunities carry out experiments and do research to support or not support different exploration initiatives. Lisa clearly said, *“That rational strategic thinking and assessment, that rational strategic thinking, comes out of an assessment of what’s here…, so it is based on an assessment of the interests, where the resources are, where the potential and where the enthusiasm is. And then that is all built together in a strategic vision that we can then all stand behind and support and grow programs from it and focus and leverage.” “So I approach this as, ‘Let’s build programs by partnering with people who … have programs to offer.’” “If there’s an institutional higher-level interest in beginning and maintain a relationship, that helps with sustainability, and then we follow up with all of our agreements.”* In addition, according to Oliver, *“The growth that we talked about is intangible…. How are you changed when you go? How am I different when I come back? How much have I learned? … It is more, because it is internal change, I mean, it’s change in the way people are…. But if you have* *infected, if you will motivate others that you work with, and your dean or whatever, that this is a great idea, and this is sustainable. We already see the promise of growth because you've been able to convince others that this is a good idea." "Is this current? Is … it appropriate to keep this agreement open? Or should we close it and wait for something to happen?"* Oscar added: *"Yeah, you assess the results and we move on to another thing. Most of our project fail, and that's okay. We are okay with projects failing, and then we move to other things that are more likely to succeed, and then make them succeed. It's a mixed bag. You cannot succeed with everything, but you can try your best to succeed and at everything." "Yeah, you win some, you lose some. It's always the case you always lose a little bit more than you win, or at least that's true for me, but that's life, you know, you don't dwell on it. You learn from it and then you move on."* Ben, the faculty member whose specialty is international community and leadership development, also said: *"I mean, you know, probably 90% of what I do I fail. I submit articles that don't get published. I submit grants that do not get funded…. So I mean to say that, you know, someone didn't pull their way or whatever. You know, we are all busy and things like that…. So I do not see as much as betrayal." "I never had an administrator say to me, 'Don't go to work in that place, or don't do some kind of work.' They, they always let us kind of run, and they assume that we know what we are doing. But that said, they can really support things."* Kasinsky, the executive who participates in the overall strategic planning of international activities, added: *"I think is that structure, yes, I don't think there is … it's hard to see losses. I don't think people lose with this. It may be that not all partnerships work out, and you might invest some time in something that simply doesn't work, but overall it is, it is positive. Maybe an investment for the future, maybe yes."*

These quotations imply that prospective collaborators deal with uncertainty by doing research to either find or create opportunities.

The contribution of this study to addressing this challenge consists of distinguishing three groups of skills required to manage the three types of collaborations. The skills and activities to manage collaborations can be organized in many different ways, as was demonstrated in the literature review. If the study cuts across the principles proposed in the literature review, it is possible to regroup these activities and skills into three groups that can be assigned to the three proposed types of collaboration (Figure 4.11). This regrouping represents this study's contribution to address this challenge.

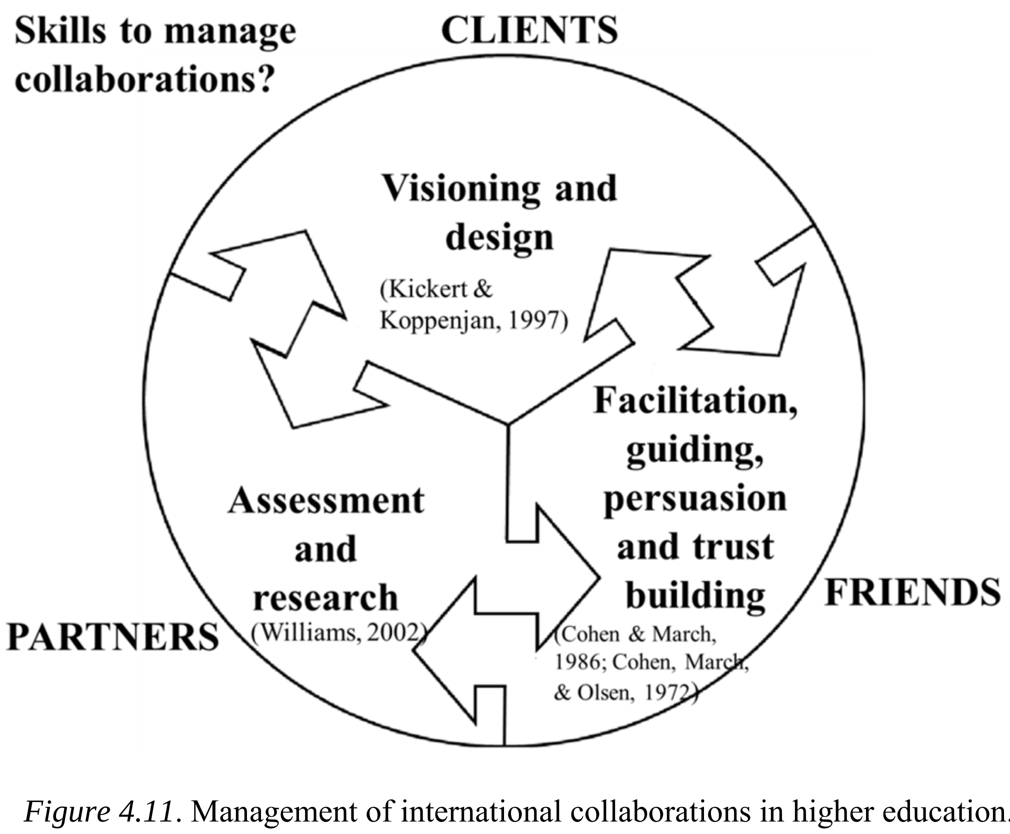

Figure 4.11. Management of international collaborations in higher education.

Challenge 3: Finding what people understand by collaboration. There are three complementary definitions of collaboration: Connection people to other people and opportunities (Camerer & Fehr, 2006); integration of agents in a chain of value (Hennart, 1993; Williamson, 1975); and solving each other's problems or creating opportunities to each other (Hui et al., 2008). Participants in relationships of friendship see collaboration as having trusted connections or social capital that allows them access to people and opportunities. They also see collaboration as the freedom to expose each other's weaknesses without fearing being unethical advantage, as there is identification with common core values and interests. Ben, the faculty member whose specialty is international community and leadership development, said, *"I like to work with people I like to work with. I know they are doing good work, that can be trusted, that do that sort of stuff…. I am doing really good work with these friends of mine that I work with, are doing really good work, and, you know the more we can share opportunities and things like that, the better. I really think it is more important, the establishment of networks of good people. The work and the expertise, the recognition and money and everything else, that comes." "I don't think any of us even remotely kept track or cared about who was first author or who was third or whatever…. It's never been a, any formal like reciprocity where we are keeping track of things. There was always an interest to work with each other." "It is always, it is always been good. But that is why I cannot stress enough the idea of working with people you trust, people that, you know, are good people…. I just work with the 1 or 2% or whatever that I believe, based on their behavior, are doing work for the right reasons and, that they treat people with respect, that they are good people." "I am just trying more and more to set up, you know, relationships with people I enjoy working with that I know are good people…. the people I do the bulk of my work with are the ones that I would trust them with anything." "One guy that I work with in*

Ireland, he is another researcher in the field. I work with two of them. If I was to show you their CVs, their resumes, you will be amazed: hundreds of articles, dozens of books, tens of millions in grants. People who are operating at the top level of everything else. They are the most humble, good-natured people that I could ever imagine. I aspire ever to be as good as them in terms of how they deal with other faculty and other students, with waiters and waitresses, with janitors. They are nice people. They are doing the work because they believe it is important it contributes to good things, and there is a kind of people that when they get into war they get embarrassed. That type of person, that they are not holding on to a war and saying, 'I am wonderful. Acknowledge me because I am great.' And they are certainly not in it for the money and that kind of thing. Because, I mean, I can think two or three of this people I work with they can probably make millions and millions in consulting and everything else. And they rather prefer to be academics, where they get not so much money at all. But the impact of the stuff they are doing and they, they are doing because it makes an impact worldwide and is doing great things. They are doing it for the right reasons, whereas a lot of people, they are doing it probably for the wrong reasons. They are doing it for their ego. They are doing it for the prestige; they are doing it for their bank account, all kinds of things like that. And they don't care how they do it as long as it benefits them. And those kind of people I don't want to work with. I have worked with enough of them in the past, and I don't want to work with them. I have one colleague who said for his 50th birthday for himself was that he was not going to work with any assholes. That was his present to himself because our lives and our careers are too short to work with people that are doing things for the wrong reasons and suck out the energy of the rest of us. And I think there is lot to be said *about that. I know there is plenty of people that are not nice people and have wonderful resumes and everything else. You know, good for them. Maybe they are better people than I give them credit for. I don't know. I would choose to go with the people right away that are kind of have strong characters and good intentions, and what I would say, it's just generally kind of good people. And maybe that is just my personal type of thing but it made me a better scholar, a better person, and is being around and working with them. It certainly gave me more knowledge and other stuff. Yeah, I think is an important thing."* Oscar, the faculty member whose specialty is development of international technology-based ventures, added, *"It really is, is a mutual beneficial relationship always. That's the way I think about it. So it's you and me, you know, as long as there is trust between us, we can help each other, if that trust is broken then, it will be like well, let's move on."* These quotations explain collaboration as having trusted connections that allow access to other people and opportunities.

Second, participants in client-provider relations see collaboration as the ongoing interaction of coordination and competition among participants in a chain of value to increase price-benefit correlations. Oscar clearly said, *"Yes, yes, you can be very nuanced and say this is collaboration, and this is competition, but practically you have to do all of it to make something work…. For example, we get some of the materials for the green houses from a company that directly competes with us. But they compete in a slightly different market. And so we buy some of our stuff from them. And that's the way it is. So it's, I think collaboration and competition, it all happens together." "To compete is to strive together. So competition in my world is a very good thing…. That's why you strive together, and you get better at something. So competition to me is always a good thing."*

In this respect, Lisa, one of the executives who supports and develops international collaborations in one of the most internationally active colleges, added: *"One of the struggles of collaboration is balancing this notion of competition with collaboration, okay. So in the case of China, I think about this a lot because if I want to build international partnerships with China, I have to answer to a lot of the people here in the U.S., 'Why are you helping China?' … Balance is this notion of collaboration in the context of competition…. We get a lot out of it. It's not like we're giving things to China…. You have to be able to deal with people's perceptions, and to be able to rationalize and justify your collaboration."* Finally, according to Renata, the executive who promotes and develops study abroad programs and student exchanges, *"Above 40% [of students] plan on studying abroad when they go to college. But in fact, only 3% end up studying abroad. So when students in high school are looking at universities, they are looking at our study abroad … website. You know, what opportunities do the university offers for me to go abroad? They may not end up going abroad, but they are looking at what those opportunities are. So there is the competition at that level."* The previous quotations present collaboration as the integration of organizations into a chain of value. This integration happens by developing various types of exchanges with institutions abroad. Generally those exchanges are developed by and with the most internationally competitive institutions.

Finally, participants in partnerships see collaboration as contributions to solve each other's problems, proposing of innovations, and the interactions that contribute to generate new knowledge. Lisa, one of the executives who supports and develops international collaborations in one of the most internationally active colleges, said, *"A lot* *of times what happens is faculty and grad students meet each other at academic conferences and generate an idea. And so they're able to through these meetings talk about their common interests, come up with their ideas using technology, keep in touch to develop those ideas, etcetera."* In addition, according to Ben, *"I used to go to a, a special meeting for … any of our professional societies, and there will be three or four hundred people and not all of them be from the United States. If you go to one in Europe, not all of them be from Europe. Now is it's not all uncommon to see probably a third of the audience in a professional meeting in the U.S. for a U.S. society be of international people, and when I go to meetings in Europe or Asia to have 10% of the audience being from other countries…. It's been, you know, just kind of the way we do business now, too, that is we do a lot a lot more international comparative kind of things, and we have partners from different parts of the world." "We know the problems, we know the skills or whatever we have. How do we work with the government? How do we work with other universities or agencies? Or how do we work with whoever to make all this fit?"* According to these quotations, participants see collaboration as the mutual solving of problems and the mutual creation of opportunities, generally as a result of finding or creating new knowledge.

The contribution on responding this research question is the integration of three complementary interpretations of collaboration. Collaboration is a multifaceted phenomenon. This study's contribution is to showcase its three faces. Knowing these three different faces allows scholars and practitioners to address it in a more comprehensive fashion. Collaboration from one perspective can be calculative, from another perspective it can be based on trust and values, and from a third perspective it can be based on learning and the discovery of opportunities. These three perspectives can be seen on Figure 4.12. Table 4 summarizes the contributions of this study to address the different challenges for developing collaborations, citing various literary sources.

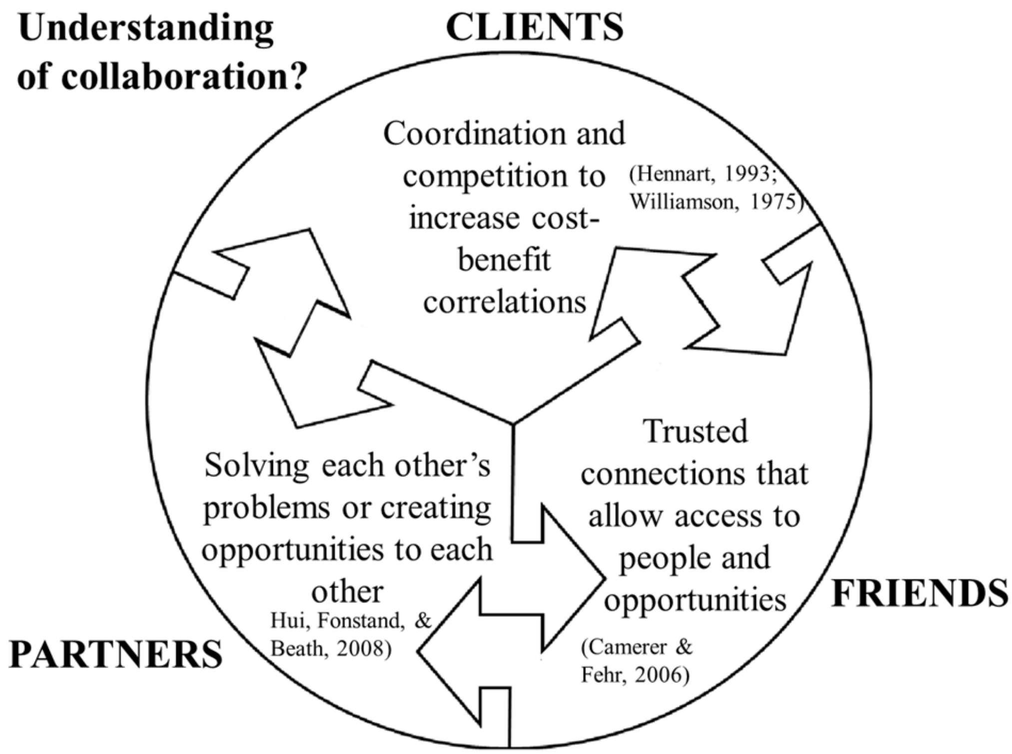

Figure 4.12. Three different understandings of international collaboration in higher education.

Table 4.1 draws of contributions from various scholars to develop comprehensive framework can be verified by checking the variety of literary references in that table. The integration of different literary sources to address common challeges as well as common types of collaboration represents the building of a framework that explains the different forms of international collaboration in higher education.

Table 4.1
Eight Challenges and Three Types of Collaborations

Challenges	Clients	Partners	Friends
Why internationally?	Other resources (Bathelt & Gluckler, 2003)	Other methods, knowledge or skills (Williams, 2002)	Other values or culture (Hofstede et al., 2010)
What conditions allow collaboration?	Certainty on the control of needed resources (Lane & Lubatkin, 1998)	Uncertainty on solving problems, finding or creating innovations (Lane & Lubatkin, 1998)	*Affinity on interests and values
What are the Stakeholders' individual interests? Why they collaborate?	Because they want to attend necessities, increase efficiencies, acquire complementary resources, gain brand recognition, and reach stability on exchanges (Oliver, 1990)	Because they want to innovate, solve problems and learn complementary skills (Oliver, 1990)	Because they want to gain preferential conditions (Mattessich et al., 2001), develop high levels of interaction, and gain access to key intermediaries (Bordieu, 1986; Coleman, 1988; Oliver, 1990)
How to engage in collaborations?	By co-specializing each other to develop exchanges with what we have or do for what we don't have or don't do (Dacin et al., 2008)	By co-learning from each other or by co-learning together (Dacin et al., 2008)	By co-opting or influencing each other coordinating activities looking for mutual benefits (Dacin et al., 2008)
What is the purpose of collaborations?	Production "make profits" (E. Beerkens, 2002; Lane & Lubatkin, 1998; March, 1991)	Exploration "make discoveries or creations" (E. Beerkens, 2002; Lane & Lubatkin, 1998; March, 1991)	Networking "make key contacts" (Williams, 2002)
What are the approaches to create collaborations?	Designing, Engineering exchanges (Doz et al., 2000; Gray, 1985; Walker et al., 1997)	Finding embedded opportunities (Doz et al., 2000; Walker et al., 1997)	Evolve as a result of interactions (Doz et al., 2000; Dyer & Singh, 1998; Walker et al., 1997)
How to manage collaborations?	Envisioning and designing the process of exchange (Kickert & Koppenjan, 1997)	Caring assessment and research to either find or create opportunities (Williams, 2002)	Facilitation, guiding and persuading each other (Cohen & March, 1986; Cohen et al., 1972)
What is collaboration?	Integrating the other into a chain of value by both coordinating and competing (Hennart, 1993; Williamson, 1975)	Solving each other's problems or creating opportunities to each other (Hui et al., 2008)	Establishing trusted connections that allow access to people and opportunities (Camerer & Fehr, 2006)

* Affinity appears to be a new concept introduced by the current study.

Applying the proposed chain of reasoning interrelating challenges to each type of collaboration. The process of applying the proposed chain of reasoning interrelating challenges to each type of collaboration implies familiarity with the literature, the data, and the interpretations of the PI. As previously noted, the development of this chain of reasoning was like building a puzzle. One finds a logic to allocate some initial concepts based on the matching between the literature and the contributions from participants. Then the allocation of these initial concepts helps in the development of new logics that allocate some additional concepts as well as some additional contributions from participants until the whole conceptual distribution and the matching with the data is reached.

Collaboration as client-provider relationships. Applying this chain of reasoning interrelating challenges to client-provider relationships seems to be a straightforward process, as the finding of concepts that contribute to address each one of the challenges in this type of collaboration seems to be clear. The application of this chain of reasoning, adding quotations to generate a rich description in this type of collaboration, reads in the following fashion:

Resources geographically distributed allow the creation of mutual benefits by developing transactions (Bathelt & Gluckler, 2003). According to Lisa, one of the executives who support and develops international collaborations in one of the most internationally active colleges, *"We need access to unique sites, we need access to ... unique populations. We need to leverage funding, and issues know no boundaries."* Kasinsky, the executive who participates in the overall strategic planning of international activities, said: *"There are very good departments in other places, very good universities in other places doing cutting edge research, and so it makes sense to collaborate." "There we also have some complementary strengths as well."*

Transactions depend on having a clear vision on generating value, controlling critical resources, and reaching common grounds on an agreement. Common ground for developing an agreement depends on having certainty on the exchanges (Lane & Lubatkin, 1998). Ben, the faculty member whose specialty is international community and leadership development, said: *"Sometimes I go to places where it's a very, very precise reason for going. You know, I'm invited there to be part of a research project that, that looks at this, this and this." "They may be working with me because they have agendas or whatever else. The same goes with funders. Some of these funders have very clear reasons why do they partner with the university. I mean, especially when you get into natural resources and stuff."* He also remarked, *"If I put in funding for graduate students in my grant, and I partner with some small school in Texas for example, they got to do the same. And for them it might be a major burden."*

Transactions attend to necessities, increase efficiencies, acquire complementary resources, get brand recognition, and increase stability (Oliver, 1990). In the case of necessities, this study finds that in some situations, according to Lisa, *"We can't, we need access to unique sites, we need access to unique populations."* In addition, according to Ben, *"There is kind of practical, getting the job done reasons."* Moreover, according to Kasinsky, *"A local university simply don't have the lab facilities to do the analysis that might be necessary, until we can provide some."* This university might engage in collaborations *"where we have resources that somebody else doesn't, or they have resources that we don't, and, and this is quite often with filling gaps."*

In the case of efficiency, according to Lisa, *"We need to leverage funding."* And according to Ben, *"In all the NGOs and all the government agencies, budgets are tight.*

So I think there is the idea that partnerships are a very good at making sure that we are not duplicating efforts. We are maximizing resources and that sort of thing." In other situations, *"We realize we are doing the same kind of work, and it would probably make more sense for us to partner and that it would be for us to do things individually." "Just the ability to have partners cuts down the cost, and it's easier for me to do a comparative research study if you are willing to conduct it in your country, and I am willing to conduct it in my country and that sort of thing." "Different places partner together because there is a lack of resources and there is no sense to me developing a project if you already developed something and if I can partner with you." "If you have ongoing relationships, I'm noticing that there are things that you can get around without just money."* For example, according to Lisa, *"A lot of those short-term embedded programs, and we do them very inexpensively because we do them with partnerships on the ground. We don't hire a contracting firm to set up our itineraries, we work with our partner."*

In the case of reciprocity, according to Ben, *"Almost everybody I work with, it's clear that … if we do a grant or a project, all our names go into the publications…. Whoever writes the most is first author, not the one who is most prestigious or whatever. If you write the most, you are the first author. If I write the second most, I am the second."* According to Kasinsky, *"We build our partnerships where there is something, there's something mutually beneficial about it. So it is not one way. We don't do it. We don't tend to partner with people and simply give." "Partnerships work better when there is a two way exchange." "If we're talking about an exchange program with another university, so you are already registered in a university abroad, and you are spending a year here or something like that, then there are ways of doing exchanges so that money* *doesn't change hands…. It has to be balanced because it has real costs on each side."* Reciprocity, according to Lisa, *"is this notion that people come to the table, and they each can identify something that they're going to get out of the partnership." "It is a win-win, a plus-plus, okay. So that's probably the most important thing, and that the partnerships come, even though that they may not be seen as in an equal state of development, whether it's in terms of program development or whatever." "There is an idea of parity or reciprocity to make sure that the exchange is even. Partially because there's a dollar figure attached to that."* According to Oliver, the executive who participates in assessment, development, promotion, and negotiation of international agreements *"In some cases, we know we're looking for reciprocity and it is not sustainable if we don't. It depends on the type of agreement."* And according to Oscar, the faculty member whose specialty is development of international technology-based ventures, *"Yeah, yeah, they do, they always do, that's human nature to judge what you put in and what others. But some of the best collaborators take a longer time scale and they are not always saying, 'Look, Fernando, I am going to help you only if within the next three days you are also going to help me.'"*

To engage in and sustain client-provider relationships, parties usually need to develop well-structured agreements about co-specialization (Dacin et al., 2008). Co-specialization allows the development of sustained exchanges by establishing mutual dependencies in the resources in which each participant is specialized. In client-provider relationships, participants generally do not want other participants to learn too much about what the others do. Participants want to retain control of their core activities and the generation of value. Participants want to promote coordination of activities to increase efficiency on their transactions. However, they aim to gain independence from each other in their decisions, and often times if possible to dominate transactions. According to Ben, *"Some places just have things that others do not, depending on what field we are working in. I mean actual physical machinery or statistical programs, you know. So sometimes it's just with programs that those responsibilities get assigned to one institution because they are really good at it. They can do evaluation much better than some other place can, or they can do data collection better than another university. So maybe sharing a resource but also maybe sharing skills. Some places are just they got their strengths and other places don't. Other places have different strengths and they get assigned those."*

Client-provider relationships serve productive purposes (E. Beerkens, 2002; Lane & Lubatkin, 1998; March, 1991). According to Ben some collaborations are about *"hiring universities as consultants to do product development for them or program development for them." "It is not at all uncommon for funders, governments, foundations, and corporations to come to this university and say, 'We want you to develop this project for us so we can use it at government programs or whatever else.' So in those settings they are just hiring the university to develop programs for them that they can use ... for their own uses. You know all of those are good they are just different… because part of that money goes to the university. The indirect costs and things, that's what keeps the lights on and keeps the new computer coming every couple of years."*

Those productive purposes can ideally be engineered by optimizing the fitting of different parts of a chain of value (Doz et al., 2000; Gray, 1985; Walker et al., 1997). There were expressions from Lisa such as, *"What is our expertise? Where are our holes?*

Who do we need to partner with to fill those holes?" "I said these are the people who need to be in the room, so let's get together. Who is going to do what? What are our roles? Responsibility, who is going to do this background? … I got an intern who can do this background piece and we do it as a team." In addition, according to Oliver, *"There are different schools that have different strengths…. So the nature of the relationships, whether it's research, or educational exchange, or dealing with a global problem changes with each university you're dealing with."* In some situations, according to Renata, the executive who promotes and develops study abroad programs and student exchanges, *"We are going to map out the curriculum. The curriculum matched. So our students know, if they go on this exchange, they will graduate on time, and this is how the courses will count…. There's a real lock step curriculum. And students are very reluctant to go to another place if they think it's going to delay their graduation."*

The goal for collaboration managers in this type of relationship is to envision the processes by which participants can increase the generation of value as well as to develop such processes in practice (Kickert & Koppenjan, 1997). According to Oliver, some faculty members say, *"Now I want to make that a part of my course. Every one of my students that take this class are required to take a three-week trip to meet with me to go to such and such an area. Then, in order for that to happen of course, for the most part, particularly if you are involving students, and that involves credits, that's when you need to start to put together some kind of agreement.... Where you lay out how things are paid for." "We are going to send our students there, we are going to send our faculty, we are gonna exchange with those countries, and we're gonna build an international university, not on the basis of where our buildings are, because those are expensive to maintain, but* *where our people are, where the work our people do, where the effect of the work our people do is felt." "Value is measured, there has to be a practical value, I guess because somebody is gonna review it, and they asked that question: 'What's the value? … How is the university benefited? And how has that the theme that we're trying to deal with? How have we benefited that theme?' So it has to be articulated, but it would be articulated differently for each, for each partnership….Iis it a trip to England because, where is the best place in the world to study Shakespeare? England, am I right, to see Stratford -upon-Avon to see where he wrote his things? And so, when you talk about selling the idea of a, of a partnership…. my commitment to that area of education. Translates to a value to the student, to the university, to the college, etc."* In addition to that, according to Oscar, *"We have our agenda, we have certain focus areas that we are interested. We try to work with them but only if it is practical…. But if I see an opportunity to make a difference in something else, even if it is out of my comfort zone, I am still going to go into it."*

Collaboration is seen as the ongoing interaction of coordination and competition among participants in a chain of value in order to increase price-benefit correlations (Hennart, 1993; Williamson, 1975). Oscar, when asked about the differences between collaboration and competition, said: *"Yes, yes you can be very nuanced and say this is collaboration and this is competition, but practically you have to do all of it to make something work…. For example, we get some of the materials for the green houses from a company that directly competes with us. But they compete in a slightly different market. And so we buy some of our stuff from them. And that's the way it is. So it's, I think collaboration and competition it all happens together." "To compete is to strive together.*

So competition in my world is a very good thing." Lisa also offered some words about the interaction of competition and collaboration: *"One of the struggles of collaboration is balancing this notion of competition with collaboration, okay. So in the case of China I think about this a lot, because if I want to build international partnerships with China, I have to answer to a lot of the people here in the U.S. 'Why are you helping China?' … Balance is this notion of collaboration in the context of competition.… We get a lot out of it. It's not like we're giving things to China…. You have to be able to deal with people's perceptions, and to be able to rationalize and justify your collaboration."* Finally, according to Renata, *"Above 40% plan on studying abroad when they go to college. But, in fact, only 3% end up studying abroad. So when students in high school are looking at universities, they are looking at our study abroad … website. You know, what opportunities does the university offers for me to go abroad. They may not end up going abroad, but they are looking at what those opportunities are? So there is the competition at that level."* The various relations presented in these paragraphs can be seen in Figure 4.13.

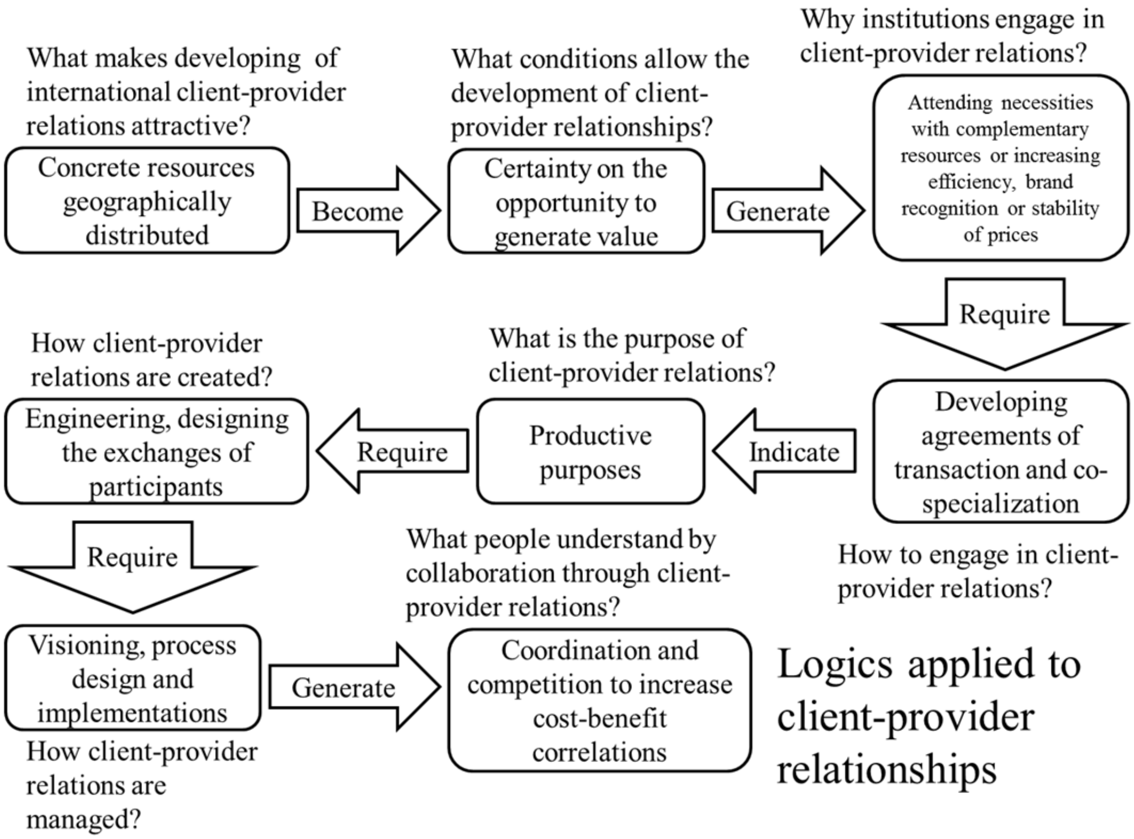

Figure 4.13. Chain of reasoning interrelating challenges applied to client-provider relationships.

Collaboration as relationships of partnership. Applying the proposed chain of reasoning interrelating challenges to relationships of partnerships was more challenging as there were some concepts that led to some confusion. Some of the concepts used to address this type of collaboration could be applied to other types of collaboration. The analysis that led to the proper allocation of concepts among the three types of collaboration and among challenges were carried both when studying the challenges as well as when studying each type of collaboration. The development of the chain of reasoning that connects challenges on this type of collaboration reads like this:

Circumstances and histories at different places generate mutual uncertainties. In addition, those conditions lead people and organizations to developing different and complementary solutions to common problems (Williams, 2002). According to Kasinsky, the executive who participates in the overall strategic planning of international activities, "*The university has to operate at a global scale because that global scale is impacting everybody's daily lives, so that is becoming a critical part of education." "We are recognizing more and more that you cannot solve all these problems without bringing that diversity together, so these partnerships bring you leverage resources, they bring global multiple perspectives on issues, they bring new sources of funding, and they open avenues for our students to gain global competency and global literacy."* In addition, according to Lisa, one of the executives who supports and develops international collaborations in one of the most internationally active colleges, *"So invasive species something very important for agriculture…. You've got the Asian long-horned beetle invading the U.S. because it came on an Apple box from China. So you need collaboration with China to figure out how to stem the problem. A huge disease came in from Western Europe and wiped out all the lot of our tree fruit. Because we had collaboration with Western Europe, we knew how to stop it…. It wiped out Europe, but it was prevented from wiping out in the U.S. because we had collaborations with Western Europe."*

Shared uncertainties, the commitment of participants to address them, cognitive distances, hypotheses or projects that contribute to address such uncertainties, and cognitive distances all motivate mutual exploration, experimentation, and learning (Lane & Lubatkin, 1998). On common uncertainties, Lisa said: *"Issues know no boundaries." "We have common adversity, we have a common goal, and that common goal is due to* *the world we live in, and so it only makes more sense for us to work together to address that common goal because collaborating is much stronger than not."*

Regarding commitment of participants, Lisa also said: *"Partnerships can often times live and breathe on the commitment of maybe two individuals."* Ben, the faculty member whose specialty is international community and leadership development, said: *"It is not programs and research being forced upon them. It is things they develop on their own. You know, working with foundations or government or academia or whoever, but locally based because people take on ownership of it."* According to Lisa, collaborating internationally might be difficult, *"but I was able to get some commitment from some other people, and we actually got funding for our project from USAID. And the project had a vision."* Oliver, the executive who is responsible for assessment, development, promotion, and negotiation of international agreements reported, *"It isn't purely bottom up. But we understand that the value of relationship and the sustainability of relationship come because there is someone again at the ground level, the ground floor, that is actually doing the work and keeping it going."*

In the case of cognitive distances, Oliver stated: *"To the student, or to the researcher, there is the benefit of other ideas, perhaps unique ideas, where other expertise that isn't our expertise, and then very practically, in the education at the educational level. If you are going, if you are studying Spanish, if you are studying Spanish culture, you are going to learn better if there's an immersion in that Spanish culture."* Greg, the executive who travels and maintains collaborative efforts on the ground thought, *"Where I look around the university, and I see what does the university has to offer to the world. What are some of the things that we do really well? And start to* *target those things, and as I'm traveling and talking to my partners, I'm saying, 'What are some other things that do you are, that you are lacking?" "They are about all kind of things. Some of them have been about sharing knowledge and resources."*

In the case of hypotheses or projects that contribute to address such uncertainties, Ben reported, *"A lot of times we sit around with all these colleagues and come up with ideas. You don't know if you are going to get the funding, and you don't know if you are going to get the students. A lot of this is just a leap of faith. You know, it might happen." "If you are doing good work, and if you are working with good people, and coming with really good ideas, and doing things for the right reasons, then all that stuff comes, and it does. I am convinced of that." "I think it brings new ideas, fresh ideas, but it also helps support any of this kind of things."* Lisa reported, *"There is a kernel of an idea that with the help and guidance of administrators can grow into something. So you have the bottom-up interest, that the groundswell of interest from faculty, and a lot of times it's grad students pushing things. It's very interesting…. Sometimes the students lead the faculty to some the new ideas and new ways of doing things…, so the institution has to have a vision of what it wants to accomplish…, so that when the faculty and the people come to you with a good idea, and they are willing to do the work and to dedicate their time, you can put it all together. If you can meet those two you are good." "The web of possibilities coming out of that core…, there's a skill set that I am starting to call this, isn't fancy enough term, we would have to come up with the new term for it, but like … complex vision or complexity…, something that really captures this notion of people who can build programs, have a more complex vision capability, to be constantly like an* *octopus trying to bring in more and feed more and reach out at the same time…. It's kind of the interconnectivity of things the complexity of things."*

People have developed alternative ways to solve problems or come up with opportunities at different places that become innovations at other places (Oliver, 1990). In addition, the combination of different contributions from different places also becomes an innovation for everyone. Ben illustrated this idea: *"Some of them are bringing entirely different schools of thought for me to understand and incorporate into my work, and it is always forcing me to look at things from a completely different angle, which is, I think is nice." "There is people coming to campus here that are bringing the best ideas and the best new practices and experiences and everything else to share to people here, and we go to share them what we have to other places." "And then, try to take the best of ideas from there and use them here, and if they're interested to share the best of ideas, the best practices that we have from here."* Greg, added that, in some cases, *"They need to be thinking about who is the expert in a particular field, and that expert might be in South Africa. That expert might be in Germany. That expert might be in Brazil." "Working with other partners allows us to do that a little bit better than if we were just working with colleagues in the state or just American colleagues. But it gives us a larger pool of expertise that we can all contribute to on the service side of things."* Oliver added, *"So a place like [a known university in Africa] or [a known university in Korea], they may have … some unique perspective on how they're doing. Maybe they are doing something that nobody thought of in the area of global health, or whatever any of the other themes are, and so there definitely is a benefit to the university to partner with them."* Oscar, the faculty member whose specialty is international community and leadership development, said: *"You are always trying to get a whole bunch of people who think differently, who want different things to come together and say, 'Okay, how can we address this together, this problem together, because it's a very complicated problem that requires all our expertise and interest?'"*

As participants in these relations are exploring, experimenting, and learning from each other's contributions, co-learning is their major collective interest and the preferred mean to engage in these types of collaborations (Dacin et al., 2008). Participants might assume different roles at different times, contribute different resources, and defend different interests, but those who have key knowledge or master critical skills are the ones who generally propose projects, convene participants, and assume brokering roles; making it more evident that co-learning is the major collective interest in this type of collaborations. As Ben said, *"We are learning as much from Zambia than they are learning from us. So it is a sharing of knowledge, of research, of ideas, all that." "I might have an idea for doing a project that I think … is complete. And I might have a colleague in … Ireland or wherever that has their idea of a complete project, but when we actually sit down and put them together, it becomes something bigger than the sum of its parts." "So they always come challenging my ideas, and I am challenging theirs. And they are always introducing me to literature and studies and research and methods and things that I wouldn't have ever seen." "I think the best thing to narrow it is the ability to have sharing of research and knowledge and expertise." "I got programs that I use worldwide, but they got to be adapted for each individual culture and things like that." "If I go to sub-Saharan Africa, and they are dealing with poverty or famine or whatever else, I am in the place learning as much as I left, you know.… There's a context, there is* *reasons for things to go on, and we're not there to save places…. We are there to learn from each other, and then share what we got, and them to share what they have, and find our way through these crises we have and everything. That is kind of the way I see a lot of it." "Some of things that I'm completely ashamed of here, you've done very well, and work with you, and say, 'How do I fix them? How do I … take the best practices of what you've learned?'"* Oliver also said: *"Learning from what other schools do well. Trying to incorporate that, and in some cases, what we do well. So we, we improve where we can and we, we forge ahead in those areas, either where nobody's has done it before, or where we are already doing it well."*

Following this line of thought, partnerships are generally intended for exploration purposes (E. Beerkens, 2002; Lane & Lubatkin, 1998; March, 1991). According to Ben, *"If you want to look at this crop that only grows in Brazil, you have to go, you have to go to do your work in Brazil, or if you're looking at, you know, a health zone, if you are looking at malaria or other things, you've to go to sub-Saharan Africa or southeast Asia, you know, places that are heavily influential, so I think that a lot of our funding has to, has like an international dimension to it that distribute to the university."*

Partnerships are based on finding embedded, hidden relations or innovations that once discovered or created offer opportunities to participants as well as a common benefit (Doz et al., 2000; Walker et al., 1997). According to Lisa, *"Here is somebody who has a really good research program in chemical ecology, boy that program could be world renowned if we could find partners for that person around the world to really elevate it to a world-class program." "You still have to have people interested in doing what it is, you know, that are willing to go, and you have to have the finances to keep it going. So, as* *broad and deep as they may get. There are still a very, you know, basic tree underneath to hold it together."* According to Oliver, with other universities, *"We wouldn't ever think of directly partner with, but because they have a strength on this topic, we will all work together on this topic. So … they can be, what we call, thematically, they're driven by a theme rather than by a university to university relationship."* Ben also added, *"They know what they could do locally and what the culture was like." "The unique context of the place, whether it is natural resources or history or whatever else, that they can use for social and economic development and other things."*

Managing partnerships demands a willingness to take risks and manage complexity. It requires assessing opportunities, carrying out experiments, and doing research to support or not to support different initiatives (Williams, 2002). According to Lisa, *"That rational strategic thinking and assessment, that rational strategic thinking comes out of an assessment of what's here…, so it is based on an assessment of the interests, where the resources are, where the potential, and where the enthusiasm is, and then that is all build together in an strategic vision that we can then all stand behind and support and grow programs from it and focus and leverage." "So I approach this as, 'Let's build programs by partnering with people who … have programs to offer.'" "If there's an institutional higher-level interest in beginning and maintain a relationship, that helps with sustainability, and then we follow up with all of our agreements."* Oliver added, *"The growth that we talked about is intangible.… How are you changed when you go? How am I different when I come back? How much have I learned? …. It is more because it is internal change, I mean, it's change in the way people are…, but if you have infected, if you will motivate others that you work with, and your dean or whatever, that* *this is a great idea and this is sustainable. We already see the promise of growth because you've been able to convince others that this is a good idea." "Is this current? Is this, is it appropriate to keep this agreement open? Or should we close it and wait for something to happen?"* Oscar also commented on assessment and research: *"Yeah, you assess the results, and we move on to another thing. Most of our projects fail, and that's okay. We are okay with projects failing, and then we move to other things that are more likely to succeed and then make them succeed. It's a mixed bag, you cannot succeed with everything, but you can try your best to succeed and at everything." "Yeah, you win some, you lose some. It's always the case. You always lose a little bit more than you win, or at least that's true for me, but that's life, you know, you don't dwell on it. You learn from it and then you move on."* Ben also pointed out, *"Probably 90% of what I do, I fail. I submit articles that don't get published. I submit grants that do not get funded.... So I mean to say that, you know, someone didn't pull their way or whatever. You know, we are all busy and things like that.... So I do not see as much as betrayal."* In addition, *"I never had an administrator said to me, 'Don't go to work in that place,' or 'Don't do some kind of work.' They, they always let us kind of run, and they assume that we know what we are doing. But that said, they can really support things."* Kasinsky discussed assessment and research in these terms: *"It's hard to see losses. I don't think people lose with this. It may be that not all partnerships work out, and you might invest some time in something that simply doesn't work, but overall it is, it is positive. Maybe an investment for the future maybe yes, okay."*

Participants in partnerships see collaboration as contributions to solve each other's problems, the proposing of innovations, and interactions that contribute to generate new knowledge (Hui et al., 2008). In this respect, Lisa said: *"A lot of times what happens is faculty and grad students meet each other at academic conferences and generate an idea. And so they're able to, through these meetings, talk about their common interests, come up with their ideas, using technology keep in touch to develop those ideas, etc."* Ben provided comments that support this idea of mutual solution of problems: *"I used to go to a, a special meeting for … our professional societies, and there will be three or four hundred people and not all of them be from the United States. If you go to one in Europe, not all of them be from Europe. Now is it's not all uncommon to see probably a third of the audience in a professional meeting in the U.S., for a U.S. society be of international people, and when I go to meetings in Europe or Asia to have 10% of the audience being from other countries…. It's been, you know, just kind of the way we do business now, too. That is, we do a lot a lot more international comparative kind of things, and we have partners from different parts of the world." "We know the problems, we know the skills or whatever we have. How do we work with the government? How do we work with other universities or agencies? Or how do we work with whoever to make all this fit?"* The various relations presented in these paragraphs can be seen on Figure 4.14.

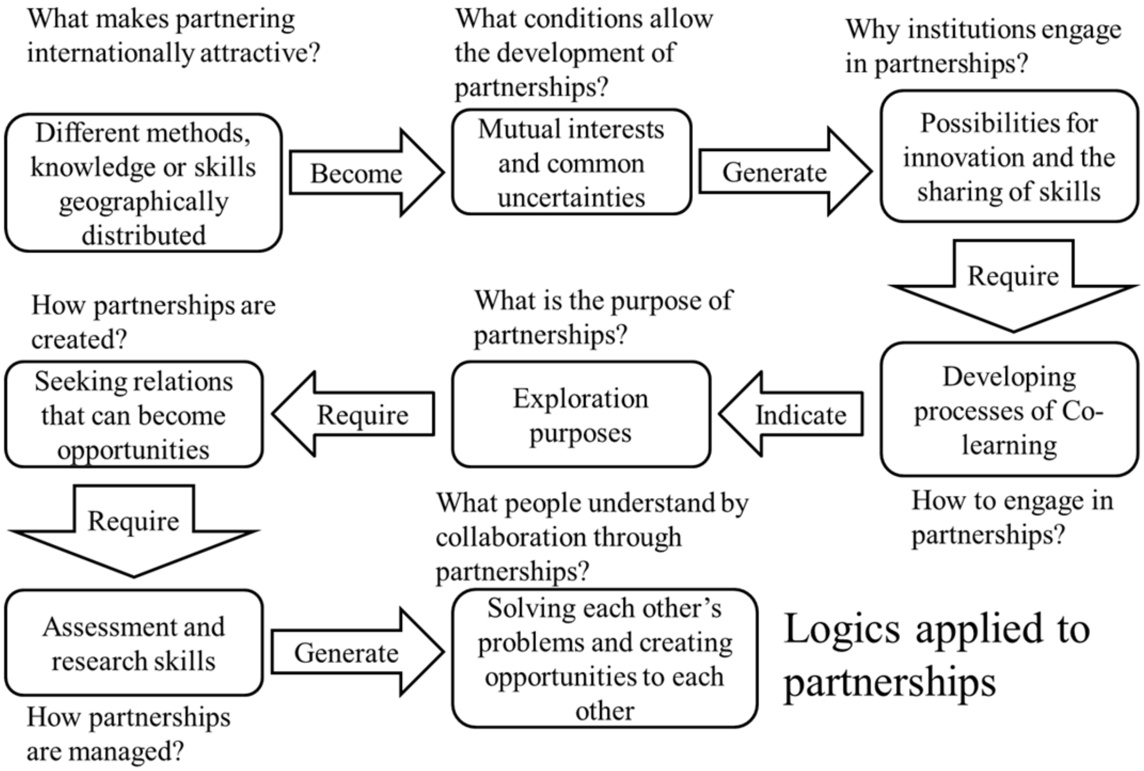

Figure 4.14. Chain of reasoning interrelating challenges applied to relationships of partnerships.

Collaboration as relationships of friendship. Applying the proposed chain of reasoning interrelating challenges \to this type of collaboration demanded pulling additional contributions from the literature as well as the development of a new concept to summarize the conditions necessary to develop these relations: "Affinity". Previous explanations of international collaboration in higher education did not contemplate some of the concepts required to develop this logical argument. As previously noted, people prefer to attribute their decisions to objective motivations. However, in practice many collaborative decisions are driven by the personal values and interests. The application of the chain of reasoning that connects the different concepts that contribute to address this type of collaboration and the quotations from participants that contribute to develop a rich description of relationships of friendships reads like this:

Circumstances and histories at different places led people and organizations to develop different cultures and frames of mind (Hofstede et al., 2010). On this matter, Greg, the executive who travels and maintains collaborative efforts on the ground, asked: *"How is your belief system? And your way of doing things, how do they clash or how are they similar?"* Ben, the faculty member whose specialty is international community and leadership development, added, *"The more we interact with people, the more we realize we have common goals and interests." "I think to place students back and forth between universities, that makes for a better outcome of students."*

Personal commitment, interest in understanding other people's frames of mind, common as well as complementary goals and values, and previous positive experiences contribute to generate affinity (Mattessich et al., 2001). In the case of personal commitment, Ben stated: *"I am more concerned about having really good people to work with. Probably 75% or 80% of the people I work with, they are not just colleagues, they are very, very close friends."*

Ben's interest in understanding other people's frame of mind was noted through statements such as: *"I think the people that like to travel, the people that like to encounter different cultures, the people who like to get out from their comfort zone…, but also people who like people who force them to do even better work than they would do on their own and show them new ideas and engage in good debate. That is going to make everybody better for the processing." "I want to get out and understand why people are acting in a certain way. I want to understand what they are doing and why. I want to be able to tell their story." "They have been really enthusiastic about working with interesting people and interesting people in different places that are very different from* *ourselves. It can be in lots of ways. It can be incredibly different culturally or it can just be in incredibly different schools of thought."*

Common and complementary values was noted in statements such as this observation from Ben: *"I mean, the ones I work with they are a lot better than I am, you know, I think they got good families, they got good kids, they earned the respect of their colleagues."* Greg also suggested, *"I think there is sort of philosophical pieces." "What are some of the priorities that you have? What are some of the things that's on your, your wish list?" "[Andres] and [Kasinsky] travel…. It's exploring. It's trying to see where those philosophies might align."* Oliver, the executive who is responsible for assessment, development, promotion, and negotiation of international agreements, also said: *"One of those things the university looks is, 'Are we dealing with, are we working with a peer institution?'"* Greg made this point even more clear when saying: *"You are trying to identify who are good partners, but also who are appropriate partners…. There are some personalities that just don't fit." "Not because they don't have value, but because it's going to be very difficult for their priorities to align." "So there were different priorities.… I realized that that's not a priority. Then you don't make it a priority. You don't go after the big grant.… In that case, you focus on how could you enhanced their teaching."*

Membership in common communities and connections to trusted members or social capital are conditions that contribute to generate relational capacities (Bordieu, 1986; Coleman, 1988; Oliver, 1990). According to Ben, *"I think that one of the good things I have been able to do is to sort of creating this network of, of friends and students and colleagues and the whole same thing of my book. But, you know, create this network* *of, of people that we can, that we can plug into, that we can get people connect with each other."* Oscar, the faculty member whose specialty is development of international technology-based ventures, added: *"Through kind of partnerships that lead to other partnerships." "And then you would go up to those people, but even then you would almost never cold call somebody…. So then you say, 'Okay how can I, whom do I know that is going to introduce me to this person in the agricultural ministry?'" "I would say clear goals and social network, social, social capital. I am not going to say this is a network, but social assets, you know similar social assets and clear goals, alright, so when I go in, in a university."* Ben gave the example, *"There is amazing work going on in Colombia that is similar to this, but I don't have any contacts there. Then I usually start with the international office to see if there is anyone on campus here who is doing work in Colombia and then reach out to them….. Very often I coordinate within [a multilateral organization] …. They have a presence on every country..., so I use that, those networks now to, to get connected."*

Affinity and relational capabilities allow gaining access to preferential conditions (Mattessich et al., 2001), developing high levels of interaction, securing access to key intermediaries (Bordieu, 1986; Coleman, 1988), and gaining legitimacy to facilitate one's own and others' development as well as to promote or prevent changes (Oliver, 1990). Regarding preferential conditions, Greg said: *"So we do research along with them. Our students are working on the research. But because we're doing research in their parks, they have a, they give us 50% off on accommodation."* Lisa, one of the executives who supports and develops international collaborations in one of the most internationally active colleges, provided another example: *"And now we send students there every* *summer program, and they set it up for us for free, because we are their partner. You know, and it doesn't, so it doesn't, they don't charge us to set up these programs for our students, okay, so we have a long term benefit from two people initially coming together with an idea."*

On high levels of interaction, Ben said: *"I go to their conferences and they go to mine…. I see entirely different ways of doing work that I wouldn't have before."* Lisa added: *"Thank goodness for technology, to help that, to help us continue in these contacts internationally…. So thank goodness for email and Skype and all those tools that we have now … to keep the contact fresh and new things."*

On gaining access to key intermediaries, Ben said: *"Get me connected in to field faster. I spent probably a couple years getting, looking connections and getting established." "I do everything in my power to try and connect them with people that can help them get the job done.... I'll get you plugged in with my old student there or one of my colleagues or whatever…. I will get you connected today with somebody that I know there, and if they couldn't do it, they will help get you connected with somebody that did."*

About gaining legitimacy, Oliver said: *"What we're getting is a tangible … and an intangible benefit that isn't about are the numbers exactly the same going back and forth" "There are other benefits, that maybe are not as tangible, when you do international partnership building and collaborate with other countries."*

On promoting or preventing changes, Oscar said: *"I want to improve the human condition, and I want people to be happier. I want them to have more freedom, to have more liberty. I want them to be happy. So I mean, yeah, I mean there is not a give and* *take."* Lisa also cited a case in which one top executive was trying to promote a program: *"[A university leader] was pushing me very hard to have a partnership with [a university] in Mexico. So it's top down. You know me, I don't like top-down pushes. I thought it is not going to work."*

The driving collective interest for relations of friendship is co-option (Dacin et al., 2008). Participants shape their behaviors and decisions and connect with other people based on their common interests, values, and frames of mind. Friends might assume different roles and informally share information with each other. However, what sustains their relationship is their agreement on common core values as well as the sharing of common interests, such as influencing decision makers. According to Ben, *"I would say it's probably more, more the faculty and, and people doing international work are guiding the process, but guiding it in a very structured way."* Greg also added: *"You could also influence the, their strategic planning and make it a priority for them…. I agree, but that's down the road."* Lisa also said: *"Advocating for people with good ideas and investing in people and programs that would benefit from international partnerships, whether that was in research or teaching programs."* Oliver saw this capacity as the ability to influence students: *"It's not sustainable if students don't go, and students won't go if they don't have a professor that potentially is pushing them saying them, 'This is a great trip, and I am going along. You're gonna, you're gonna experience this, and this, and this while you're there.' That's what makes them sustainable." "I am going to experience that. I want to see how I can embed that and make it a portion of my course."*

Friendships are intended for networking, dealing with good and likeable people in addition to advocating for common purposes, and goals in accordance to one's values and frames of mind (Williams, 2002). According to Lisa, *"There is also a skill set in terms of networking and looking for cross pollination and then feeding that to grow something else. So I think this notion of seeing existing opportunities as breeding ground for new opportunities and looking to grow those, those kind of successful linkages into additional linkages is this, I guess I will call it kind of a networking skill." "A lot of the best ideas actually come from kind of these random connections that happen…. You can actually start mapping out the contacts that are happening in each kind of research area of the world ."* Ben added, *"If we develop a program that can be distributed throughout the entire university or World Bank network." "Some of these places have tremendous local networks. The university is heavily ingrained in many communities throughout the state, many programs and agencies and everything else…. So being able to tap into those networks, I think, is really important."* According to Ben, friendships allow on to get *"connected in to field faster. I spent probably a couple years getting, looking connections and getting established."*

Friendships evolve through time in various planned and unplanned interactions (Doz et al., 2000). In these interactions, people and organizations find other people who share their aspects of identification and differentiation. When relating his story, Ben recalled, *"I started working there probably 20, over 20, years ago, just doing my own research and other things. And the one university there that had a good reputation in my area, the [international university]…. So we start seeing each other at professional meetings. We started exploring ways where we could do complementary studies. We started exploring ways in which we could share students and bring students to each other's places, and then if we are doing all these things, we should have an MOU* *because we are doing research and teaching and outreach…. Those little tiny things build up.”* According to Greg, *“No one or no culture changes before they are ready to change.” “Having a relationship, sustaining a relationship does not mean that you are going to have a product quickly. It means you are thinking about long term. It means you are thinking about what you, what you care about, what I care about, and we are going to work together.” “You need a vision, but you need to keep testing the vision and allow it to evolve…. The master plan will never be perfect. You just need to get it good enough so that you can start for it to evolve, get the other partners involved, see how they respond…. The partners' priorities become important to you then the master plan adjusts.”* In addition, according to Kasinsky, it *“requires investment of time and effort you have to, you have to visit each other. Once you've made some initial connections and things are going you can use the phone, you can use Skype. There are ways of connecting, but without sitting down face to face and sort of exploring ideas and topics and getting to know each other, it is hard to make things happen.”* Lisa said: *“Probably about seven years ago, two professors came to me, friends, and one from [another university], and said we wanted to do a project together, so we looked, they described what it was…. Told them our ideas, we got money. Started this program, the money ran out, but we had so many linkages by that time that ... here's the core project, but there's this new thing, this new thing, this new thing, and so we've kept that partnership going despite the lack of funding. And now we send students there every summer program, and they set it up for us for free, because we are their partner…. If you have a good partnership, you should expect the snowball effect.”* According to Oscar, *“First you build a relationship, and the, if an opportunity comes around, you see if you can leverage* *that." "I do not always think how this is supposed to reciprocate. I just want to know somebody and what they do and if there is a way I can help them because the more people you help, the more of it comes back to you and the more people will help you."* According to Ben, *"I think a lot of places are, just sort of stumbled into doing international work, you know…. I have no intention of doing international work, but I met you, and we became friends, and we did some work. Very rarely, I think, is there a plan for new faculty or even students who want to do international work, is just sort of been. It happens by accident.… I spent a long time getting myself kind of established to do international work."*

Managers of this type of collaboration facilitate and guide each other's activities, connect participants to opportunities and to other trusted participants, and persuade each other according to core values (Cohen et al., 1972). Greg described facilitating and guiding others' activities: *"So a lot of what I do is … as a facilitator, to work with all these different stakeholders around a product, and a product, that product is this, this experience of students going abroad and then the stakeholders serving to enrich that learning environment." "Help the process, help the process along, but that does not necessarily mean that you can't, you can't put all your money, or you can't bet all your money, on a final product because you don't know when that's going to happen."* According to Lisa, *"So probably the third factor was ... success through partnership and facilitating others' success through advocacy and through international partnership development for program growth, so those three, now we have three concepts that play here for success." "So one of the things that by the college investing in this position was able to do is this notion of facilitate…. So we ended up developing what I would like to* *think of as a unique skill sets here in this office to complement what is already available…. So we offer expertise in program development in first, in many ways. One, we are kind of a one-stop shopping." "We have guidebooks of how to put these programs together…, budget preparation, visa issues, risk management, advice in terms of what are the policies? Are there safety concerns? What paperwork do you have to fill out? We can answer all those questions. We can be the point of negotiation for different agreements. So we interface…, have the unique skill set and expertise and knowledge to be able to facilitate."* Oliver added, *"Both in terms of making sure that people are aware that we are here to help them is to serve, so to speak, whether it's an international student, an international scholar, or our university faculty member that wants to go abroad to help with that. And then also to help to make our relationships with international institutions get deeper."*

Persuading each other according to core values was drawn from Oscar: *"We want to understand their needs, their context, what will work, what will not work and do that."* Oliver added: *"What's important to me for my campus, or what's important to you for your campus, so the faculty member that comes to you might sell you, to use that expression, in a different way than he might use to sell me."* Greg said a lot about this topic: *"You're coming into their space, and so they still need to be convinced, or it needs to be explained to them. Why this partnership makes sense how does it benefit them? Who are the people that would be involved? They still need that to be explained to them. They still need time to process that. They still need more of an engagement in order to see it happen before they can fully commit, and that that's how I have seen the relationships kind of function." "Rather than me coming in and saying this is what the university wants* *to do, and this is the way we think you can support it, but being able to come in and have ongoing conversations and figuring out what people value? What our company values? What the university values? What are the things that are the top three things that we want to do? And if we can help to achieve those things, then the relationship will last a lot longer than if you go in, and you have one project and the local entities are in it, but they're not really invested in it."*

On connecting participants to opportunities and to other trusted participants, Oscar said: *"So it's emergent, the more relationships you build the more opportunities emerge from it…. In a way, with a philosophy of engagement that is similar to mine, and I can find more people like them…. I would love to meet somebody in Colombia who was interested in taking a technology and getting it into the hands of small farmers and helping them grow more vegetables make more money." "It's much more about ground resources, contacts, access to people, credibility, very practical things. But a lot of these are opportunities for both sides to gain something. So it's much more of that social capital and opportunities."*

Participants in these relationships see collaboration as having trusted connections or social capital that allows them access to people and opportunities. They also see collaboration as the freedom to expose each other's weaknesses without fearing being taken unethical advantage of, as there is identification with common core values and interests (Camerer & Fehr, 2006). This interpretation was drawn from Ben, who on repeated occasions said: *"I like to work with people I like to work with. I know they are doing good work, that can be trusted, that do that sort of stuff. You know, certainly we are interested in each other, too…. I am doing really good work with these friends of* *mine that I work with, are doing really good work, and, you know the more we can share opportunities and things like that, the better. I really think it is more important, the establishment of networks of good people. The work and the expertise, the recognition and money and everything else, that comes." "I don't think any of us even remotely kept track or cared about who was first author or who was third or whatever…. It's never been a, any formal like reciprocity where we are keeping track of things. There was always an interest to work with each other." "It is always, it is always been good. But that is why I cannot stress enough the idea of working with people you trust, people that, you know, are good people…. I just work with the 1 or 2% or whatever that I believe, based on their behavior, are doing work for the right reasons and that they treat people with respect, that they are good people." "I am just trying more and more to set up, you know, relationships with people I enjoy working with that I know are good people…. The people I do the bulk of my work with are the ones that I would trust them with anything." "One guy that I work with in Ireland, he is another researcher in the field. I work with two of them. If I was to show you their CVs, their resumes, you will be amazed: Hundreds of articles, dozens of books, tens of millions in grants. People who are operating at the top level of everything else. They are the most humble, good-natured people that I could ever imagine. I aspire ever to be as good as them in terms of how they deal with other faculty and other students, with waiters and waitresses, with janitors. They are nice people. They are doing the work because they believe it is important. It contributes to good things, and there is a kind of people that when they get into war, they get embarrassed. That type of person, that they are not holding on to a war, and saying, 'I am wonderful. Acknowledge me because I am great.' And they are certainly not in it for* *the money and that kind of thing. Because, I mean, I can think two or three of this people I work with, they can probably make millions and millions in consulting and everything else. And they rather prefer to be academics, where they get not so much money at all. But the impact of the stuff they are doing, and they, they are doing because it makes an impact worldwide and is doing great things. They are doing it for the right reasons, whereas a lot of people, they are doing it probably for the wrong reasons. They are doing it for their ego. They are doing it for the prestige. They are doing it for their bank account, all kinds of things like that. And they don't care how they do it, as long as it benefits them. And those kind of people, I don't want to work with. I have worked with enough of them in the past and I don't want to work with them. I have one colleague who said for his 50th birthday for himself was that he was not going to work with any assholes. That was his present to himself because our lives and our careers are too short to work with people that are doing things for the wrong reasons and suck out the energy of the rest of us. And I think there is lot to be said about that. I know there is plenty of people that are not nice people and have wonderful resumes and everything else. You know, good for them. Maybe they are better people than I give them credit for. I don't know, I would choose to go with the people right away that are kind of have strong characters and good intentions and what I would say it's just generally kind of good people. And maybe that is just my personal type of thing, but it made me a better scholar, a better person, and is being around and working with them. It certainly give me more knowledge and other stuff. Yeah I think is an important thing."* According to Oscar, *"It really is, is a mutual beneficial relationship always, That's the way I think about it. So it's you and me, you know, as long as there is trust between us, we can help each other, if that trust is* *broken then, it will be like well, let's move on."* The various relations presented in these paragraphs can be seen in Figure 4.15.

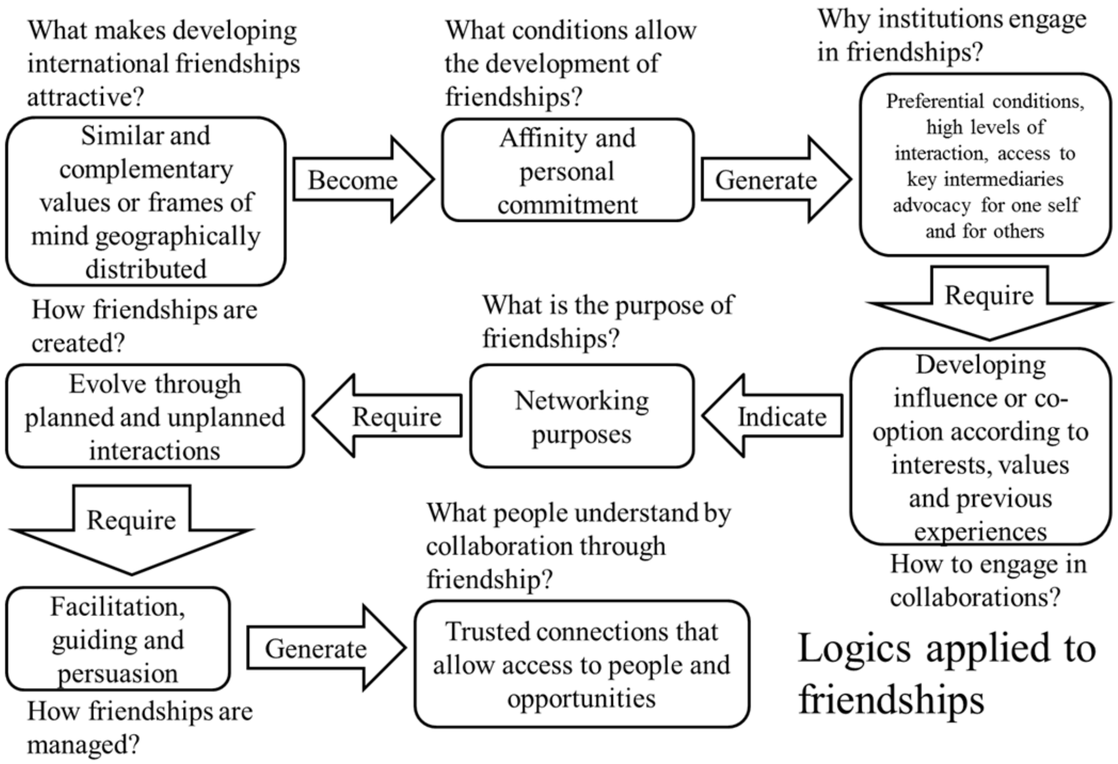

Figure 4.15. Chain of reasoning interrelating challenges applied to relationships of friendship.

The study of the previous three types of collaboration contributed to demonstrate the applicability of the conceptual distribution proposed in Table 4.1. This conceptual distribution allowed pulling various contributions from the literature to build new generalizations, as well as to propose some distinctions that were not available in the literature. This conceptual distribution will be used in addressing the next two research questions.

The application of the chain of reasoning that connects the different challenges on developing collaborations on these three types of collaboration made possible to inter-relate the different concepts. During this process, some segments of data did not connect to a concept in the literature review at a given moment. In such cases, the study needed to bring contributions from other scholars to extend previous conceptualizations. In some other cases, there were no literary sources to complete these conceptualizations, such as with the concept of affinity. The study needed to introduce this concept to point at the conditions that sustain relationships of friendship.

The development of this conceptual framework through the exploration of the international collaborations at a comprehensive research university served to apply the extant literature, extend previous conceptualizations, and develop a chain of reasoning interrelating challenges to explain international collaboration in higher education. Addressing the current research questions was a demanding interactive process. Its results are summarized in Table 4.1. This conceptual distribution made it possible to respond to the next research questions, as well as to propose additional contributions on the field of international collaboration in higher education.

Findings on Research Question 3: Limitations on the Development of International Collaborations in Higher Education

This section considers the third research question: *To what extent can the practices of creating cross-border collaborations in higher education be learned or developed? To what extent do such practices depend upon having or controlling certain critical resources?* The previous section showed the various concepts that can be used to address the different challenges on developing international collaborations in a comprehensive research university. This exercise developed a comprehensive chain of reasoning that explains the development of international collaborations in higher education. The PI had not finished carrying this exercise when he started the third round of interviews, in which he sought participants' thoughts on this third research question.

Interviewees provided different kinds of responses to the questions posed in the third interviews. When the PI was considering the previous research question, the key leads came from distinctions proposed by interviewees. In contrast, for the third research question, interview data did not provide the initial leads. Rather, these leads came from responding the previous research question. Finding a response to the second research question was the turning point on finding the limits on developing international collaborations at a comprehensive research university: The different types of collaboration are limited by the conditions that support them. The concepts that contribute to addressing the challenge of finding the conditions that allow collaboration also indicate the limits on developing collaborations when these conditions are no longer available.

The aim of this current section is to explore more deeply the conditions for or limitations on establishing different types of international collaboration in higher education. The study of such limitations not only allows an institution to assess its own capabilities for developing international collaboration, but it contributes to the identification of the interrelations among the different types of collaboration that allow partners to bridge or overcome these limitations.

Determining the limitations on developing international collaborations in higher education allows finding the extent to which the development of collaborations can be learned, the extent at which international collaborations depend on controlling resources, and the extent to which collaborations depend on the interests, cultures, and values of participants and their institutions. It also generated an understanding of the different interrelations among the three proposed types of collaboration. This understanding facilitates the development of collaborations according to the own capacities to do research and find opportunities, according to the own control of resources, to establish client-provider relations as well as to develop friendships according to the own interests, culture, and values.

The guiding research question for this section was proposed before having distinguished the three different types of collaborative relations: clients, partners, and friends. According to this distinction, collaboration depends on the capacity to generate new knowledge, find opportunities, and learn from others in the case of partnerships. Collaboration also depends on self-specialization and control of resources in the case of client-provider relationships. Moreover, collaboration depends on co-option or influence on others' decisions according to one's own values. Personal relations and one's own value system are important influences for changing the decisions of others. These decisions allow the creation of relations and, in some cases, gaining preferential conditions for developing collaborations. Therefore, the extent of the influence of values and personal connections should also be taken into account when studying collaboration.

If we consider the influence of values and personal connections, the whole third research questions should ask: *To what extent can the practices of creating cross-border collaborations in higher education be learned or developed? To what extent do such practices depend upon having or controlling certain critical resources? And finally, to what extent the development of collaborations in higher education depend on the own culture and values?* As previously noted, each one of the three aspects of this question is related to different types of collaboration. Therefore, developing client-provider relationships without controlling critical resources is not possible. Quoting the interviewees, Oliver, the executive who is responsible for assessment, development, promotion, and negotiation of international activities, said, *"In some cases, we know we're looking for reciprocity, and it is not sustainable if we don't. It depends on the type of agreement."* In the same vein, developing partnerships without research and the finding of opportunities is also unfeasible. As Lisa, one of the executives who supports and develops international collaborations in one of the most internationally active colleges, said, *"When the faculty and the people come to you with a good idea, and they are willing to do the work and to dedicate their time, you can put it all together. If you can meet those two, you are good…. If you have this, if he had this without this, it's not good. If you have this without this, it is not going to happen. There will never be anything if it's, if it's, just one or the other."* Finally, developing friendships without having an agreement on core values is also unlikely. Greg, the executive who travels and maintains collaborative efforts on the ground, said, *"You are trying to identify who are good partners but also who are appropriate partners…. There are some personalities that just don't fit." "Not because they don't have value, but because it's going to be very difficult for their priorities to align." "So there were different priorities."* In addition to the influence of each of these aspects on one specific type of collaboration, these aspects also influence across the other types of collaboration. The next paragraphs include an assessment of the impact of learning, control of critical resources, and personal interests and values on the development of all types of collaboration.

Skills, knowledge, or research needed to manage collaborations. Learning has its own merit independently from the type of collaboration in the sense that all collaborations are benefitted by mastering their specific set of skills. Drawing from the concepts used to address the challenge of management of collaborations, the management of each type of collaboration has its own set of skills that can be learned, practiced, and mastered. There are three distinct sets of skills necessary to manage collaborations. First, managers of friendship collaborations facilitate and guide each other's activities, connect participants to opportunities and to other trusted participants, and persuade each other according to core values. Second, the goal for collaboration managers in client-provider relations is to envision the processes by which participants can increase the generation of value as well as to develop such processes in practice. Finally, managing partnerships demands a willingness to take risks and manage complexity. It requires assessing opportunities carry out experiments and do research to find opportunities and support or not support different explorations that might lead to future exploitation initiatives.

According to Lisa, one of the executives who supports and develops international collaborations in one of the most internationally active colleges, *"We ended up developing what I would like to think of as a unique skill set here in this office to complement what is already available…. So we offer expertise in program development … in many ways. One, we are kind of a one-stop shopping." "We have guidebooks of how to put these programs together…, budget preparation, visa issues, risk management, advice in terms of what are the policies? Are there safety concerns? What paperwork do you have to fill out? We can answer all those questions. We can be the point of negotiation for different agreements. So we interface…. have the unique skill set and* *expertise and knowledge to be able to facilitate."* These skills can be studied, learned, and mastered for the development of the different types of collaboration.

In some cases, however, the impact of such learning is limited to improving, rather than developing, collaborations. Client-provider relationships and friendships can benefit from the exercise of certain skills, but client-provider relationships are still dependent on controlling demanded resources. According to Oliver, the executive who is responsible for assessment, development, promotion, and negotiation of international activities, *"For that to happen of course, for the most part, particularly if you are involving students, and that involves credits, that's when you need to start to put together some kind of agreement..., where you lay out how things are paid for."* Relationships of friendship could also be facilitated through the exercise of certain people's skills, but true friendships are still dependent on agreement on core values. According to Greg, the executive who travels and maintains collaborative efforts on the ground, it is necessary to answer such questions as: *"Figuring out what people value? What our company values? What the university values? What are the things that are the top three things that we want to do? And if we can help to achieve those things, then the relationship will last a lot longer than if you go in and you have one project and the local entities are in it, but they're not really invested in it."* Jacky, the executive who supports the logistics of international collaborative activities added: *"We are not going to partner with an institution, not matter how different they are, if they don't share our fundamental values of, you know, of you know, academic freedom for the faculty, of you know."* Regarding the role of personal values in the case of friendships, Greg remarked, *"There are some personalities that just don't fit."*

According to these data, the control of critical resources and the agreement on core values are aspects that cannot be learned. In the case of client-provider relationships, these capacities depend on economic transactions. According to Oliver, *"In some cases, we know we're looking for reciprocity, and it is not sustainable if we don't. It depends on the type of agreement."*

Conditions or resources necessary to develop the different types of collaboration. Resources also have their own merit independent from the type of collaboration in the sense that all collaborations depend on certain conditions or resources that allow their development. Drawing from the answer to the second research question on finding the conditions that allow collaboration, there are three groups of conditions that allow collaboration. First, mutual affinity and relational capabilities must be generated through such conditions as personal commitment, interest in understanding other peoples' frames of mind, common as well as complementary goals, values, previous positive experiences, membership in common communities, and connections to trusted members or social capital. Second, a clear vision of how to create benefits and control critical resources, as well as common perspectives of power and value, allow transactions to be developed. Third, cognitive distances, diversity in approaches to addressing common and complementary problems, teaching and learning abilities, hypotheses on the solution of problems, the creation of new opportunities, and structural and power differences motivate mutual exploration, experimentation, and learning.

In some cases, however, the impact of acquiring such conditions is limited to enabling rather than developing collaborations. Partnerships and friendships can be enabled by having certain conditions that allow their development, such as research facilities and training in the case of partnerships or membership in common communities in the case of friendships. Research can be enabled by having facilities or getting training, but finding opportunities for partnering depends on participants' own cleverness to assess available opportunities and do research. According to Lisa, one of the executives who supports and develops international collaborations in one of the most internationally active colleges, *"I joked about looking trying to do some research on to, maybe kind of test of how different people think and really try to capture what I think it is a difference between a successful program developer, a successful person in terms of developing programs, for assessing the successful. And it is something that really can happen, to be able to see new.… It is almost like new neural networks going out and bringing more in to grow something vs. a very linear approach to project development and program development. So I will be curious if you interview other people to talk about what it is that makes one individual successful at leading offices and programs vs., you know, things that don't necessarily go off the ground because they miss opportunities to make connections. It's kind of the interconnectivity of things, the complexity of things, if this neural network of programming."* Friendships can be enabled by having a membership in common communities, but if one does not engage in interactions that lead to personal connections and finding peers with common sets of interests and values, then having common memberships does not lead to developing relationships of friendship. According to Ben, the faculty member whose specialty is international community and leadership development, it takes time: *"I spent a long time getting myself kind of established to do international work. And that was probably a lot of time that was wasted. There could have been structures in place that I could, you know. Ease your… going and knock into* *an office that helps to facilitate this and helped, you know, get me connected into field faster. I spent probably a couple years getting, looking connections and getting established. Once that was in place, it's sort of a snowball effect from there. But you know, I could have saved a lot of time and, and I was actually lucky enough to do it. It worked out well, I know a lot people that they spent 10 years going to conferences and trying to find a way to connect in and [it didn't work for them]*." Cleverness and values cannot be bought. One can get training or equipment, but intelligence seems to be an innate characteristic. Similarly, one can pay memberships to organizations or clubs, but finding friends also seems to depend on personal characteristics and, often times, serendipity.

Values and personal relations. Values and personal relations also have their own merit independent from the types of collaboration in the sense that all collaborations depend or are assessed in accordance to higher-order values that allow the generation of mutual dependencies. According to the answer to the second research question on addressing the challenge of finding what collaboration means to different participants, there are three complementary definitions of collaboration that are related to a specific set of values. First, participants in relationships of friendship see collaboration as having trusted connections or social capital that allows them access to people and opportunities. They also see collaboration as the freedom to expose each other's weaknesses without fearing being taken unethical advantage as there is identification on common core values and interests. Second, participants in client-provider relations see collaboration as the ongoing interaction of coordination and competition among participants in a chain of value in order to increase price-benefit correlations. Third, participants in partnerships see collaboration as contributions to solve each other's problems, propose innovations, and create interactions to generate new knowledge.

According to Oliver, the executive who is responsible for assessment, development, promotion, and negotiation of international activities, in some cases, the use or resources or the finding of opportunities is dependent or limited upon the applicability of higher-order values: *"Frankly, are our own laws compatible? We'd, we'd deal with the federal government in who can we work with. Who can we work with? Are we dealing with technology that might be considered if not secret, it's not the kind of technology that we give to certain countries because our, our government says you can't deal with those countries. So the, those obstacles can be governmental, they can be financial.… Even though we like the idea of working with such and such university, whatever it is, maybe their goals and our goals are just different enough that we can't get them to mesh. We can't get them to work together. We have a piece of the puzzle, to go back to the examples used before, and they have a piece of the puzzle but right now those pieces don't seem to fit."*

Client-provider relationships are assessed according to generation of profits, but the making of profits must meet ethical, legal, and political standards. Not everything that contributes to make profits is ethical, legal, moral, or politically appropriate, such as sensitive or harmful technologies. In the same fashion, partnerships are assessed according to the generation of innovations and opportunities, but innovations and opportunities must also meet ethical, legal, and political standards. In this respect, Ben, the faculty member whose specialty is international community and leadership development, said, *"There are people who have reputations for, you know, for, for* *having their grad students write papers, and they go in as the main authors. Not the grad students. Those people have reputations for being egomaniacs or people that have, you know, proven reputations for just not being nice people. They mistreat staff and students and things like that… And I personally just, I don't know, I don't have any tolerance for that kind of thing. So I just, I made the decision to not work with people like that, you know, I am not hostile toward them or something like that, but when an opportunity comes to write an article or a grant or to develop a project, I wouldn't invite them to be part of my efforts."* Innovations are also judged in accordance to the contribution to people's improvement. Being trusted, meeting ethical, legal, political, and even disciplinary standards certainly facilitates economic transactions and the development of research collaborations.

It appears that there is a cross-influence of the different types of collaborations. Learning and research are required to develop partnerships, but they also contribute to the development of friendships and client-provider relationships. The control of critical resources is required to develop client-provider relationships, although resources also contribute on the development of partnerships and friendships. Common interest and agreement on common values are necessary to develop relationships of friendship, but they also contribute to the development of partnerships and client-provider relationships. These inter-relationships are depicted in the logic model presented in Figure 4.16.

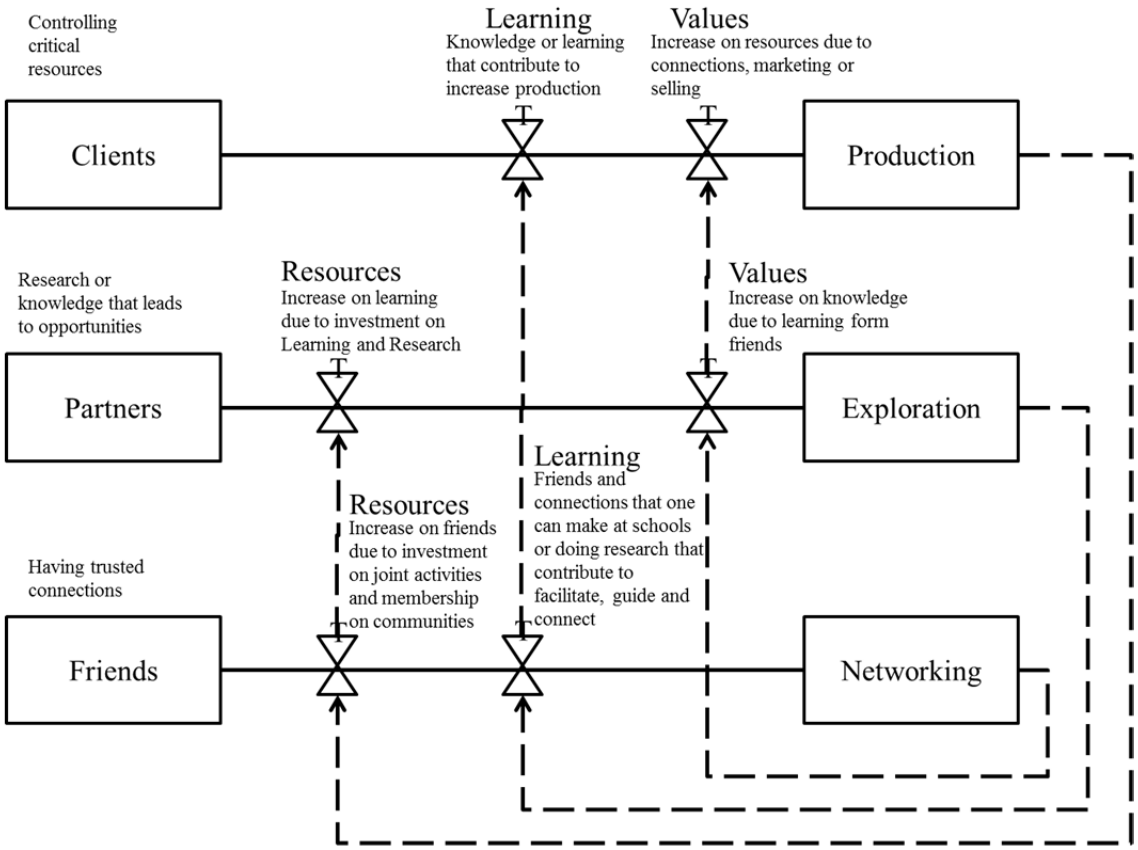

Figure 4.16. Influences on the development of the different types of collaboration and interrelations among different types of collaboration.

The answer to the third research question clearly indicated the extent and limitations on developing collaborations. However, it also indirectly showed the opportunities and possibilities for developing collaborations. It showed the independent influence of learning, controlling resources, and having agreement on interests and values on the development of all types of collaborations. It also showed that such aspects have a higher impact on the collaborations on some disciplines than in other disciplines. The fourth question, discussed next, explored the issue of learning to collaborate, bearing in mind the available possibilities and limitations on developing international collaborations in higher education.

Findings on Research Question 4: Learning to Develop International Collaborations in Higher Education

This section responds to the fourth research question: *How can the competencies of creating cross-border partnerships be learned or developed?* Beyond the finding of theoretical connotations of collaborations in higher education presented in previous sections, this section is focused on the practice of developing collaborations. The first section of the findings proposed a comprehensive explanation, showcasing a rationale that explains the development of international collaborations at a comprehensive research university. This rationale resulted from integrating various independent contributions from the literature as well as from analyzing the international collaborations at a comprehensive research university. The second section of the findings identified the limitations on developing international collaborations. This third section of the findings shares the experience of participants who developed collaborations at a comprehensive research institution.

In exploring this fourth research question, the PI initially perceived that this response would be presented as a list of independent recommendations from participants. However, the PI later found that these recommendations could be grouped around the three previously proposed types of collaboration. Moreover, the PI found that learning to collaborate was to a high degree about acquiring the skills necessary to manage the three different types of collaborative relations. The PI found, when responding to the second research question, that the concepts used to address the challenge of how to manage collaborations were also found on responding to this research question. Therefore, these learnings will be framed according to the three types of collaboration and according to the skills needed to manage these three types of collaborations as proposed in the first section of the findings.

Learning to collaborate from a client-provider perspective. Learning from the client-provider perspective implies learning to exert control over critical resources to promote international collaborations and their desired outcomes. As Kasinsky, the executive who participates in the overall strategic planning of international activities, said: *"There's always more possibilities, and so the challenge always becomes: How do you get the people in those areas involved in doing it, which almost always becomes a resource issue?"* This control of resources can take the form of inducements in some cases or the form of demands in other cases.

The critical resources that can promote international collaborations include faculty time, travel funding, student placements, faculty promotion, research funding, administrative support, and curriculum requirements. Faculty members can be given time and funding to develop international collaborations to travel, to invite partners from abroad, or to develop internationalization activities. As Oliver, the executive who is responsible for assessment, development, promotion, and negotiation, of international activities said: *"The biggest resource in terms of ... collaboration is the faculty member, in my opinion. And since the faculty member has time constraints. You are the faculty member. You still have to teach your class, you still have to make sure that other things are are graded appropriately, that your curriculum is up to date. So what is the value of the collaboration to you as a faculty member? The international collaboration, is it valuable enough for you to take your critical time?"* Programs, projects, or even faculty members can be given student placements to support student exchanges or visiting scholars to support collaborations.

Faculty promotions can be substantially conditioned on the development of international activities. As Ben, the faculty member whose specialty is international community and leadership development, said: *"In terms of incentives, I kind of see two sides to that. I mean I think I think we can start giving more credit and more acknowledgment to faculty members, you know, when they are going for promotion and tenure, and it's already in there, but it is also sort of doesn't have a lot of weight behind it. So, you know, the hundred points save for your packet or your dossier will be evaluated on maybe having international experiences maybe ten points."*

Funding for research could also be connected to the development of collaborations or activities abroad. For example, Kasinsky said: *"It was forcing earth and mineral sciences to collaborate with engineering, to collaborate with liberal arts. Not that somebody forced those, but the fact that you have those institutes forced those collaborations to occur because the university took resources and put them in to those institutes. And the only way that colleges could get those resources was because they collaborate."*

International experiences such as service learning or international research could be included in the curriculum of some programs. As Oliver explained, *"It's not sustainable if students don't go, and students won't go if they don't have a professor that potentially is pushing them saying them, 'This is a great trip, and I am going along. you're gonna, you're gonna experience this, and this, and this while you're there.' That's* *what makes them sustainable."* Finally,, institutions can hire staff members to support professors in the development of their international activities.

In addition to all the previously mentioned instruments to develop international collaborations, there are some considerations that institutions need to make about resources when developing their international collaborations. One is the issue of co-specialization. There are educational activities that can be outsourced to collaborators abroad. However, there are other educational activities of which it is better for colleges and universities to retain control retain. As Oliver explained: *"I think one of the struggles for a larger university is letting go, is giving control away, realizing that we're not the big brother all the time."* On the other hand, *"Jealous of. Thank you, good word. That's something the university is very jealous of because we set a certain standard for ourselves. I'm not saying others schools don't meet that standard—that's not the point—but because we can't know that, we're very jealous of saying, 'You got our university degree. You've gotten it because you're being taught by our university professor.'"*

Another aspect is the development of efficient administrative scales for collaborations. It is better to have multiple collaborations with few institutions than to have little collaboration with multiple institutions. Increasing the number of collaborating institutions increases the administrative work load and makes tracking collaborations difficult. Kansinsky said: *"That's a question of scale. If, if we go back a few years before we started to try to build strategic relationships, before the university started to develop strategic relationships, most of the international relationships were between individual faculty maybe between a department and another department, but they all were sort of very focused. And I think those will happen, regardless…. So at that scale, I think there* *aren't barriers. Faculty will make things happen. As soon as you try to move it up above that and start to talk about institutional relationships that are built around a particular project, a faculty research project, then you become very limited by resources. It is very hard to build those relationships if you don't have some funding to encourage faculty to do something that they are not already doing."*

Learning to collaborate from a partnership perspective. Learning to collaborate from a partnership perspective is about finding opportunities that contribute to develop collaborations and achieve their desired outcomes. This finding of opportunities stems from evaluating promising visions, hypotheses, or ideas on international collaboration. Faculty members are generally those who propose visions, ideas, or hypotheses for the development of international collaboration and harness their benefits. Ben, the faculty member whose specialty is international community and leadership development, clearly stated, *"I would say it's probably more, more the faculty and, and people doing international work are guiding the process. But guiding it in a very structured way."* Jacky, the executive who supports the logistics of international collaborative activities, also said, *"For our institution, the vision tends to come from the faculty. I would say that would be the number one. And then behind that would be student interests. And then behind that would be administrative. But we tend to faculty are the drivers of the collaborations."* Andres, one of the executives who supports and develops international collaborations at one of the most internationally active colleges, said, *"Faculty members, generally speaking, my experience, they like to be in the driver's seat. Okay, they don't want to be driven. They want to be in the driver's seat. So that is a difference…. It has to be something that the faculty really want to do. Otherwise, it is not* *going to work."* However, executives, administrators, and even students also contribute to propose such initiatives. Executives and leaders also propose visions of collaboration. As Kasinsky, the executive who participates in the overall strategic planning of international activities, said, *"If you take those groups and say, 'Look, if these two groups can get together not only with research, not only we will advance knowledge in some way, but we will do it dramatically right that this will take us to a whole new level that neither group is thinking about right now.'"*

The execution and assessment of such initiatives is in some cases straightforward and objective, allowing the learning to collaborate by trial and error. Some exploration of hypotheses or ideas for collaboration is straightforward. As Greg, the executive who travels and maintains collaborative efforts on the ground, said, *"How I learned to do it is simply trial and error, right. It's been trial and error, and it's been trial and error, and it's because I have a good mentor in my director, [Kasinsky], in being able to share his experiences about these relationships as well. So those are the two main ways in how to develop collaborations."* Kasinsky added, *"The global network for health was an experiment. We didn't know if that was going to work."*

The assessment of other collaborations, however, is subjective or takes a long time. Such characteristics greatly limit the assessment of such initiatives. Such uncertainties also call for more or alternative methods of research. Kasinsky also said about other engagements, *"It's a theory, for what it is is something that shapes the way I want faculty to think about these partnerships. So what I'm saying for these things is: You know, we got this global health, we're going to do another one of these thematic networks in STEM education, global STEM education. We will probably do another big* *one in materials and humanitarian use of materials, and so what I'm saying with all of these groups is what we want is our collaboration to lead to projects that you need a network to do them. So not something that we could do on our own or with one single partner, you need a global network to make this happen."* For other ideas or hypotheses, their evaluation is subjective or requires a long time for their assessment. Kasinsky, when asked about measures of human capital said: *"It's a good question. I like the way you are phrasing it and would like to see that model work. I think the hardest thing is to come up with good metrics for what these things mean so you can measure the change and at the institutional level with global partnerships. I think is hard to think about how you measure some. This one is so easy because it's resources. There is an input and an output. The others, I think it's much harder to have a measure of the capital that you have gained."*

Learning to collaborate from a friendship perspective. Learning to collaborate from a friendship perspective implies managing personal connections to exert influence. As Kasinsky, the executive who centralizes the strategic planning of international activities, said: *"So we weren't controlling what they did. But the partnership influenced the way they developed internally as well."* This ability has three dimensions: persuasion, guiding, and networking. Persuasion requires making internationalization activities and international collaboration appealing and even fun. As Oliver, the executive who is responsible for assessment, development, promotion, and negotiation of international activities, said about his functions: *"Advertising for lack of a better term, what's available to do. If you're a faculty member that doesn't have a connection internationally and you'd like to get one.... What's going on? How do I do that? You need a resource.*

And that's what we want to be here in this office. A resource for that faculty member to say: 'I teach... I don't know, I teach solar. Who do I connect with? Who... Are we doing solar research or do we have a solar connection with anybody internationally?' This office needs to be that resource to be able to connect a university faculty member with someone there. So promotion in that sense he is making a faculty member aware of what the possibilities are." "Part of our idea is to have a database in some kind of format that would allow either the faculty member themselves to search or us to search for someone either shares an interest in a location or a subject to our discipline or whatever."

Guiding requires being or becoming knowledgeable to provide reliable information. As Kasinsky said, *"In my case, I was doing it primarily with [Andres], and he has more experience of it than me, so I was using his experience to learn how to do it."* Oliver added, *"We recommend that the faculty member who has done that travel and have those relationships to take with them a faculty member that doesn't have that experience or those connections. Kind of a mentoring relationship."* Ben, the faculty member whose specialty is international community and leadership development ,also said, *"Yeah, they should help you get funding for travel, you know, help you establish linkages between universities, that kind of thing, sure. And the university does a very good job on that."*

The third and maybe the most important and difficult dimension is networking, which is the ability to gain trust and connect different participants thanks to the trust that has been endowed to oneself. This ability embraces the previous two and allows participants to mentor faculty, students, and administrators who are interested in developing those international collaborative activities. As Ben explained about developing international collaborations, *"We have been colleagues of long time, we like working with each other. So it's a, it's a personal relationship. It's profitable for both of us. It's fun for both of us, and it's easy for both of us. It doesn't, it doesn't take any resources as such, right, we just work together." "But you know create this network of, of people that we can, that we can plug into, that we can get people connect with each other, that's, that's done awful a lot and networks too, is just you know. It's very flexible types of things where five years from now you have an idea for a project, and there is some funding out there, and you can pick up the phone and call me, and we will collaborate or you can bring students here, I will bring students there. You know, I think kind of looking at very interdisciplinary type ways of doing work…. It can be teaching, it can be research. Any one of these leads to the other step."*

Collaboration from a friendship perspective can also be supported by sharing membership in particular communities. As Oscar, the faculty member whose specialty is development of international technology-based ventures, said, *"Yeah, that gives you a reason to connect. That gives you a way to connect. But is that, is that the only reason why you meet somebody? No, it has to be beyond that. That can give your foot on the door." "Those networks and how I interact with those networks, how I am perceived in those networks is as important to me as how I am perceived here at the university, right. The university gives me a floor, gives me a platform to work on these things, but ultimately I am not going to do all these things with the university. I am going to do all these things with other similar entities in these places, and that is where these conferences help you build that network."*

Finally, it is difficult to find out all the problems and nuances of developing a collaboration in advance of the actual collaboration. Participants in collaborations in many cases, therefore, have to rely on trust. As Kasinsky said, *"With the people we have been working with, we had enough trust that we're willing to go that way and work out the details as we go along."*

Additional Findings: Compartmentalization of Collaborative Relations

This section explores the advantages and disadvantages that generated the findings proposed in the previous sections of this chapter This section does not respond to a research question. However, when interviewees where shown the analysis derived from addressing the research questions during the third and fourth interviews, they provided feedback that warrants the validity of the findings. The remaining sections of this findings chapter offer additional contributions from the study beyond the scope of the original research questions.

When interviewees were asked about the proposed theory of collaboration and the three frameworks of collaboration, they provided comments that justify it and give them practical application. Some of them saw the value of the theory and the framework as it allows for compartmentalization of relations. Some others saw the value of the framework as it allows integrating, mixing, and repurposing of relations. This section focuses on the compartmentalization of relations. The repurposing of relations is examined in the fifth section of this chapter.

Compartmentalization. The three proposed types of relations can be separated from each other. This situation can be assumed as these types of collaboration seem to depend on different conditions and in some cases require different approaches. Some collaborations have the purpose of generating resources, others have the purpose of generating research, and still others are designed to generate connections and enjoyment. This section presents the neutral, positive, and negative connotations of compartmentalizing collaborative relations. The fifth section presents advantages of integrating, mixing, and repurposing different types of collaborative relations.

Neutral comments. Neutral comments support the theoretical model in a value-free fashion. They do not advocate for any type of relations or for any type of action based on that framework. They just demonstrate and/or discuss the validity of the theoretical model. These comments are divided in five groups. Ben, the faculty member whose specialty is international community and leadership development, saw the model as a *"very cool way in which you break it down, those three areas, I like it a lot."* Lisa, one of the executives who supports and develops international collaborations in one of the most internationally active colleges, said, *"I think this is a good classification."* Kasinsky, the executive who participates in the overall strategic planning of international activities, said, *"Yeah, I think that. I like the structure and framework you've got, and I like the interactions because I think they are real…, all possible paths to take."*

These three types happen because there are different streams of funding. According to Lisa they happen because *"in some, sense even though the person is very responsible,i t should be a two way. It just still feels very one way, unidimensional. Where the other project that I talked about is multidimensional, and maybe because it's not money dependent. Whereas the contract is money dependent, you get a different feeling with it in terms of commitment and partnership."* People and organizations can distinguish their collaborative relations. According to Ben, *"Some people are very very* *clear, like that they draw very clear lines of where their life exists. And like I know people that in my department here and across campus that probably work together more than any, you know, like, they work together, you know, on everything, and that said at five o'clock at the end of the day, you know, they won't email to each other at night. They won't go to dinner or drinks together, it's just, we are incredibly, incredibly deep working relationships but outside of work, no contact."* Relations can be distinguished, but often blend. According to Oliver, the executive who is responsible for assessment, development, promotion and negotiation of international activities, *"I don't disagree with your classification, because I do see those classifications. I do see the distinct perhaps motivations for what we're doing or a distinct difference in our relationships in some instance one higher than the other. In others we are very, somewhat very equal and in some others it doesn't matter whether we are equal or higher because we are doing kind of a different goal. I do, I agree with you. I just ... I think that there is probably some blend over in every instance."*

Some people just know what they want to get out of a relationship. According to Oscar, the faculty member whose specialty is development of international technology-based ventures, *"Other already knows what kind of things you are looking for. Because one thing I have learned is that there are people who spent like forever trying to like, you know, develop some collaboration they have no clue of what they want out of it and in that case it is a waste of everybody's time. So I want to be clear about what the goals are from day one. And not beat around the bush too much."*

Comments in favor of compartmentalization. These comments, as opposed to the previous ones, are charged with value judgment. These comments demonstrate how the compartmentalization of relations allows preventing negative or undermining effects from some relations into the other relations. The comments also demonstrate how making distinctions, differentiations, and separations clarifies efforts, commitments, and expectations.

The comments in favor of compartmentalization can be divided into six groups. Some participants were in favor of compartmentalizing relations among organizations because there are relations that organizations want and other relations that organizations don't want at a given moment. Ben, the faculty member whose specialty is international community and leadership development, said, *"I can think of a few people that I absolutely, that I respect, that I like their work, I think great things of them, I like them as people, I would love to go, and I do go eat and drink with them and everything else, but I never work with them, you know, they will drive me, personality wise, they would drive me crazy, like we just couldn't work together, so certainly it goes that way too."*

Other organizations are so big and so standardized that do not allow developing other types of relationships. According to Greg, the executive who travels and maintains collaborative efforts on the ground, *"Avis doesn't have a friendship with anyone because Avis is a public company. Their rules are worldwide or countrywide…. So they don't care why…. They don't care that I'm renting it to do education, they don't, they don't care."*

In some cases, there might be conflicts of interest or a high probability of problems in one of the relations so relations need to be compartmentalized. According to Oscar, the faculty member whose specialty is development of international technology-based ventures, *"When you can't compartmentalize it very well and something bad happens, you fall out of favor on the personal and the professional network, and that's* *how, that's how you, that is how poverty traps happen … because there has to be a vicious cycle."*

Due to the nature of a given activity, some collaborative relations are directed to many, and some other collaborative relations are directed to few, so you need to compartmentalize them. According to Jacky, the executive who supports the logistics of international collaborative activities, *"You can't just have one type of collaboration. You have to have both. You have to have those that ... I would say the individualistic collaborations where you have two researchers coming together, or you have two academic departments. We have a ton of those. We have 230 of those. But if you want to be multi-layered, you have to be more strategic about who you are selecting. And so we actually utilize the faculty members here at the university to come together and find us institutions that multiple academic departments and colleges could partner with. And that's where the GCN network is. So yeah, you need to have both. That is the thing."*

Compartmentalization of relations prevents confusion in approaches, commitments, and expectations. According to Lisa, one of the executives who supports and develops international collaborations at one of the most internationally active colleges, *"In terms of those types of partnerships, I think it's really important to have the clear objectives and a good framework at the beginning and understanding for the use of the money and the expectations for the outcomes … because on not so much on the U.S. government side, because it has a very clear process of putting a proposal together describing what you're going to do, developing a time line and a budget. We run into the problems, in my view, is when it's a private donor. Who says, 'Oh, here's a $100 million* *to go work to build this thing in Rwanda. You don't have very clear expectations. That's when you get into trouble, in my view."*

Finally, compartmentalization allows attending different interests with different approaches. According to Kasisnky, the executive who participates in the overall strategic planning of international activities, *"If we think of [a specific program], it does both. It does research and it does student stuff, education, but actually in two different locations, in a sense. So right now a lot of the collaborative research … is happening around energy and alternative energy sources, renewable energy. But we have a completely separate relationship with them that is through the honors college. So we have an exchange base, they are set up a similar sorts of structures, not quite same as our honors college. But there's a group of students who are equivalent to our honors students, and we have an exchange program between those two groups. So it's still the same university and is doing research on the one hand and teaching on the other, but it is different programs doing the research and teaching."*

Comments against the compartmentalization of relations. These comments demonstrate participant disagreement with compartmentalizing relations. The mixing, repurposing, and integration of collaborative relations generate synergies as opposed to undermining, as proposed by the previous section. The following groups of comments demonstrate this position. This is a qualitative study, but it is worth noticing that the number of comments referring to synergies was almost twice the number of comments mentioning undermining. The comments against the compartmentalization of relations are grouped around the following four themes: over-regulating and over-compartmentalizing relations in higher education destroys spontaneity, creativity, and learning.

Ben, the faculty member whose specialty is international community and leadership development clearly said, *"I'm always very worried about people that have too much structure, you know. And like if this is to be a learning environment, if is to be a place where we actually share and grow knowledge, very strict rules can't, you know, it defeats the purpose of it. And and I think you know, treating students as clients, where I am just going to present information to you, have no interaction with you that doesn't help them learn. And for the students who just say this is, you know, 'I paid good money, give me the degree that doesn't give them any knowledge,' you know, I mean maybe, but is not probably by accident that it does. Or, 'Give me all As because I paid a tuition.' I just don't think that any of that client type stuff works."*

Greg, the executive who travels and maintains collaborative efforts on the ground, says that staying in one single relation does not allow adaptations according to changing conditions: *"The inefficiencies always seem to be more prevalent if you stay in one of these sections alone. Like if you if you only have a client relationship over a period of time, then it will degrade. It's never, I don't, I've never seen it stay the same because other things change. So even though you are doing the same thing, other things change, maybe a company gets bought by another company, maybe the exchange rate changes, right, maybe fuel costs go up, maybe someone had, you know, maybe there's, there's, there's some sort of a some sort of change in regulations, you know on the vehicles or maybe there is a change in regulations in accommodation. Whatever it is, what I've seen is that … if you are not intentionally trying to amplify and become more efficient, you,*

you will, you are there committing yourself to becoming less efficient, because there is no staying the same."

According to Ben, excessive focus in one single type of relation does not allow adaptation, creativity, and learning: *"So if I am just hanging out with the same old full professors who do the same stuff or whatever, is not going to give me new ideas. And if there are, they are going to come very slowly. If I'm hanging out with faculty members, students, janitors, bartenders, waitresses, I'm getting lots of input from them about what the world's like beyond my narrow little office."* According to Greg, integrating relations generates better outcomes despite sometimes risking and maybe hurting each other: *"I think working with people you genuinely like, believing they're good people doing good things, you know, that by its nature I really believe that leads to projects. Because you want to work with people that are pleasant. The stronger the relationship, the more it leads to opportunities, programs and everything else."* These comments suggest that integrating, mixing, and repurposing relations contribute to achieve desirable synergies.

Additional Findings: Repurposing Collaborative Relations

This section explores how the different types of collaborations are inter-related. The previous section emphasized on the benefits derived from compartmentalizing and distinguishing collaborative relations. This section explores the different possibilities of mixing or repurposing relations as proposed by the participants in the study. The three proposed types of relations are also interconnected. Profits derived from production can be reinvested in alternative resources such as installations, equipment, and facilities. However, they can also be invested in learning through schooling or research as well as on socialization endeavors.

Learning derived from studying or research not only increases one's own intellectual capacity. It also creates and improves production purposes and allows socializing with other people and organizations. Friendships and personal connections, in addition to generating enjoyment and personal satisfaction, can also be used to develop productive purposes and learn from the experiences of others. Collaborative relations in some instances are so integrated generating synergies to each other that it is difficult to distinguish which type of collaboration is which. Finally, in some cases it is possible to both compartmentalize and repurpose relations simultaneously as shown in Figure 4.17.

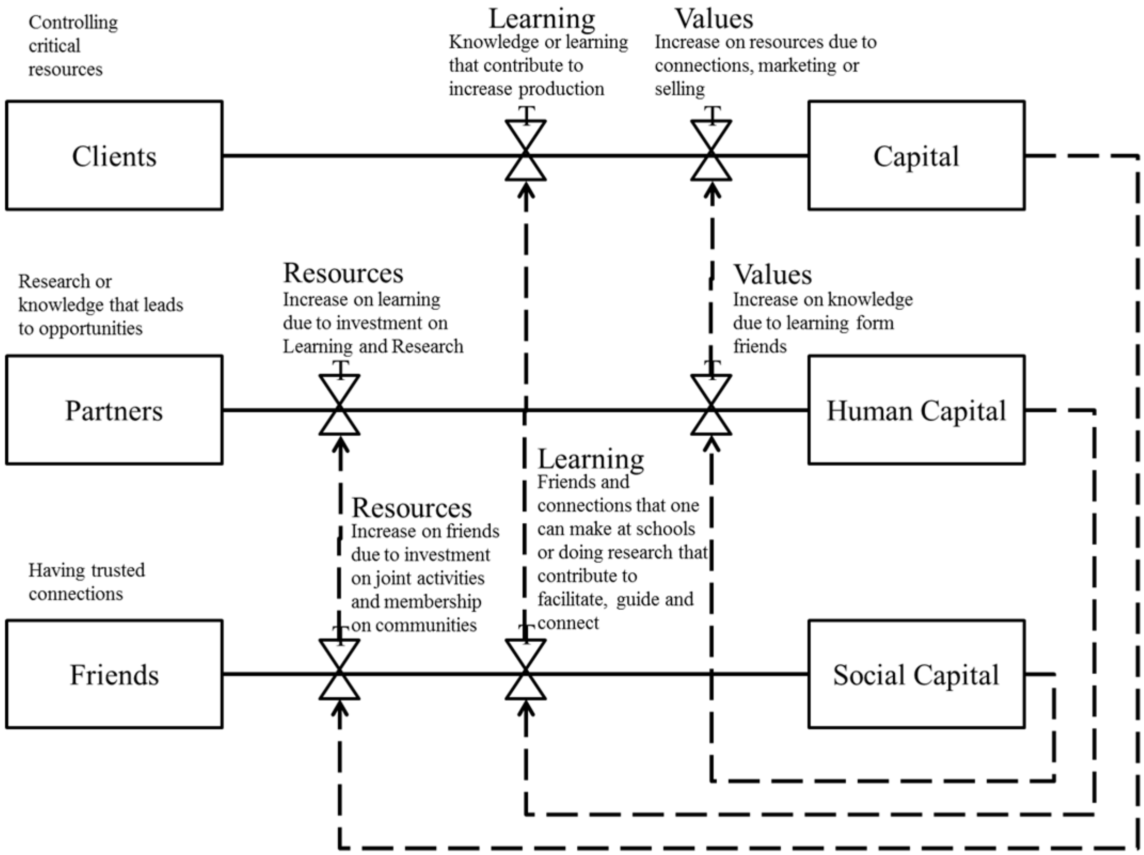

Figure 4.17. Interactions of collaborative relations and the representation of such relations in terms of three different forms of capital.

Repurposing partnerships. According to Ben, the faculty member whose specialty is international community and leadership development, research can be reinvested into resources: *"Research findings are things that are going to go into my courses, that makes the courses better and give the course is the most recent knowledge and data and everything else."* Research can be reinvested into connections: *"I can go to a conference in Philadelphia and meet scholars from all over the world, you know. I don't have to go to Russia to start establishing these." "Now under this research stuff, I mean the exposure to people who are doing similar work but in different areas, different like conceptual areas is really kind of helping me see things much more holistically and very much from a different view."* He also described repurposing research into both resources and connections simultaneously: *"I do research in rural development in Vietnam. I publish articles and everything else. I take students to Vietnam, and you know for three weeks, four weeks, they do community development work there and study."*

Repurposing friendships. According to Greg, the executive who travels and maintains collaborative efforts on the ground, it is possible to reinvest connections into resources: *"I now have a very good friendship with the owner of that company, right. The owner of that company now looks to me because I'm a university to help to expand his network because now I send other people to him. Right, so I tell people he is a, this is a good company you should rent from him because, you know, I did know him personally, we share similar values and we share the ideas of sustainability for example."*

According to Oscar, the faculty member whose specialty is development of international technology-based ventures, it is possible to reinvest connections into other connections: *"So when you have these strong ties in these other places, they are also helping you establishing weak ties and leveraging those weak ties. So I have a weak connection at the health ministry but a strong connection with an entity, and when we go* *to the ministry which is a weak tie though a strong tie locally right. So you, that's how you build your network and gain credibility."* According to Ben, the faculty member whose specialty is international community and leadership development, it is possible to reinvest connections into learning or research *"It's nurturing for you and for me for everyone to come and see people with fresh ideas. It is, and quite honestly this sounds like something that I am making up, you know, a nice story or whatever. I learn just as much from my students than they do from me. I mean they bring fresh ideas to me, they bring new experiences to me. They look at the world at different ways. That makes me look at the world at a different way."* He also said that it is possible to reinvest connections into both research and resources: *"I wouldn't say the good outcomes of that are chance. I may, you know, you and I might have known each other for almost two years now, we are friends. I think us talking about things a couple of years from now. You might be sitting around and saying, 'You know, this is an idea for a project. We should do this, you know.' That is not chance, that is just we go back a few years, we know each other and, you know. I know the quality of your work, you know mine. We know that we are not bad people and we go to work together. I don't see that as a chance. I just see it as, you know, that very strong relationship of working with good people leads you to keep looking for opportunities."*

Repurposing clients. Andres, one of the executives who supports and develops international collaborations in one of the most internationally active colleges, says that it is possible to reinvest clients or resources into research: *"So that is a client university. Now that university might eventually be a partner be know if we know that there are other things that they can bring to the table, but because of their own imperatives and* *conditions they want to focus on building [a known master's program]."* According to Ben, the faculty member whose specialty is international community and leadership development, it is possible to reinvest resources into connections: *"We probably lost out of the deal. I would argue that what we're doing is just good professional conduct. As there will come a time when I will need to send a student to Vietnam, and there will come a time when I need to send one to Japan, or there's going to come a time when I need to send a faculty member there for a semester to Japan."* He also said that it is possible to reinvest resources into both connections and research: *"We end up subsidizing one two students. At the very worst from a business standpoint. I would see it as a very smart investment in a relationship with another university because, you know, because of that kind of thing. We are going to have students doing work there. We are going to develop further relationships with faculty there. We are going to get grants together. It's it's those kind of things."*

All collaborative relations integrated. There are situations in which all relations are mixed together, making a synergy, and it is difficult to distinguish in which relation you are. For example, according to Ben, the faculty member whose specialty is international community and leadership development, *"Some people that I work with I, you know, work with them a lot throughout the day, and I may go for drinks with them or dinner with them or something like that…. I might call them on a Saturday if I have an idea for an article or something like that.... I might send them a funny email if I see something, you know, like it's just a, it's it's a continuum, you known for me. And and I think a lot of people do it that way, too. It's just I work with people I like and if the idea* *for us to do something pops at my head at ten o'clock at night, I'll call you or email you and and say, 'How do you think of this?'"*

Integrating and compartmentalizing relations. Being able to sustain various simultaneous collaborative relations and constructively handle disagreement without falling apart is one of the highest levels of collaboration. Engaging in a combination of relationships allows taking more risks, becoming more creative, and increasing the commitment of participants. Learning to collaborate despite conflicts of interest, getting to understand synergies, and undermining is a field that promises great benefits to collaboration practitioners. According to Greg, the executive who travels and maintains collaborative efforts on the ground, collaborations *"start to really grow when we can start to disagree, but still know that the disagreement does not mean that the collaboration falls apart. So if I can sit and I can say, 'Well you do things this way, this is how I do things,' and we can wrestle back and forth knowing that the collaboration is, that the friendship is there. And so I am not worried about losing that client, or I'm not worried about this partnership tanking, because you are no questioning my skills, alright. That's, that's friendship or when in those spaces is where the friendship really becomes valuable for me because then I can say then that's where I get to do things that are more innovative, I can take more risks. When I say risks I mean, you know, we might try to to teach a lesson or do something together, that we're still trying to learn ourselves but we trust each other, right. And we know that we are going to be able to have similar ... values about how are we going to deliver the information. So we can, we can teach it together. We don't have all the details and we are not quite sure and we might even, we* *might even know, I know that you don't have the skills, and you know I don't have the skills. But we are still going to do it together, right."*

Oliver, the executive who carries assessment, development, promotion, and negotiation of international activities, also provided an example of compartmentalizing and repurposing relations simultaneously. *"For example, we send students to Athens. Every year there is an Athens program. There's a provider. We pay them for their services. We're not partnered with them, except for we're paying them to train our students. There's no need to be friends, right. We don't have to be friends. But we are friends with another university. So what happens is … we both have a need for the other because we may not have enough students to completely fill a program and they don't have enough students to completely fill a program with this Athens third-party provider. But we partner together to put our students together to take this trip that the third-party provider does, as well as one year we send the faculty member that is the head of the trip, the next year they send the faculty member or members that are the heads of the trip."*

There seems to be an inescapable correlation among the three types of collaboration. Collaborations need to take inputs derived from other collaborations to get the inputs they need. Client-provider relationships need to be nurtured with the renewal of production facilities as well as the introduction of innovations and the development of personal connections that facilitate such productive purposes. Partnerships need to be nurtured with the exercise of intellectual abilities or innovations as well as with investments in schooling and research and the sharing of experiences with friends. Friendships need to be nurtured with personal dedication as well as the devotion of some resources for socialization and sharing of interesting learnings. Not having such interrelations sooner or later lead to the decay of collaborative relations.

Additional Findings: Negative Extremes on Developing International Collaborative Relations

This section explores whether there are negative results for developing international collaborations. This question was not explicitly asked to study participants. However, participants provided plenty support of the existence of negative extremes in the development of international collaborations at a comprehensive research institution by themselves. The three proposed types of collaborative relations generate different outcomes. Client-provider relationships generate profits. Partnerships generate learning. Finally, friendships generate personal connections. According to participants in the study, each of the outcomes of these three types of relations can be taken to negative extremes.

Negative extremes of client-partner relations. Seeking too much or inappropriate profit becomes exploitation, while making too low profits or even negative profits become losing resources. Lisa, the executive who supports and develops international collaborations in one of the most internationally active colleges, said: *"Ha... That sounds so bad.... Exploitation always sounds so bad to me."* Greg, the executive who travels and maintains collaborative efforts on the ground, said: *"Yes. Exactly. And sometimes they are opposites. So what benefits me hurts you, or what benefits you hurts me, right." "You are always suspicious each one is trying to save and to gain."* Ben, the faculty member whose specialty is international community and leadership development, said: *"Not just as a money maker or whatever." "If you are just a client, I going to stand there behind the podium, read off everything I know, and then walk out the door." "Did* *the bare minimum, you know, in those cases, you know, thank God there was a contract. Because they probably wouldn't have done anything. They were so poor performers, you know, that kind of thing. So I mean it's it's one of those things, where I think the higher the level of risk, depending on if this is a relationship or just a connection that risk can be pretty damaging, you know,"* Ben also warned against being extremely calculating: *"It is very tough to have a good working relationships as you are always suspicious."*

Negative extremes on partners. Seeking too much or inappropriate learning could become violation of intellectual property rights or indiscretion, while too low learning becomes neglect or misleading. One of the participants said: *"There is people that cheat, and we have professors that cheat here, you know, have been caught plagiarizing, and there's people that claim other people's work as their own, you know, there's always cheating. But I really think … it's rare, like is rare, I think out of 100 people you might get five of them to cheat, you know. But those other 95 probably had a much better experience doing that collaborative kind of preparation." "Students look at faculty sometimes as like unapproachable…, or they are uncomfortable coming and talking to us and things like this. If you can eliminate that, which we should, that's a great thing to do. I mean, otherwise you are discouraging students from learning, and you are sending the message that you are not worthy of learning and it is just, it's detrimental to students, and is bad and the people that say that, That they wouldn't work with undergraduates, I have aversion to this. I think they should be kicked out of here, quite honestly. I don't care how many awards do they have or whatever else."*

Negative extremes on friends. Seeking too much or inappropriate emphasis on personal relations becomes favoritism, while too low emphasis on personal relations becomes disdain or even negative bias. As the quotations pointing at negative extremes and mistakes on developing collaborations criticize some people and aspects of collaborations, they will not be attributed to any specific participant. One of the participants said:*"I am making the case very strongly that that especially with students and colleagues, we should be more friends than not, but as a leader, you know, one of the things that that angers me the most is when I see like one of our deans or department heads taking care of their friends, you know. Giving them more funding because they like them, because they are friends, or you know, giving them access to more resources or they can behave horribly and don't get yelled at whereas the rest of us, if I sneeze, I get yelled at. I think is as leaders, you know, I mean, as faculty too, you know, there are many students. I try to be very interactive and close to the students, and some of them, you just really like when I want to make a point of like trying to like all of them, you know, some them are shy, some of them are feel weird around professors and like just because some of them are easy to engage, you can engage all of them, and you got to engage all of them consistently and in the same way.... Otherwise, you are picking favorites, and it's bad." "Because there are lots of people that are unpleasant to work with. I don't and and they may have a great reputation in the field or whatever but they may have egos, they may have, you know, I mean they are not nice people." "Like if somebody is just a rotten person, you know, I don't care if they have a Nobel prize, I don't work with them."*

These extremes need to be prevented. Organizations can take undue advantage of other organizations in one extreme, or let other organizations take undue advantage of them in the other extreme. There are intermediate points in which all parties participating in collaboration can achieve commensurable growth.

Additional Findings: Mistakes When Developing International Collaborative Relations

This section addresses mistakes that might be made while developing international collaborations at a comprehensive research university. This question also was not explicitly asked to participants. However, they provided plenty of support to explore the topic.

Various types of mistakes and misunderstandings occur during the development of international collaborations in higher education. One is undue benefits like discounts. Participants reported that they need to be mindful about the type of collaboration they develop to develop fair exchanges. They found that if they will only be able to deliver returns on one type of relation, then it is better not to engage in the other types of relations. In some cases, they might not be able to compensate for the benefits they are receiving with one type of collaboration with their capacities on other types of collaboration. For example, they might not be able to compensate for savings in client-provider relationships with some knowledge or with other connections. Greg, the executive who travels and maintains collaborative efforts on the ground, said: *"I try not to do is if I don't think I am going to be able to bring some level of expertise or return. I intentionally don't try to develop that friendship, right, because then that friendship runs into a problem because I am not going to be able to maintain, to compensate."*

A second one is overpaying. In some cases, participants are able to compensate savings with alternative contributions, such as knowledge or connections. Interviewees cited cases in which organizations might be over giving for the benefits they are receiving. For example, they cited explicit time connotations related to the ability to give back in other forms of collaboration and to the appropriate giving of resources. Specifically, it is not wise to make long-term agreements or promises on things that they already know are going to be short-term arrangements. In this case, they might end up exploiting others because they will not be able to compensate with alternative benefits or to compensate in future rounds of exchanges. On the other hand, it is better not to make short-term agreements on aspects that are going to be long term. They might be overpaying or paying both in terms of resources and in terms of providing alternative benefits such as knowledge and connections with other people.

Different collaborations have different time horizons and different commitments. Pure client-provider relationships imply a short term or repeated short terms. Partnerships imply a foreseeable time span limited by the achievement of the solution of a problem or the discovery of an opportunity. Finally, friendships indicate an undefined time span conditioned to the consistency and alignment of interests and values. These different time horizons provide or not provide opportunities of correction of past unbalances or the compensation with other contributions such as knowledge or connections. Greg said: *"I don't want to try to exploit. I am often, so sometimes, sometimes you know people would say: 'Oh!' because I have a big group and so if I booked at one point they will offer me savings and sometimes I refuse. I've refused savings before, because I have said, 'No, no, no, charge me, you know, what you would charge anyone because I know that I am, won't able to return. I might never come back to your establishment.' … In those cases,* *jumping too quickly into the friendship, trying to get to that friendship, now the thing with friendship is you get really good benefits."*

Problems can also arise from not differentiating agreements according to different purposes. Client-provider relationships generate profits. Partnerships generate learning. Finally, friendships generate personal connections. Andres, one of the executives who supports and develops international collaborations in one of the most internationally active colleges said: *"See many people use MOU for everything…. When we come to the point where I want to do X and you are going to do Y, we use memorandum of agreement. So for client we don't sign MOU, we sign MOA. Memorandum of agreement is an agreement, is a legally binding document. For a letter of intent is generic, it doesn't mean much. It just says look we shake hands, we like each other. So maybe we can think on what we can do together. If it happens or if not we are okay."*

Do not try to homogenize your partners, respect and protect the differences. Lisa, one of the full-time executives at the college level who supports and develops international collaborations in one of the most internationally active colleges, said: *"Don't change anything. You know, protect those cultures. You know, you go out but you try to prevent something from happening, but nobody can know that you were there. Because you don't want to change anything, so this notion of incorporating the teaching of valuing difference may be something really important when we get to the conversation about how do you teach about building collaborations, building sensitivity, and valuing differences. Probably needs to be a key element of any training program that is out there. Kind of a different perspective on that same question, though is something that's come up among my grad students in the class I teach where I am…. It's a class designed to teach* *our graduate students how to do research internationally, and we talk about the importance of partnership building in that class."*

It is important to get to know the people and organizations with which you are collaborating with, even though there are always uncertainties. Andres said: *"No, you want to go in, because there are some things enough to be able to say: 'Okay, I believe that this should work out.' However, you are not 100% certain. Maybe you are 60% certain, maybe you are 50% certain, but there are lots of uncertainties. So things could happen that could make the partnership not to work to the satisfaction of both parties and to fall apart. So there are uncertainties, of course always."*

Collaborations will not succeed unless faculty members are committed to supporting them. Andres said: *"Administration could impose relationships, but if a faculty member isn't interested in making that relationship work, all the imposing of 'This is who you will work with' doesn't mean it will be successful."*

There are appropriate scales for collaboration. Having more people than needed deters progress. Ben, the faculty member whose specialty is international community and leadership development, said: *"I think for certain like research projects or other things like, do you understand, like too many cooks in the kitchen ruins the soup. Is it just becomes harder to manage more and more opinions and things, you know. I mean, most the projects I work on are five people, maybe, on them, very diverse from all over the place, five to ten people maybe just like in practice it gets a little messy after that, you know."*

Chapter 5: Summary, Discussion, and Conclusions

The findings of the current study provide guidance to higher education institutions that are interested in developing collaborations with other higher education institutions around the world. The study was carried out at a comprehensive research university in the mid-Atlantic using the case method of research. This final chapter of the dissertation provides a summary of the findings, a theoretical and a practical discussion of such findings, and some practical conclusions and recommendations based on the foreseeable impacts of the findings.

This chapter is divided in five sections. The first section proposes the classification of international collaborations as three well distinguished types of collaboration and proposes a chain of reasoning that explains international collaboration at a comprehensive research university. The second section presents potential limitations to development of international collaborations. The third section describes the skills required to develop these collaborations. The fourth section showcases the compartmentalization and the repurposing of international collaborative relations. The fifth and final section discusses negative extremes and mistakes that can be made when developing international collaborations at such a university.

These findings were derived from a case study of a comprehensive research university. Conditions at other higher education institutions might differ. However, the analytical explanations proposed by the study are general enough to support their extrapolation to other settings to facilitate the development of international collaborations in higher education.

Reconciling the Literature and Participants' Perspectives

The study found that there are three basic types of collaborative relations: clients, partners, and friends. The study also developed a chain of reasoning that connects the different challenges of developing international collaborations in a comprehensive research university. This chain of reasoning interrelating challenges is presented in Figure 4.4. The application of this chain of reasoning to the three proposed types of collaborative relations generates three frameworks of collaboration that integrate previous conceptualizations of inter-organizational relations found in the literature (see Table 4.1).

Problematic situation: Existing literature on inter-organizational relations has not been sufficiently applied to international collaborations in higher education. The literature of inter-organizational relations has not been used to address the case of international collaborations at a comprehensive research university. IIE and NAFSA have systematically gathered the experiences of higher education institutions that are collaborating internationally, but most of their publications have been practice oriented without too much theorization about collaboration.

Contributions of the study to the literature of higher education. The study sought to achieve a better understanding of collaborative relations by applying the theoretical conceptualizations of inter-organizational relations to the practices of international collaboration in higher education. This application not only rendered a better understanding of such relations; it rendered a chain of reasoning interrelating challenges and three frameworks that explain three different forms of international collaborative relations in higher education.

Problematic situation: Previous theories on higher education collaboration narrowly focused on client-provider relationships. Previous theories about collaboration in higher education were narrow in the sense that they were focused on client-provider relationships leaving partnerships and friendships behind. Croom (2012), Knight (2012), Lane (2013), and Levy (2005), suggested basic exchanges of resources or pure client-provider relationships as the drivers for international collaboration in higher education. These theories suggested that international collaboration was limited to the exchange of resources of institutions in some countries for the development of institutions at some other countries.

Contributions of the study to the theories on international higher education collaboration. The current study found that beyond the narrow concept of client-provider relationships, higher education institutions also engage in partnerships derived from the search of knowledge and opportunities and in relationships of friendships derived from having commonality and complementarity of interests and values of the people involved in collaborations.

Problematic situation: The theories that addressed the challenges for international collaborations were disarticulated. The body of knowledge in inter-organizational relations was the result of various independent contributions without a common organizing principle to integrate these different theoretical contributions.

Contributions of the study to the integration of theories that address challenges of developing international collaborations. As the application of such a variety of concepts was difficult, the study developed a chain of reasoning that integrated and interrelated previous conceptualizations to facilitate the application of the literature to international collaborations in higher education.

This study allowed the interrelating different contributions from the literature by finding a common organizing principle. The application of independent contributions from the literature allowed different challenges of developing collaborations at a comprehensive research university to be addressed. These conceptualizations and interrelations can be extended to other organizations. This interrelation was achieved by making the distinction of three different types of collaboration: clients, partners, and friends. The challenges of developing collaborations were also interrelated through logic models that contributed to put an order to those challenges. The integration of these distinctions and the making of those logic models resulted in a comprehensive theory of collaboration as it addresses the various purposes and procedures to develop collaboration.

Problematic situation: Theories of collaboration were not previously used to study organizations. The study of organizations was guided through four frameworks: Structural, human resources, political and symbolic, Bolman and Deal (1997, 2008). These frameworks provided four metaphors and four sets of concepts that allow understanding organizations from four different perspectives.

Contributions of the study to the literature of organizations. The current study proposes an alternative view of organizations with three frameworks according to the three proposed types of inter-organizational relations and according to the challenges for developing collaborations. The study of organizations is also the study of collaborations within the boundaries that define an organization. The study developed a framework that has the potential to describe organizational relationships. This framework will complement previous frameworks for the study of organizations.

Problematic situation: Theories for the study of organizations are extremely abstract. Previous approaches for the study of organizations such as the natural, rational and open systems perspectives (Scott & Davis, 2007) are extremely abstract.

Contribution of the study: The use of concrete relations such as clients, partners, and friends makes the study of organizations practical. The reduction of inter-organizational relations to clients, partners, and friends facilitates the study of inter-organizational relations. These theories also have the potential to facilitate the study of relations within organizations. These relations can make the study of organizations more applicable and concrete.

Problematic situation: There was no theorization of why colleges and universities are an active player on the creation and development of organizations. One of the main purposes, if not the main purpose, of higher education institutions is to generate knowledge. This knowledge production constantly provides opportunities to convene people and other organizations to partner and develop new organizations and/or to change current organizations. This knowledge generation constantly changes the distribution of advantages in the environment. However, the literature of organizations does not directly connect knowledge generation with the development of organizations through partnerships.

Contribution of the study: The study explains why colleges and universities have a key role on the development of collaborations and as a consequence of new organizations. The current study proposes that there are three fundamental drivers for collaboration and three fundamental actors in the creation of organizations: businesses, driven by the control of resources; universities, through the generation of knowledge and opportunities; and families, religious organizations, and social groups, through the development of personal affinities.

Problematic situation: There were no theoretical frameworks to explain different types of collaborations and the different challenges to developing collaborations that could be extended to the study of collaborative learning within the classroom. Many pedagogic approaches advocate for collaborative learning, including Beichner (2008), Bruffee (1999), Freire (1970), Ladson-Billings (1995), and many others. However, they do not have or propose a theoretical framework or theory of collaboration.

Contribution of the study: The study proposes a theoretical framework that explains three types of collaborations as well as challenges to developing collaborations that has the potential to extend to the study of collaborative learning. The current study foresees the application of the current frameworks at the classroom level to provide structure to proposed practices of collaborative learning and the organization of activities.

Limitations on Development of International Collaborations in Higher Education

The application of the literature review to the case study allowed the identification of limitations of developing collaborative relations. Collaborations are sustained on conditions such as the certainty of control of resources to do exchanges (Bathelt & Gluckler, 2003), the uncertainty derived from the discovery or creation of opportunities derived from new knowledge (Williams, 2002) and the affinity of interests and values that allow access to other people and opportunities (Hofstede et al., 2010). Without meeting one or more of these conditions, it is not possible to develop international collaborations with a comprehensive research university.

These conditions, applied to each of the proposed reletionships, imply that client-provider relations depend on the control of a given resource. Without control of a resource, it is not possible to develop these relations. Partnerships depend on the finding of opportunities in terms of methods and technologies. Without new opportunities, it does not make sense to partner. Finally, friendships depend on the alignment of interests and values. If such alignment does not exist, it is not possible to develop friendships.

Problematic situation: There were no analytical explanations of the limitations on developing higher education collaborations. It was not clear to what extent the practices of developing international collaborations in higher education could be learned and to what extent such relations depended on the control of resources.

Contribution of the study to explaining such limitations. The study confirmed that there are not just two conditions that limit the development of collaborations: There are three. However, as these conditions are independent, they do not limit all types of collaboration.

Learning to Develop International Collaborations in Higher Education

The findings of this study illuminate the practice of developing collaborations at a comprehensive research institution. For each given approach to develop collaborations, there are different types of management skills and tasks that support them. Some collaborations can be envisioned and designed (Kickert & Koppenjan, 1997); others depend on the assessment and research of opportunities (Camerer & Fehr, 2006;

Williams, 2002); and others depend on facilitation, persuasion, and networking (Cohen & March, 1986; Cohen et al., 1972). These different sets of skills can be differentiated according to each type of collaboration.

First, from a client-provider perspective, higher education institutions can promote international collaborations because there are resources that such institutions control to either induce or demand international collaborations. In addition, there are processes that institutions can design to promote the development of such international engagements. Second, from a partnership perspective, learning to collaborate implies that faculty, executives and students propose international collaborations that potentially could help them better achieve their goals. Institutions need to explore such initiatives and find opportunities to develop international collaborations. Third, from a friendship perspective, learning to collaborate implies that there are international connections into which institutions can tap. In addition, institutions can motivate, guide, and even mentor faculty members, executives, and students to take advantage of such connections and participate in international collaborations.

Problematic situation: The skills for developing collaborations were not differentiated according to the types of collaborations. The differentiation of skills for developing international collaborations in higher education was not clear. Participants in collaborations did not know what skills they would need to master to develop international collaborations.

Contributions of the study to finding and differentiating skills according to the types of collaboration. The study proposed three well differentiated sets of skills to develop international collaborations in higher education. This distinction provides different tools for practitioners that allow them decide what skills they need to develop to achieve the collaborations they want. This distinction also allows developing combinations of skills to accomplish desired collaborations.

Compartmentalization and Repurposing of Collaborative Relations

This study found that the three previously proposed types of collaboration can be studied separately. This section explores the benefits and complications of dealing with collaborative relations separately as well as in an interrelated fashion. These findings are presented in Figure 4.16. This graphic representation is a simplification that stems from discussions with participants. The study also found that these three forms of collaborations can be compartmentalized, interrelated, and represented as aggregates of three different forms of capital.

When participants were asked their perceptions of the proposed classification of collaborative relations, they referred to this classification as compartmentalization. They said that it is a nice way to break down collaboration; some people and organizations can draw strict lines across engagements, while for others such relations are blended. Compartmentalization in some cases stems from different streams of funding; in other situations people and organizations just know what they want and choose the appropriate relation to get it; others beat around the bushes.

Compartmentalizing relations offers a number of advantages, including attending to different interests with different approaches and preventing confusion on approaches, commitments, and expectations. In cases when different types of relations have conflicts of interest, compartmentalization prevents some types of collaboration from affecting others. There are people and organizations with which institutions prefer to have just one type of collaborative relations. Moreover, relations have different scales, so institutions need to compartmentalize them. On other occasions, organizations are so big that they need to regulate and standardize all relations.

Compartmentalizing relations also generates disadvantages. For example, staying in one type of relation or overspecializing in one relation does not allow adaptation and innovation. Overregulation of relations destroys innovation, creativity, and expansion; it undermines learning. Integrating and alternating relations generates far better outcomes as it encourages variety and dynamicity in all three types of relations.

On the other hand, repurposing relations implies that profits derived from productive client-provider relations can be reinvested in the same productive relations, such as investing in alternative resources, installations, equipment, and facilities. However, such profits can also be invested in learning through schooling or research as well as on social endeavors. Next, learning derived from studying or research not only increases one's own intellectual capacity. It also contributes to the creation and improvement of production purposes and to socialization with other people and organizations. Finally, friendships and personal connections generate enjoyment and personal satisfaction and can contribute to the development of productive purposes and to learning from the experiences of others.

Problematic situation: The literature lacks discussion of compartmentalization vs. integration and repurposing of collaborative relations. The literature lacks discussion of compartmentalization vs. integration of collaborative relations, presenting both the benefits and the negative outcomes of these complementary approaches to handle collaborative relations.

Contributions of the study to the discussion of compartmentalization vs. repurposing or integrating collaborative relations. The current study presents comments and rationales from participants that support either compartmentalization or integration of collaborative relations. These rationales inform participants in their collaborations on which paths to take in the administration of such relations.

Problematic situation: Disconnection between sociological and organizations theories. Previous sociological theories such as capital, social capital, and human capital were not connected to the organizations and inter-organizational relations.

Contributions of the study to bridging sociological and organizational theories. The study integrated the previously mentioned collaborative relations with three different forms of capital and their interrelations. In addition, it identified additional connotations to these relations that help to clarify them. The study also presented some sample hypothetical scenarios to participants to illustrate the interactions of such capital and collaborative relations.

Negative Extremes and Mistakes in Developing International Collaborations

There are negative extremes in the development of international collaborations at a comprehensive research university. Seeking too much or inappropriate profit becomes exploitation, while making too low profits or even negative profits results in loss of resources. Seeking too much or inappropriate learning could become violation of intellectual property rights or indiscretion, while too low learning becomes neglect or misleading. Seeking too much or inappropriate emphasis on personal relations becomes favoritism, while too low emphasis on personal relations becomes disdain or even discrimination.

Comprehensive research universities can also make mistakes in the development of international collaborations. First, institutions often times promise long-term engagements and returns from other types of collaboration to get preferential conditions, knowing that engagements are going to be short term and will not allow for making alternative contributions. On the other hand, in some instances, institutions pay full price, as if an engagement is short, knowing that the engagement will be long, and that the university will provide returns through other types of collaboration.

Another mistake is to try to homogenize partners. Universities need to value and respect differences. One more mistake is to treat all engagements the same. Engagements need to be differentiated according to their characteristics. As previously shown, contracts are different from research and are different from friendships. Collaborations have different outcomes characteristics and approaches. Another important aspect is to get to know partners. There are always uncertainties, but the more institutions get to know other institutions, the less uncertainty they have.

Next, collaborations in higher education never work unless faculty members and students get involved. It is very difficult for administrators to impose collaborations. That is why networking, guiding, and persuading are so important. Finally, too many cooks in the kitchen ruins the soup. For each collaboration, there is an appropriate number of participants. Adding participants beyond that point lowers the collaboration's effectiveness.

Problematic situation: Lack of clarity and confusion on the development of collaborations. The aspects needed to develop the capacity to collaborate at a higher education institution were unclear. It was confusing whether collaborating internationally depended on one's own academic or administrative capacities. In addition, the constituent parts of that capacity were also undefined.

Contributions of the study to clarify and guide the development of collaborations. The current study contributed to clarify those previous uncertainties by showcasing both the academic and the administrative aspects of collaboration. It appears that both the academic and administrative aspects of collaborations follow the theoretical connotations; they come in a set of three, according to the three proposed types of collaboration.

Problematic situation: No study of the negative extremes and mistakes of developing collaborations. Some scholars saw collaboration as always positive. Other scholars supported collaboration with certain safeguards. Previous publications on collaboration did not provide clear emphasis on and distinctions of the negative extremes and mistakes that can be made when developing collaborations.

Contributions of the study to showcase the negative extremes and mistakes of developing collaborations. The study showcased negative extremes and mistakes of developing collaborations. Gaining awareness of mistakes and negative extremes has the potential to allow collaboration participants to prevent them and to assist outsiders in seeing collaboration with a less naïve and more objective perspective.

Limitations of the Study

It is difficult to summarize many years of experience developing collaborations in one single study. However, this study has managed to integrate various perspectives by selecting participants from different positions, disciplines, and backgrounds.

The study was carried out at one institution. Collaboration by its nature is multiparty. A future study could compare perspectives at different institutions that are collaborating with each other. This exercise would warrant the generalizability of the findings. Another study could include a case study of international collaborations at a comprehensive research university that addresses different questions and therefore arrives at different findings or different aspects of such international engagements. This study focused on the aspects of international collaboration that the PI considers most relevant. Another study might offer a different perspective.

The study proposes some interesting contributions to the field of international collaborations in higher education. However, many of these contributions were judged according to the PI's personal frame of mind. Other researchers might have other values and priorities, offering a different assessment of the relevance of the findings.

As previously noted in the introduction of the findings in Chapter 4, research is not a straightforward, linear process. The PI had to explore many leads from both the literature and the contributions from interviewees before reaching a promising one. It might be possible that in this process other researchers might have found other promising leads on the development of international collaborations in higher education, therefore generating different studies and arriving at different findings.

There might be innumerable experiences for, lessons of, and practices of developing international collaborative relations in higher education. The study of international collaborations in higher education might be a never-ending endeavor. According to the initially proposed research goals, however, this study has made some significant contributions to the field of international collaboration in higher education.

These findings could be extrapolated to collaborations at other higher education institutions and even other types of organizations.

Due to the differences in the characteristics of collaborators, the current study warns about issues of fairness and moral and ethical behaviors of strategizing too much the development of collaborative relations. The PI considers that exploiting the confusion or misunderstandings of others is a questionable practice. One interesting question for future research is to find if it is fair, ethical, or moral to design or strategize too much these three collaborative relations.

Future Research

The PI proposes a number of avenues for future research. One is exploring the findings at different institutions that are collaborating with each other. The current study was carried at one institution. A comparative study at multiple institutions would reassure the validity of the findings. A second avenue for research is the exploration of this conceptual distribution and chain of reasoning interrelating challenges at the classroom level to explore the generalizability of the framework. The study addressed collaborations at the macro level of international relations. This macro level allowed developing various distinctions and chains of reasoning. It would be interesting to explore such distinctions and chains of reasoning at the classroom level as well as at other intermediate organizational levels. Moreover, some participants suggested that the development of international collaborations was the result of gaining the in-home capacity to collaborate. They pointed out particularly that the capacity to develop in-home interdisciplinary collaborations was a key advantage when developing international collaborations.

Therefore, an interesting study would be to explore the development of in-home interdisciplinary collaborations.

Another potential avenue for future research is the exploration of collaborative relations as aggregates of different forms of capital. The results of client-provider relationships could be represented in terms of profits or the generation of capital. The results of partnerships could be measured or represented in terms of learning or human capital. Finally, friendships could be represented as social capital. Some hypothetical scenarios could be drawn from these assumptions. However, exploring collaborations through these hypothetical scenarios would need to be supported with data derived from the measurement of these different forms of capital. Participants in the study suggested that developing measures that could explore collaborations through these different forms of capital would be easier at the internal university levels.

References

Abernathy, W. J., & Clark, K. B. (1985). Innovation: Mapping the winds of creative destruction. *Research Policy*, *14*, 3-22. doi:10.1016/0048-7333(85)90021-6

Adams, J., Gurney, K., & Marshall, S. (2007). *Patterns of international collaboration for the UK and leading partners* (Summary report). Retrieved from *The Guardian* website: http://image.guardian.co.uk/sys-files/Education/documents/2007/07/13/OSICollaborationSummaryRepo.pdf

Adams, J. S. (1976). The structure and dynamics of behavior in organizational boundary roles. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1175-1199). Chicago, IL: Rand McNally.

Ahuja, G. (2000). Collaboration networks, structural holes and innovation: A longitudinal study. *Administrative Science Quarterly*, *45*, 425-55. doi:10.2307/2667105

Adler, P. S., & Kwon, S.-W. (2002). Social capital: Prospects for a new concept. *Academy of Management Review*, *27*, 17-40. doi:10.5465/AMR.2002.5922314

Aldrich, H. (1976). Resource dependence and inter-organizational relations: Local employment service offices and social services sector organizations. *Administration and Society*, *7*, 419-454. doi:10.1177/009539977600700402

Aldrich, H. (1979). *Organizations and environments*. Englewood Cliffs, NJ: Prentice Hall.

Allen, J. (2003). *Lost geographies of power*. Malden, MA: Blackwell.

Altbach, P. G., & Knight, J. (2007). The internationalization of higher education: Motivations and realities. *Journal of Studies in International Education*, *11*, 290-305. doi:10.1177/1028315307303542

American Council on Education. (2012). *Mapping internationalization on U.S. campuses: 2012 Edition.* Retrieved from http://www.acenet.edu/news-room/Documents/Mapping-Internationalizationon-US-Campuses-2012-full.pdf

American Law Institute. (1981). *Restatement of the law, second, contracts 2d.* St. Paul, MN: American Law Institute Publishers.

Amin, A. (1994). *Post-Fordism: A reader*. Oxford, UK: Basil Blackwell.

Amir, Y. (1994). The contact hypothesis in intergroup relations. In W. J. Lonner & R. S. Malpass (Eds.), *Psychology and culture* (pp. 231-237). Boston, MA: Allyn and Bacon.

Arora, A., & Fosfuri, A. (2000). Wholly-owned subsidiary vs. technology licensing in the worldwide chemical industry. *Journal of International Business Studies*, *31*, 555-572. doi:10.1057/palgrave.jibs.8490922

Arrow, K. (1962). Economic welfare and the allocation of resources for invention. In H. M. Groves (Ed.), *The rate and direction of inventive activity: Economic and social factors*. (pp. 609-625). Princeton, NJ: Princeton University Press.

Ashby, W. (1969). Self-regulation and requisite variety. In F. E. Emery (Ed.), *Systems thinking: Selected readings* (pp. x-y). Harmondsworth, UK: Penguin.

Avelsson, M., & Willmott, H. (1996). *Making sense of management: A critical introduction.* London, UK: Sage.

Avelsson, M., & Willmott, H. (2003). *Studying management critically.* London, UK: Sage.

Bachmann, R. (2001). Trust, power and control in trans-organizational relations. *Organization Studies*, *22*, 337-365. doi:10.1177/0170840601222007

Bachmann, R., & Zaheer, A. (2008). Trust in interorganizational relations. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring, *The Oxford handbook of inter-organizational relations* (pp. 533-554). New York, NY: Oxford University Press.

Balloch, S., & Taylor, M. (2001). *Partnerships working: Policy and practice.* Bristol, UK: Policy Press.

Barney, J. B. (1999). How a firm's capabilities affect boundary decisions. *Sloan Management Review*, *40*, 137-145. doi:10.1007/s10796-008-9065-8

Barney, J. B., & Hansen, M. H. (1994). Trustworthiness as a source of competitive advantage. *Strategic Management Journal*, *15*(S1), 175-190. doi:10.1002/smj.4250150912

BarNir, A., & Smith, K. A. (2002). Interfirm alliances in the small business: The role of social networks. *Journal of Small Business Management*, *40*, 219-232. doi:10.1111/1540-627X.00052

Bathelt, H., & Gluckler, J. (2003). Toward a relational economic geography. *Journal of Economic Geography*, *3*, 117-144. doi:10.1093/jeg/3.2.117

Bathelt, H., Malmberg, A., & Maskell, P. (2004). Clusters and knowledge: Local buzz, global pipelines and the process of knowledge creation. *Progress in Human Geography*, *28*, 31-56. doi:10.1191/0309132504ph469oa

Baum, J. A. C., & Oliver, C. (1991). Institutional linkages and organizational mortality. *Administrative Science Quarterly*, *36*, 187-218. doi:10.2307/2393353

Baum, J. A. C., Rowley, T. J., Shipilov, A. V., & Chuang, Y.-T. (2005). Dancing with strangers: Aspiration performance and the search of understanding syndicate partners. *Administrative Science Quarterly*, *50*, 536-575. doi:10.2189/asqu.50.4.536

Beerkens, E. (2002). International Inter-organisational arrangements in higher education: Towards a typology. *Tertiary Education and Management*, *8*, 297-314. doi:10.1080/13583883.2002.9967086

Beerkens, H. J. (2004). *Global opportunities and institutional embeddedness: Higher education consortia in Europe and southeast Asia*. Enschede, The Netherlands: University of Twente.

Beichner, R. J. (2008). *The SCALE-UP project: A student-centered, active learning environment for undergraduate programs* (National Academy of Sciences invited white paper). Retrieved from http://sites.nationalacademies.org/cs/groups/dbassesite/documents/webpage/dbasse_072628.pdf

Biesta, G. J. J., & Burbules, N. C. (2003). *Pragmatism and educational research.* Oxford, UK: Rowman & Littlefield.

Birnbaum, R. (2010). Problems of governance, management, and leadership in academic institutions. In S. R. Harper & J. F. L. Jackson (Eds.), *Introduction to American higher education* (pp. 298-314). New York, NY: Routledge.

Bolman, L. G., & Deal, T. E. (1997). *Reframing organizations: Artistry, choice, and leadership.* San Francisco, CA: Jossey-Bass.

Bolman, L. G., & Deal, T. E. (2008). *Reframing organizations: Artistry, choice, and leadership*. San Francisco, CA: Jossey-Bass.

Bordieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-58). New York, NY: Greenwood Press.

Bromiley, P., & Cummings, L. L. (1995). Transaction costs in organizations with trust. In R. J. Lewicki, B. H. Sheppard, & M. H. Bazerman (Eds.), *Research on negotiation in organizations: A biannual research series* (Vol. 1, pp. x-y). Greenwich, CT: JAI Press.

Brown, J. S., & Duguid, P. (1991). Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation. *Organization Science*, *2*, 40-57. doi:10.1287/orsc.2.1.40

Bruffee, K. A. (1999). Collaboration, conversation, and reacculturation. In *Collaborative learning: Higher education, interdependence, and the authority of knowledge* (2nd ed., pp. 3-20). Baltimore, MD: Johns Hopkins University Press.

Burstein, P. (1976). Social networks and voting: Some Israeli data. *Social Forces*, *54*, 833-847. doi:10.1093/sf/54.4.833

Burstein, P. (1991). Policy domains: Organization, culture, and policy outcomes. *Annual Review of Sociology*, *17*, 327-350. doi:10.1146/annurev.so.17.080191.001551

Burt, R. (1992). Structural holes: The social structure of competition. In N. Hohria & R. G. Eccles (Eds.), *Networks and organizations: Structure, form, and action* (pp. 57-91). Boston, MA: Harvard Business School Press.

Camerer, C. F., & Fehr, E. (2006). When does "economic man" dominate social behavior? *Science*, *311*, 47-52. doi:10.1126/science.1110600

Cameron, K. S. (1984). Organizational adaptation and higher education. *Journal of Higher Education*, *55*, 122-144. doi:10.2307/1981182

Campbell, D. T. (1969). Variation and selective retntion in sociocultural evolution. *General Systems*, *16*, 69-85.

Carr, W., & Kemmis, S. (2004). Interpretative view of educational theory and practice. In *Becoming critical: Education, knowledge, and action research* (pp. 83-102). London, UK: Taylor & Francis.

Chiristen, P. R., Eskelinen, H., Forsstrom, B., Lindmark, L., & Vatne, E. (1990). Firms in networks: Concepts, spatial impacts and policy implications. In S. Illeris & L. Jakobsen (Eds.), *Networks and regional development* (pp. 11-58). Copenhagen, Denmark: NordREFO.

Chisholm, D. W. (1989). *Coordination without hierarchy: Informal structures in multiorganizational systems.* Berkeley: University of California Press.

Clark, P. A. (1985). A review of the theories of time and structure for organizational sociology. *Research in the Sociology of Organizations*, *4*, 35-79.

Cohen, M. D., & March, J. G. (1986a). Introductory conclusions. In M. D. Cohen & J. G. March, *Leadership and ambiguity: The American college president* (2nd ed., pp. 1-25). Boston, MA: Harvard Business School Press.

Cohen, M. D., & March, J. G. (1986b). Leadership in an organized anarchy. In M. D. Cohen & J. G. March, *Leadership and ambiguity: The American college president* (2nd ed., pp. 195-215). Boston, MA: Harvard Business School Press.

Cohen, M. D., & March, J. G. (1986c). The process of choice. In M. D. Cohen & J. G. March, *Leadership and Ambiguity: The American college president* (2nd ed., pp. 81-91). Boston, MA: Harvard Business School Press.

Cohen, M. D., March, J. G., & Olsen, J. P. (1972). A garbage can model of organizational choice. *Administrative Science Quarterly*, *17*, 1-25. doi:10.2307/2392088

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, *94*, S95-S120. doi:10.1086/228943

Commons, J. R. (1950). *The economics of collective action.* Madison: University of Wisconsin Press.

Concejo nacional de acreditacion. (n.d.). *Concejo nacional de acreditacion*. Retrieved from http://www.cna.gov.co/1741/channel.html

Cox, A. (2001). Understanding buyer and supplier power: A framework for procurement and supply competence. *Journal of Supply Chain Management*, *37*(2), 8-20. doi:10.1111/j.1745-493X.2001.tb00094.x

Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.

Croom, P. W. (2012). Motivation and aspirations for international branch campuses. In R. Sakamoto & D. W. Chapman, *Cross-border partnerships in higher education: Strategies and issues* (pp. 45-66). New York, NY: Routledge.

Cropper, S., Ebers, M., Huxham, C., & Ring, P. S. (2008). Introducing interorganizational relations. In S. Copper, M. Ebers, C. Huxham, & P. S. Ring, *The oxford hadbook of inter-organizational relations* (pp. 1-30). New York: Oxford University Press.

Cropper, S., & Palmer, I. (2008). Change, dynamics, and terporality in interorganizational relations. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring, *The Oxford handbook of inter-organizational relations* (pp. 635-663). Oxford, UK: Oxford University Press.

Dacin, T., Reid, D., & Ring, P. S. (2008). Alliances and joint ventures: The role of partner selection fom an embeddedness perspecive. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring, *The Oxford handbook of inter-organizational relations* (pp. 93). Oxford, UK: Oxford University Press.

Das, S., Sen, P. K., & Sengupta, S. (1998). Impact of strategic alliances on firm valuation. *Academy of Management Journal*, *41*, 27-41. doi:10.2307/256895

Dasgupta, P. (1988). Trust as a commodity. In D. Gambetta (Ed.), *Trust: Making and breaking cooperative relations* (pp. 42-72). New York, NY: B. Blackwell.

Davidson, W. H., & McFretidge, D. G. (1984). International technology transactions and the theory of the firm. *Journal of Industrial Economics*, *32*, 253-264. doi:10.2307/2098016

Demsetz, H. (1967). Towards a theory of property rights. *American Economic Review*, *57*, 347-359.

Diani, M. (2003). “Lenders” or brokers? Position and influence in social movement networks. In M. Diani & D. McAdam (Eds.), *Social movements and networks: Relational approaches to collective action* (pp. 105-122). Oxford, UK: Oxford University Press.

Dicken, P. (1990). The geography of enterprise: Elements of a research agenda. In M. de Smidt & E. Wever (Eds.), *The corporate firm in a changing world economy: Case studies in the geography of enterprise* (pp. 234-244). London, UK: Routledge.

Dicken, P., & Thrift, N. (1992). The organization of production and the production of organization: Why business enterprises matter in the study of geographical industrialization. *Transactions of the Institute of British Geographers*, *17*, 279-91. doi:10.2307/622880

DiMaggio, P. (1997). Culture and cognition. *Annual Review of Sociology*, *23*, 263-87. doi:10.1146/annurev.soc.23.1.263

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, *48*, 147-160. doi:10.2307/2095101

Doz, Y. L., & Hamel, G. (1998). *Alliance advantage: The art of creating value through partnering*. Boston, MA: Harvard Business School Press.

Doz, Y. L., Olk, P., & Ring, P. (2000). Formation process of R&D consortia: Which path to take? Where does it lead? *Strategic Management Journal*, *21*, 239-266. doi:10.1002/(SICI)1097-0266(200003)21:3<239::AID-SMJ97>3.0.CO;2-K

Dyer, J. H., & Singh, H. (1998). The relational view: Cooperative strategy and sources of interorganizational comparative advantage. *Academy of Management Review*, *23*, 660-679. doi:10.5465/AMR.1998.1255632

Emirbayer, M., & Goodwin, J. (1994). Network analysis, culture, and the problem of agency. *American Journal of Sociology*, *99*, 1411-1154. doi:10.1086/230450

Fiol, C. M., & O’Connor, E. J. (2003). Waking up! Mindfulness in the face of bandwagons. *Academy of Management Review*, *28*, 54-70. doi:10.5465/AMR.2003.8925227

Forsyth, D. R. (1990). *Group dynamics* (2nd ed.). Pacific Grove, CA: Brooks/Cole.

Freire, P. (1970). *Pedagogy of the oppressed.* New York, NY: Herder and Herder.

Freud, S. (1922). *Group psychology and the analysis of the ego.* London, UK: Hogarth.

Fukuyama, F. (2004). *State-building: Governance and world order in the 21st century*. Ithaca, NY: Cornell University Press.

Galaskiewicz, J. (1979). *Exchange networks and community politics*. Beverly Hills, CA: Sage.

Galaskiewicz, J. (1985). Interorganizational relations. *Annual Review of Sociology*, *11*, 281-304. doi:10.1146/annurev.so.11.080185.001433

Garrette, B., & Dusauge, P. (1995). Patterrns of strategic alliances between rival firms. *Group Decision and Negotiation*, *4*, 429-452. doi:10.1007/BF01384790

Geringer, J. M. (1988). *Joint venture partner selection: Strategies for developed countries.* New York, NY: Quorum Books.

Gibson, R. (1996, June 26). McDonald's, U.S. Franchisee ventures are on the rise: Mutual financial incentives heat up a shift, some doubts on the griddle. *Wall Street Journal*.

Giddens, A. (1990). *The consequences of modernity.* Stanford, CA: Stanford University Press.

Gilsing, V., & Nooteboom, B. (2005). Density and strenght of ties in innovation networks: An analysis of multimedia and biotechnology. *European Management Review*, *2*, 179-97. doi:10.1057/palgrave.emr.1500041

Gilsing, V., Nooteboom, B., Vanhaverbeke, W., Duysters, G., & Van den Oord, A. (2008). Network embeddedness and the exploration of novel technologies: Technological distance, betweenness centrality and density. *Research Policy*, *37*, 1717-1731. doi:10.1016/j.respol.2008.08.010

Gimeno, J. (2004). Competition within and between networks: The contingent effect of competitive embeddedness on alliance formation. *Academy of Management Journal*, *47*, 820-842. doi:10.2307/20159625

Goldfinch, S., Dale, T., & De Roue, K. (2003). Science from the periphery: Collaboration network and 'periphery effects' in the citation of New Zealand Crown Research Institutes articles, 1992–2000. *Scientometrics, 57(3)*, 321–337. doi:10.1023/A:1025048516769

Grandori, A., & Soda, G. (1995). Inter-firm networks: Antecedents, mechanisms and forms. *Organization Studies*, *16*, 183-214. doi:10.1177/017084069501600201

Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology*, *78*, 1360-1380. doi:10.1086/225469

Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, *91*, 481-510. doi:10.1086/228311

Granovetter, M. (1992). Problems of explanation in economic sociology. In N. Hohria & R. G. Eccles (Eds.), *Networks and organizations: Structure, form, and action* (pp. 25-56). Boston, MA: Harvard Business School Press.

Gray, B. (1985). Conditions facilitating interorganizational collaboration. *Human Relations*, *38*, 911-936. doi:10.1177/001872678503801001

Gray, B. (1989). *Collaborating: Finding common ground for multi-party problems.* San Francisco, CA: Jossey-Bass.

Gray, B. (2008). Intervening to improve interorganizational partnerships. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 664-690). Oxford, UK: Oxford University Press.

Gross, M. A., & Guerrero, L. K. (2000). Managing conflict appropriately and effectively: An application of the competence model to Rahim's organizational conflict styles. *International Journal of Conflict Management*, *11*, 200-226. doi:10.1108/eb022840

Gulati, R. (1999). Network location and learning: The influence of network resources and firm capabilities on alliance formation. *Strategic Management Journal*, *20*, 397-420. doi:10.1002/(SICI)1097-0266(199905)20:5<397::AID-SMJ35>3.0.CO;2-K

Hagedoorn, J. (1993). Understanding the rationale of strategic technology partnering: Interorganizational models of cooperation and sectoral differences. *Strategic Management Journal*, *14*, 371-385. doi:10.1002/smj.4250140505

Hagedoorn, J., & Duysters, G. (2002). Satisficing strategies in dynamic inter-firm networks: The efficacy of quasi-redundant contacts. *Organization Studies*, *23*, 525-548. doi:10.1177/0170840602234002

Hagedoorn, J., & Schakenraad, J. (1998). The effect of strategic technology allliances on company performance. *Strategic Management Journal*, *15*, 291-309. doi:10.1002/smj.4250150404

Hall, R. H. (1999). *Organizations: Structures, processes, and outcomes.* Upper Saddle River, NJ: Prentice Hall.

Hannan, M. T., & Freeman, J. (1977). The population ecology of organizations. *American Journal of Sociology*, *82*, 929-964. doi:10.1086/226424

Hansen, M. T. (1999). The search-transfer problem: The role of weak ties in sharing knowledge across organization subunits. *Administrative Science Quarterly*, *44*, 82-111. doi:10.2307/2667032

Hardy, C., & Phillips, N. (1998). Strategies of engagement: Lessons from the critical examination of collaboration and conflict in an interorganizational domain. *Organization Science*, *9*, 217-29. doi:10.1287/orsc.9.2.217

Hardy, C., Lawrence, T. B., & Phillips, N. (1998). Talk and action: Conversations, narrative and action in interorganizational collaboration. In D. Grant, T. Keenoy, & C. Oswick (Eds.), *Discourse and organization* (pp. 65-83). London, UK: Sage.

Hayter, R., & Watts, H. D. (1983). The geography of enterprise: A reappraisal. *Progress in Human Geography*, *7*, 157-181. doi:10.1177/030913258300700201

Hendrickson, R. M., Lane, J. E., Harris, J. T., & Dorman R. H. (2013). The engaged college or university. In *Academic leadership and governance of higher education: A guide for trustees, leaders, and aspiring leaders of two- and four-year institutions* (pp. 179-198). Sterling, VA: Stylus.

Hennart, J.-F. (1982). *A theory of multinational enterprise.* Ann Arbor: University of Michigan Press.

Hennart, J.-F. (1993). Explaining the swollen middle: Why most transactions are a mix of “market” and “hierachy.” *Organization Science*, *4*, 529-548. doi:10.1287/orsc.4.4.529

Hennart, J.-F. (2008). Transaction consts perspectives on interorganizational relations. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 339-365). Oxford, UK: Oxford University Press.

Hibbert, P., Huxham, C., & Ring, P. S. (2008). Managing collaborative interorganizational relations. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 390-416). Oxford, UK: Oxford University Press.

Hill, C. W. L. (1990). Cooperation, opportunism, and the invisible hand: Implications for transaction cost theory. *Academy of Management Review*, *15*, 500-513. doi:10.5465/AMR.1990.4309111

Himmelman, A. (1996). On the theory and practice of transformational collaboration: From social service to social justice. In C. Huxham (Ed.), *Creating collaborative advantage* (pp. 19-43). London, UK: Sage.

Hold my hand. (1999, May 13). *The Economist*, *351*, 75.

House, E. R. (1991). Realism in research. *Educational Researcher*, *20*(6), 22-25. doi:10.3102/0013189x020006002

Hudzik, J. K. (2011). *Comprehensive internationalization: From concept to action.* Available from NAFSA: Association of International Educators website: http://www.nafsa.org/wcm/Product?prodid=382

Hui, P. P., Fonstad, N. O., & Beath, C. M. (2008). Technology service interorganizational relationships. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 256-288). Oxford, UK: Oxford University Press.

Huxham, C., & Beech, N. (2008). Interorganizational power. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 554-579). Oxford, UK: Oxford University Press.

Huxham, C., & Vangen, S. (2000). Ambiguity, complexity and dynamics in the membership of collaboration. *Human Relations*, *53*, 771-806. doi:10.1177/0018726700536002

Huxham, C., & Vagen, S. (2005). *Managing to collaborate: The theory and practice of collaborative advantage.* London, UK: Routledge.

Institute of International Education. (n.d.). *Institute of International Education*. Retrieved from http://www.iie.org/

Jap, S. D., & Ganesan, S. (2000). Control mechanisms and relationship lifecycles: Implictions for safeguarding specific investments and developing commitment. *Journal of Marketing Research*, *37*, 227-245. doi:10.1509/jmkr.37.2.227.18735

Jehn, K. A. (1995). A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly*, *40*, 256-282. doi:10.2307/2393638

Johnsen, T. E., & Ford, D. (2005). At the receiving end of supply network intervention: The view from an automotive first tier supplier. *Journal of Purchasing and Supply Management*, *11*, 183-192. doi:10.1016/j.pursup.2005.10.010

Jones, C., Hesterly, W. S., & Borgatti, S. P. (1996). A general theory of network governance: Exchange conditions and social mechanisms. *Academy of Management Review*, *22*, 911-945. doi:10.5465/AMR.1997.9711022109

Jones, C., & Lichtenstein, B. B. (2008). Temporary interorganizational projects: How temporal and social embeddedness enhance coordination and manage uncertainty. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 231-255). Oxford, UK: Oxford University Press.

Jost, J. T., Banaji, M. R., & Nosek, B. A. (2004). A decade of system justification theory: Accumulatede evidence of discussion and unconcious bolstering of the status quo. *Political Psychology*, *25*, 881-919. doi:10.1111/j.1467-9221.2004.00402.x

Kanter, R. M. (1994). Collaborative advantage: The art of alliances. *Harvard Business Review*, *72*(4), 96-108.

Katz, J., & Hicks, D. (1997). How much is a collaboration worth? A calibrated bibliometric model. *Scientometrics, 40(3)*, 541–554. doi:10.1007/BF02459299

Kenis, P., & Oerlemans, L. (2008). The social network perspective: Understanding the structure of cooperation. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 289-312). Oxford, UK: Oxford University Press.

Kickert, W. J. M., & Koppenjan, J. F. M. (1997). Public management and network management: An overview. In W. J. M. Kickert, E.-H. Klijn, & J. F. M. Koppenjan (Eds.), *Managing complex networks: Strategies for the public sector* (pp. 35-61). London, UK: Sage.

Killing, J. P. (1983). *Strategies for joint venture success.* New York, NY: Praeger.

Kim, T.-Y., Oh, H., & Swaminathan, A. (2006). Framing inter-organizational network change: A network inertia perspective. *Academy of Management Review*, *31*, 704-720. doi:10.5465/AMR.2006.21318926

Klijn, E.-H. (2008). Policy and implentation networks: Managing complex interactions. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 118-146). Oxford, UK: Oxford University Press.

Knight, J. (2012). Higher education crossing borders. In R. Sakamoto & D. W. Chapman, *Cross-border partnerships in higher education: Strategies and issues* (pp. 16-44). New York, NY: Routledge.

Knoke, D., & Chen, X. (2008). Political perspectives on interorganizational networks. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 441-472). Oxford, UK: Oxford University Press.

Koberg, C. S., & Ungson, G. R. (1987). The effects of environmental uncertainty and dependence on organizational structure and performance: A comparative study. *Journal of Management*, *13*, 319-332. doi:10.1177/014920638701300412

Koka, B. R., & Prescott, J. E. (2002). Strategic alliances as social capital: A multidimensional view. *Strategic Management Journal*, *23*, 795-816. doi:10.1002/smj.252

Koza, M. P., & Lewin, A. Y. (1998). The co-evolution of strategic alliances. *Organization Science*, *9*, 255-264. doi:10.1287/orsc.9.3.255

Kraatz, M. S., & Zajac, E. J. (1996). Exploring the limits of the new institutionalism: The causes and consequences of illegitimate change. *American Sociological Review*, *61*, 812-836. doi:10.2307/2096455

Krumme, G. (1969). Toward a geography of enterprise. *Economic Geography*, *45*, 30-40. doi:10.2307/143176

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, *32*, 465-491. doi:10.3102/00028312032003465

Lamming, R. C., Cousins, P. D., & Notman, D. (1996). Beyound vendor asessment: Relationship assessment programmes. *European Journal of Purchasing and Supply Management*, *2*, 173-181. doi:10.1016/S0969-7012(96)00013-5

Lane, J. E. (2012). Joint ventures in cross-border higher education. In R. Sakamoto & D. W. Chapman, *Cross-border partnerships in higher education: Strategies and issues* (pp. 67-92). New York, NY: Routledge.

Lane, J. E. (2013). Partnerships and outspots: New role for U.S. universities in Latin American higher education. In J. Balán (Ed.), *Latin America's new knowledge economy: Higher education government, and international collaboration* (pp. 85-98). New York, NY: Institute of International Education.

Lane, P. J., & Lubatkin, M. (1998). Relative absortive capacity and interorganizational learning. *Strategic Management Journal*, *19*, 461-477. doi:10.1002/(SICI)1097-0266(199805)19:5<461::AID-SMJ953>3.0.CO;2-L

Lattuca, L. R., & Stark, J. S. (2009). Learners. In *Shaping the college curriculum: Academic plans in context* (pp. 145-181). San Francisco, CA: Jossey-Bass.

Laumann, E. O., Galaskiewicz, J., & Marsden, P. V. (1978). Community structure as interorganizational linkages. *Annual Review of Sociology*, *4*, 455-484. doi:10.1146/annurev.so.04.080178.002323

Lawrence, T., Phillips, N., & Hardy, C. (1999). Watching whale watching: Exploring the discursive foundations of collaborative relationships. *Journal of Applied Behavioral Science*, *35*, 479-502. doi:10.1177/0021886399354008

Le Bon, G. (1896). *The crowd: A study of the popular mind*. New York, NY: Macmillan.

LeBaron, M. (2003). *Bridging cultural conflicts: A new approach for a changing world*. San Francisco, CA: Jossey-Bass.

Levinthal, D. A., & Fichman, M. (1988). Dynamics of interorganizational attachments: Auditor-client relationships. *Administrative Science Quarterly*, *33*, 345-369. doi:10.2307/2392713

Levy, D. C. (2005). *To export progress: The golden are of university assistance in the Americas*. Bloomington: Indiana University Press.

Lomi, A., Negro, G., & Fonti, F. (2008). Evolutionary perspectives on inter-organizational relations. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 313-338). Oxford, UK: Oxford University Press.

Lorange, P., & Roos, J. (1992). *Strategic alliances: Formation, implementation, and evolution*. Cambridge, MA: Blackwell Business.

Lotia, N., & Hardy, C. (2008). Critical perspectives on collaboration. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 366-389). Oxford, UK: Oxford University Press.

Luhmann, N. (1979). *Trust and power: Two works.* Chichester, UK: Wiley.

Lundvall, B.-A. (1988). Innovation as an interactive process: From user-producer interaction to national systems of innovation. In G. Dosi, C. Freeman, C. Nelson, R. Silverberg, & L. Soet (Eds.), *Technical challenge and economic theory* (pp. 349-369). London, UK: Pinter.

Macneil, I. R. (1980). *The new social contract: An inquiry into modern contractual relations*. New Haven, CT: Yale University Press.

Macready, C., & Tucker, C. (2011). *Who goes where and why? An overview and analysis of global educational mobility.* New York, NY: Institute of international education.

Mandell, M. P., & Keast, R. (2008). Voluntary and community sectro partnerships: Current interorganizational relations and future challenges. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 175-202). Oxford, UK: Oxford University Press.

March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, *2*, 71-87. doi:10.1287/orsc.2.1.71

Martin, P., Chackerian, R., Imershein, A., & Frumkin, M. (1983). The concept of “integrated” services reconsidered. *Social Science Quarterly*, *64*, 747-763.

Mattessich, P. W., Murray-Close, M., & Monsey, B. R. (2001). *Collaboration: What makes it work?* (2nd ed.). St. Paul, MN: Amherst H. Wilder Foundation.

Mayer, K. J., & Argyres, N. S. (2006). Learning to contract: Evidence from the personal computer industry. *Organization Science*, *15*, 394-410. doi:10.1287/orsc.1040.0074

Mayo, M., & Taylor, M. (2001). Partnerships and power in community regeneration. In S. Balloch & M. Taylor, *Partnership working: Policy and practice* (pp. 29-56). Bristol, UK: Policy Press.

MacDougall, W. (1921). *The group mind: A sketch of the principles of collective psychology with some attempt to apply them to the interpretation of national life and character.*. Cambridge, UK: Cambridge University Press.

McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, *27*, 415-444. doi:10.1146/annurev.soc.27.1.415

Medcof, J. W. (2001). Resource-based strategy and manageria power in networks of internationally dispersed technology units. *Strategic Management Journal*, *22*, 999-1012. doi:10.1002/smj.192

Melaville, A. I., Blank, M. J., & Asayesh, G. (1993). *Together we can: A guide for crafting a profamily system of education and human services.* Retrieved from http://eric.ed.gov/?id=ED443164

Meyer, J. W., & Rowan, B. (1978). The structure of educational organizations. In M. W. Meyer (Ed.), *Environments and organizations* (pp. 78-109). San Francisco, CA: Jossey-Bass.

Migge, B., & Léglise, I. (2007). Language and colonialism: Applied linguistics in the context of Creole communities. In M. Hellinger & A. Pauwels (Eds.), *Handbook of language and communication: Diversity and change* (pp. 297-338). Berlin, Germany: Mouton de Gruyter.

Millar, C. C. J. M., Choi, C. J., & Chen, S. (2004). Global strategic partnerships between MNEs and NGOs: Drivers of change and ethical issues. *Business and Society Review*, *109*, 395-414. doi:10.1111/j.0045-3609.2004.00203.x

Ministerio de educacion nacional. (2014). *Thoughts for a higher education internationalization policy.* Bogota, Colombia: Ministerio de educacion nacional.

Moran, P. (2005). Structural vs. relational embeddedness: Social capital and managerial performance. *Strategic Management Journal*, *26*, 1129-52. doi:10.1002/smj.486

Morley, I., & Stephenson, G. (1977). *The social psychology of bargaining*. London, UK: Allen & Unwin.

Mortimer, K. P., & Sathre, C. O. (2007). Chapter 7: In defense of shared governance. In *The art and politics of academic governance: Relations among boards, presidents, and faculty* (pp. 111-128). Westport, CT: Preager.

NAFSA: Association of International Educators. (2013). *Connect and network: Find peers*. Retrieved from http://www.nafsa.org/Connect_and_Network/Find_Peers/

Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and organizational advantage. *Academy of Management Review*, *23*, 242-266. doi:10.5465/AMR.1998.533225

Narin, F., Stevens, K., & Whitlow, E. (1991). Scientific cooperation in Europe and the citation of multidomestically authored papers. *Scientometrics, 21(3)*, 313–323. doi:10.1007/BF02093973

Nelson, R. R., & Winter, S. G. (1982). *An evolutionary theory of economic change.* Cambridge, MA: Belknap Press.

Nooteboom, B. (1999). Innovation and inter-firm linkages: New implications for policy. *Research Policy*, *28*, 793-805. doi:10.1016/S0048-7333(99)00022-0

Nooteboom, B. (2008). Learning and innovation in interorganizational relationships. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 605-634). Oxford, UK: Oxford University Press.

Nowak, M. A. (2006). Five rules for the evolution of cooperation. *Science*, *314*, 1560-1563. doi:10.1126/science.1133755

Oliver, C. (1990). Determinants of inter-organizational relationships: Integration and future directions. *Academy of Management Review*, *5*, 241-265. doi:10.5465/AMR.1990.4308156

Oliver, P. E., & Myers, D. J. (2003). Networks, difussion, and cycles of collective action. In M. Diani & D. McAdam (Eds.), *Social movements and networks: Relational approaches to collective action* (pp. 173-203). Oxford, UK: Oxford University Press.

Ordóñez-Matamoros, H. G., Cozzens, S. E., & Garcia, M. (2012). International Co-Authorship and Research Team Performance in Colombia. *Review of Policy Research*, 415-431. doi:10.1111/j.1541-1338.2010.00449.x

Otatti, G. D. (1994). Cooperation and competition in the industrial district as an organization model. *European Planning Studies*, *2*, 463-83. doi:10.1080/09654319408720281

Ozcan, C. P., & Eisenhardt, K. M. (2001). *Start-ups in nacent markets: Building a strong alliance portfolio from a low-power position.* Retrieved from Druid website: http://www2.druid.dk/conferences/viewpaper.php?id=2669&cf=18

Park, S. H., & Ungson, G. R. (1997). The effect of national culture, organizational complementarity, and economic motivation on joint venture disolution. *Academy of Management Journal*, *40*, 297-307. doi:10.2307/256884

Peters, M. A., & Burbules, N. C. (2004). *Poststructuralism and educational research.* Lanham, MD: Rowman & Littlefield.

Pfeffer, J., & Salancik, G. R. (1978). Social control of organizations. In *The external control of organizations, Managing Environmental Demands: Adaptation and Avoidance, The Design and Management of Externally Controlled Organizations* (pp. 39-52, 92-110, 257-268). Harpercollins College Div.

Phillips, D. C., & Burbules, N. C. (2000). *Postpositivism and educational research.* Lanham, MD: Rowman & Littlefield.

Pollitt, C. (2013). The logics of performance management. *Evaluation*, *19*, 346-363. doi:10.1177/1356389013505040

Powell, W. W. (1990). Neither market nor hierarchy: Network forms of organizing. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 12, pp. 295-336). Greenwich, CT: JAI Press.

Powell, W. W., & Smith-Doerr, L. (1994). Networks and economic life. In N. J. Smelser & R. Swedberg (Eds.), *The handbook of economic sociology* (2^{nd} ed., pp. 368-402). Princeton, NJ: Princeton University Press.

Powell, W. W., White, D. R., Koput, K. W., & Owen-Smith, J. (2005). Network dynamics and field evolution: The growth of interorganizational collaboration in the life sciences. *American Journal of Sociology*, *110*, 1132-1205. doi:10.1086/421508

Ray, J. P. (2008). *The influence of culture on conflict handling styles and use of mediation* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses. (Publication Number 3354221)

Ring, P. S. (1997). Transacting in the state of union: A case study of exchange governed by convergent interests. *Journl of Management Studies*, *34*, 1-25. doi:10.1111/1467-6486.00040

Ring, P. S. (2008). Theories of contract and their use in studying interorganizational relations: Sociological, psychological, economic, management and legal. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 502-524). Oxford, UK: Oxford University Press.

Ring, P. S., Doz, Y. L., & Olk, P. M. (2005). Managing formation processes in R&D consortia. *California Management Review*, *47(4)*, 137-156. doi:10.2307/41166320

Ring, P. S., & Van de Ven, A. (1992). Structuring cooperative relationships between organizations. *Strategic Management Journal*, *13*, 483-498. doi:10.1002/smj.4250130702

Robinson, D., Hewitt, T., & Harriss, J. (1999). *Managing Development: Understanding Inter-Organizational Relationships.* London, Thousand Oaks, New Dehli: SAGE Publications.

Rokeach, M. (1960). *The open and closed mind: Investigations into the nature of belief systems and personality systems.* New York, NY: Basic Books.

Rokeach, M. (1968). *Beliefs, attitudes, and values: A theory of organization and change.* San Francisco, CA: Jossey-Bass.

Rorty, R. (1998). Afterword: Pragmatism, pluralism, and postmodernism. In *Philosophy and Social Hope* (pp. 262-277). New York, NY: Penguin Books.

Rowley, T., Behrens, D., & Krackhardt, D. (2000). Redundant governance structures: An analysis of structural and relational embeddedness in the steel and semiconductor industries. *Scientific Management Journal*, *30*, 1235-1251. doi:10.1002/(sici)1097-0266(200003)21:3<369::aid-smj93>3.0.co;2-m

Ruiz-López, S. (2011, May 26). *Reforma a la ley 30 de educación. Según Pierre Bourdieu* [Translation, video file]. Retrieved from https://www.youtube.com/watch?v=fj8FBlnjtWo

Sakamoto, R., & Chapman, D. W. (2012). Expanding across borders: The growth of cross border partnerships in higher education. In R. Sakamoto, & D. W. Chapman, *Cross-border partnerships in higher education* (pp. 3-15). New York: Routledge.

Saku, M. (1992). *Prices, quality and trust: Inter-firm relationships in Britain and Japan.* Cambridge, UK: Cambridge University Press.

Sampson, R. C. (2004). Organizational choice in R&D alliances: Knowledge-based and transaction cost perspectives. *Managerial and Decision Economics*, *25*, 421-436. doi:10.1002/mde.1199

Sanford, J., & Milward, H. B. (2008). Collaborative service provision in the public sector. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 147-174). Oxford, UK: Oxford University Press.

Schoenmakers, W., & Duysters, G. (2006). Learning in strategic technology alliances. *Technology Analysis & Strategic Management*, *18*, 245-264. doi:10.1080/09537320600624162

Schruijer, S. G. (2008). The social psychology of interorganizational relations. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 417-440). Oxford, UK: Oxford University Press.

Scott, W. R., & Davis, G. F. (2007). *Organizations and organizing: Rational, natural, and open system perspectives*. Upper Saddle River, NJ: Pearson Prentice Hall.

Sharma-Brymer, V. (2009). Reflecting on postcolonialism and education: Tensions and dilemmas of an insider. In R. Cowen & A. M. Kazamias (Eds.), *International handbook of comparative education* (pp. 655-668). New York, NY: Springer.

Sherif, M. (1967). *Group conflict and cooperation.* London, UK: Routledge and Kegan Paul.

Simon, H. A. (1962). The architecture of complexity. *Proceedings of the American Philosophical Association Society*, *106*, 467-482.

Simon, H. A. (1965). *Administrative behavior: A study of decision-making processes in administrative organization* (2nd ed.) New York, NY: Macmillan.

Slaughter, S., & Rhoades, G. (2009). *Academic capitalism and the new economy: Markets, state, and higher education.* Baltimore, MD: Johns Hopkins University Press.

Sooryamoorthy, R. (2009). Do types of collaboration change citation? Collaboration and citation patterns of South African science publications. *Scientometrics, 81(1)*, 177–193. doi:10.1007/s11192-009-2126-z

Spekman, R. E., Forbes, T. M., III, Isabella, L. A., & MacAvoy, T. C. (1998). Alliance management: A view from the past and a look to the future. *Journal of Management Studies*, *35*, 747-764. doi:10.1111/1467-6486.00118

Spekman, R. E., Isabella, L. A., & MacAvoy, T. C. (2000). *Alliance competence: Maximizing the value of your partnerships*. New York, NY: Wiley.

Stouffer, S. A., Suchman, E., Devinney, L., Star, S., & Williams, R. (1949). *The American soldier: Adjustment during army life.* Princeton, NJ: Princeton University Press.

Tajfel, H., & Turner, J. (1979). An integrative theory of intergroup conflict. In W. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey, CA: Brooks/Cole.

Taylor, M., & Asheim, B. T. (2001). The concept of the firm in economic geography. *Economic Geography*, *77*, 315-328. doi:10.2307/3594103

Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups.* New York, NY: Wiley.

Uzzi, B. (1996). The sources and consequences of embeddedness for the economic performance of organizations: The network effect. *American Sociological Review, 61*, 674-698. doi:10.2307/2096399

Van de Ven, A. H., & Walker, G. (1984). The dynamics of interorganizational coordination. *Administrative Science Quarterly*, *29*, 598-621. doi:10.2307/2392941

Van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Albany: State University of New York Press.

Van Rossem, R. (1996). The world system paradigm as general theory of development: A cross national test. *American Sociological Review*, *61*, 508-527. doi:10.2307/2096362

Vansina, L., Taillieu, T., & Schruijer, S. (1998). “Managing” multiparty issues: Learning from experience. In W. Pasmore & R. Woodman (Eds.), *Research in organizational change and development* (Vol. 11, pp. 159-183). Greenwich, CT: JAI Press.

Vidotto, G., Vicentini, M., Argentero, P., & Bromiley, P. (2008). Assessment of organizational trust: Italian adaptation and factorial validity of the organizational trust inventory. *Social Indicators Research*, *88*, 563-575. doi:10.1007/s11205-007-9219-y

Waddock, S. A., & Post, J. E. (1995). Catalytic alliances for social problem solving. *Human Relations*, *48*, 951-973. doi:10.1177/001872679504800807

Walker, G., Kogut, B., & Shan, W. (1997). Social capital, structural holes and the formation of an industry network. *Organization Science*, *8*, 109-125. doi:10.1287/orsc.8.2.109

Warren, R. L., Rose, S. M., & Bergunder, A. F. (1974). *The structure of urban reform: Community decision organizations in stability and change*. Lexington, MA: Lexington Books.

Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications.* Cambridge, MA: Cambridge University Press.

Weick, K. E. (1976). Educational organizations as loosely coupled systems. *Administrative Science Quarterly*, *21*, 1-19. doi:10.2307/2391875

West, C. (2012). *New approaches to cooperation with Latin America.* Retrieved from NAFSA: Association of International Educators website: http://www.nafsa.org/uploadedFiles/Chez_NAFSA/Find_Resources/Publications/Periodicals/Epublications/epub_latin_america.pdf

Westley, F., & Vredenberg, H. (1991). Strategic bridging: The alliance of business and environmentalists in the marketing of green products. *Journal of Applied Behavioral Science*, *27*, 65-90. doi:10.1177/0021886391271004

Williams, P. (2002). The competent boundary spanner. *Public Administration*, *80*, 103-124. doi:10.1111/1467-9299.00296

Williamson, O. E. (1975). *Markets and hierarchies: Analysis and antitrust implications: A study in the economics of internal organization.* New York, NY: Free Press.

Williamson, O. E. (1987). *The economic institutions of capitalism: Firms, markets and relational contracting.* New York, NY: Free Press.

Williamson, O. E. (1991). Comparative economic organization: The analysis of discrete structural alternatives. *Science Quarterly*, *36*, 269-296. doi:10.2307/2393356

Williamson, O. E. (1993). Calculativeness, trust and economic organization. *Journal of Law and Economics*, *36*, 453-486. doi:10.1086/467284

Wood, D. J., & Gray, B. (1991). Toward a comprehensive theory of collaboration. *Journal of Applied Behavioral Science*, *27*, 139-162. doi:10.1177/0021886391272001

Yeung, H. W.-C. (1994). Critical reviews of geographical perspectives on business organizations and the organization of production: Towards a network approach. *Progress in Human Geography*, *18*, 460-490. doi:10.1177/030913259401800403

Yeung, H. W.-C. (2005). The firm as social networks: An organisational perspective. *Growth and Change*, *36*, 307-328. doi:10.1111/j.1468-2257.2005.00279.x

Yeung, H. W.-C. (2008). Perspectives on interorganizational relations in economic geography. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The Oxford handbook of interorganizational relations* (pp. 473-501). Oxford, UK: Oxford University Press.

Yin, R. K. (2009). *Case study research: Design and methods*. Los Angeles, CA: Sage.

Yoffie, D. B., & Kwak, M. (2006). With friends like these: The art of managing complementors. *Harvard Business Review*, *84*(9), 89-98.

Zaheer, A., McEvily, B., & Perrone, V. (1998). Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization Science*, *9*, 141-159. doi:10.1287/orsc.9.2.141

Zaheer, S., Albert, S., & Zaheer, A. (1999). Time scales and organizational theory. *Academy of Management Review*, *24*, 625-674. doi:10.5465/AMR.1999.2553250

Zartman, I. W. (1981). Explaining disengagement. In J. Z. Rubin (Ed.), *Dynamics of third party intervention: Kissinger in the Middle East* (pp. 148-67). New York, NY: Preager.

Zollo, M., Reuer, J. J., & Singh, H. (2002). Interorganizational routines and performance in strategic alliances. *Organizational Science*, *13*, 701-713. doi:10.1287/orsc.13.6.701.503

Zucker, L. G. (1986). Production of trust: Institutional souces of economic structure, 1840-1920. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 8, pp. 53-111). Greenwich, CT: JAI Press.

Appendix A: Interview Protocol

Overview

The initial interview protocol was developed before the literature review was completed in a pilot study. The first two interviews were meant to explore the proposed conceptual framework (see Figure 2.1). Therefore, some aspects that were found in the literature were not found during the initial two interviews during the pilot study. In addition, the meanings and interpretations of some concepts changed during the initial interview process as well as through the completion of the literature review.

Those aspects, however, were addressed during these two initial interviews by the interviewees in the natural flow of conversations. Those aspects are going to be shown in bold in the following interview protocol. It is important to take into account that this was a qualitative exploration research study. Therefore, the design evolved throughout the research process. There are aspects underlined and written in bold to make readers aware that were not asked explicitly to the initial participants. Changes in meaning or association were addressed in the analysis phase. As concepts could have many different meanings or connotations, one thing to notice is that before each of the questions was posed, a short contextualization was given to interviewees by the interviewer. This contextualization appears in the first column.

It might not be necessary to go back to the initial interviewees and ask them about those aspects as those have already been addressed in the previous interviews. It is not needed to verify every concept whose meaning changed. As the principal researcher engaged in the analysis of the data though Nvivo he determined if it were necessary to go back to any of those aspects in any of the following interviews in order to explore the theoretical framework.

Interview 1

The first and second interviews addressed the second research question: *To what extent the theories of international collaboration apply to the practices of international collaboration at a comprehensive research university?* These interviews were meant to explore the proposed conceptual framework in the case of this comprehensive research institution (see Figure 2.1).

Context. The PI had not met most interviewees before. The first interview was usually their first face-to-face meeting, or the previous face-to-face meeting was very brief. Therefore, the PI asked general questions about the interviewee to contextualize the interview. The PI also explained the broad purpose of the study and the specific purpose of this interview.

Salutation. Hello, my name is Fernando Soler. We have previously exchanged some e-mails, and today we are going to carry an interview that will last between 30 minutes to one hour.

Make sure that they consent to participate in the research. I want to make sure that you have previously read the consent to participate in the research. If I have not sent to you this consent, I want you to read it. If you have any questions, do not hesitate to ask them. By participating in the following interview, it is understood that you have read the consent form and that you have voluntarily agreed to participate in the proposed research. A form of implied consent will be given in print or emailed to the participant.

Explanation of the purpose of the interview and the research. The PI explains that this interview will be used as part of his D.Ed. dissertation project. He is exploring the nature of international higher educational collaborations and currently is applying and experimenting with his conceptual framework.

Interview questions. At first I would like you to give me a brief introduction about yourself: Who are you? What do you do? And what is your experience in cross-border partnerships?

I am interested on finding what are the factors that generate fruitful cross-border partnerships? In the methods chapter, I established the following interview protocol.

Could you emphasize on what are the motivators for partnering? Or why partnerships were created?

Concepts	**Interview Questions About Proposed Concepts**
Incomplete puzzles We have incomplete puzzles or problems that the other can contribute to solve	Where are these incomplete puzzles? What do we want from the other?” What the other wants from us?”
Affiliation We have an Affiliation that drives us together, kinship, professional affiliation, common history, etc.	Are there any bonds? How strong are these bonds?
Frequent interactions We have frequent interactions and that makes us more likely to cooperate and to reciprocate	How do we ensure that the other will reciprocate?
Reputation building Helping the other improves our reputation so we can receive from others	Who do we need to help in order to receive from others?
Selective capacity We can differentiate between reciprocators and defectors so we can choose the first ones	How can we distinguish givers and reciprocators from defectors? What are our criteria?
Promise of growth The others offer them a plausible promise of growth on learning, research, reach, etc.	How do we evaluate external the promises of growth? How do we address such promises?

Concepts: How Do These Partnerships Operate?	Interview Questions About Proposed Concepts
Organizations engage in partnerships because:	Interview questions about the proposed factors
Philanthropy The other wants to help me or I want to help the other	What the giver and the receiver expect? Do we expect reciprocity? Are we getting indirect reciprocities?
Joint efforts We both engage in common causes	What are the enables for getting together and pursuing a common cause? What are the obstacles or deterrents for that same cause? How are the joint efforts organized?
Resource exchanges We exchange resources because have complementary offers and demands	What are the complementary offers and demands that support exchanges on resources, products and services?
<u>Co-option</u> **<u>We are actively influencing each other's planning either to engage in collective or complementary actions</u>**	**<u>How do you influence your partner's planning or actions?</u>** **<u>How do your partners influence your own planning or actions?</u>**

Note. Underlined and bolded text indicates the questions that were added as result of interacting with participants.

What makes these partnerships sustainable? We can argue that partnerships are sustained by the same factors that motivate them. However, here we are dealing with the decision bodies and the external forces that change our decisions and perceptions of these collaborations. **Here sustainability is not a goal by its own sake. Collaborations can be about short time endeavors but also about long time ones. The goal is not to enlarge short time endeavors.**

Concepts	**Interview Questions About Proposed Concepts**
External dynamics We live in highly dynamic and competitive environments so in some cases we need to collaborate to better compete.	What are the advantages gained with the partnerships? What is the price of acquiring such advantages? Does the partnership improve my reputation? Does it allow me to compete better?
Internal dynamics of organizations The alliance is going to require some efforts therefore it will require some internal negotiations.	Who participates in the partnership efforts? What are the efforts to maintain these partnerships? What are the perceived gains or losses from these partnerships? Who has to be convinced to invest in the alliance? Am I able to convince? How can I show the benefits? What are the benefits and what are the investments?

Concepts: Relational Embeddedness	**Interview Questions About Proposed Concepts**
Agency There are key people who establish these partnerships	Who are the key agents on establishing these partnerships? What are their characteristics? What are their methods? Did they started with a top-down or a bottom-up approach?
<u>**Embedded**</u> <u>**Collaborations can be embedded without the need of an explicit agreement such as traditional transfers from some universities.**</u>	<u>**With what organizations do you collaborate without having an explicit agreement?**</u>
<u>**Engineered**</u> <u>**Relationships can also be engineered, they are not only evolutionary.**</u>	<u>**What plans or strategies or goals can motivate partnering without having a previous relations?**</u>
<u>**Evolutionary**</u> <u>**Relationships can evolve progressively untiul they become partnerships**</u>	<u>**How have you worked your way into entering into a chain of value or collaboration in which there are different competitors as well as different providers and different possibilities for collaboration?**</u>

Note. Underlined and bolded text indicates the questions that were added as result of interacting with participants.

Concepts: How Do They Come to Terms with the Resulting Deals?	Interview Questions About Proposed Concepts
Market and/or value sharing Collaborate in order to develop my market and respect the other's market "share value" Overtake the other's market, colonize, capture all the value Let the other copy my advantages without an appropriate return, let the other get a higher advantage, let the other capture all the value	Is this a personal disinterested relation? Is this an institutional probably interested relation? In both cases: Is there a mutual benefit? In the second case: How do we share value? Are we going to get a higher advantage than the other? Is the other going to get a higher advantage than us? How do we reach an appropriate balance? What is fair for each one?

Concepts: Generation of Mutual Dependencies	**Interview Questions About Proposed Concepts**
People have many definitions for collaboration, some see it as help, others as preferential conditions, and some others as the integration of agents in a chain of value.	**How do you define collaboration?** **How do you relate collaboration to the activities of coordination and competition?**
You and your organization are immersed in a market in which you compete. You also need to follow the regulations and the requests of your boss or superiors.	**What is the relationship between your organizational structure and the external competitive environment in relation to your engagement in international collaborations?**

Note. Underlined and bolded text indicates the questions that were added as result of interacting with participants.

Interview 2

The first and second interviews address the second research question: *To what extent do the theories of international collaboration apply to the practices of international collaboration at a comprehensive research university?* These two interviews explore the application of previous theoretical frameworks in this university.

Context. The interviewee and the PI have already met in the previous interview. Therefore, the PI could ask more specific questions about the interviewee activities and probably address doubts form the previous interview.

Salutation. Hello, again. This is our second interview, and I hope this one is as fruitful as the previous one. Today we are going to carry an interview that is slightly shorter than the previous one. It will last between 30 minutes to 45 minutes.

Make sure that they consent to participate in the research. I want to remind you that your participation in the study is voluntary. You can withdraw any time you want, and if you feel that any part of the study causes you discomfort, you can ask for this part to be removed from the data.

Explanation of the purpose of the interview and the research. The PI explains that this interview will be used as part of his D.Ed. dissertation project. He is exploring the nature of international higher educational collaborations and currently is applying and interpreting his conceptual framework.

Interview questions. How have you contributed to development of partnerships?

Concepts	**Interview Questions About Proposed Concepts**
There might be some specific strategies to achieve the engagement of people in collaborations	What strategies have you used?
There might be some specific structures, units or dispositions necessary to allow international collaborations.	What structure you have contributed to develop in order to promote, develop and sustain cross-border collaborations?
There might be some particular skills such as speaking different languages or the knowing of partners needs that allows the engagement in collaborations	What knowledge and skills do you have that have allowed you to promote collaboration?
There might be some activities or behaviors that encourage or allow the engagement into international collaborations.	What behaviors do you think that have contributed to the development of cross border partnerships?
There might be an specific organization to promote international collaboration	What is the general schema or framework necessary to promote international collaborations?
I am interested in knowing how is the relation among the different units of that organization	How do you integrate, knowledge with structures and strategies?

Is there a rational organization or The organization evolves naturally according to peoples interests In any case how do you get support for the proposed developments.	Do the functions have evolved according to people's interests or on the other hand you have already planned a development and look for people with specific skills to fit certain positions

Interview 3

The third interview addressed the third research questions: *To what extent can the practices of creating cross-border collaborations in higher education be learned or developed? And to what extent do such practices depend upon having or controlling certain critical resources?* This interview focused on geographical, cultural, knowledge, and resource differences that motivated the development of collaborations, as well as the skills and criteria that collaboration managers use to develop partnering activities.

Context. At this point the PI had analyzed most of the data from the previous two interviews, applying the theoretical framework. Here the researcher asked about some aspects from the literature that have not been touched by the interviewees. At this point, the PI has bridged the conceptual framework with the practice of higher education collaboration, and he wanted to get participants' opinions on that bridging.

Salutation. Hello, again. This is our third interview, and I hope this one is as fruitful as the previous two. This interview is slightly different from the previous two, as in the previous two, I didn't have much knowledge about your collaborative activities. In this interview, I will show you some of my findings and ask you to help me complete my understanding about them. Today we are going to carry an interview that lasts between 30 minutes to one hour.

Make sure that they consent to participate in the research. As in the previous two interviews, I want to make sure that you have previously read the consent to participate in the research. If I have not sent to you this consent, I want you to read it. If you have any questions, do not hesitate to ask them. By participating in the following interview, it is understood that you have read the consent form and that you have voluntarily agreed to participate in the proposed research. A form of implied consent will be given in print or emailed to the participant.

Explanation of the purpose of the interview and the research. The PI explained that this interview will be used as part of his D.Ed. dissertation project. He is exploring the nature of international higher educational collaborations and currently is assessing his findings from the previous interviews and the literature review.

Interview questions.

Concepts: Geographical, Cultural, Knowledge and Resource Differences	Interview Questions About Proposed Concepts
Theoretically, collaborations are based on differences. Therefore, differences need to be maintained.	What is the role of geographical, cultural, knowledge and resource differences in your interests for developing collaborations? What advantages does your partner's location give you? What advantages does your partner's culture give you? What advantages does your partner's technology give you? What is better at each place? At your place and at your partner's place?
Distances need to be retained in order to maintain collaborations	How do you keep those distances?
Distances in some aspects need to be overcome in order to reach commonalities that facilitate communications and the development of collaborations.	How do you overcome those distances? How do you judge what distances need to be overcome and what distances need to be maintained or even created?

Concepts: Criteria for Classifying Collaborations	Interview Questions About Proposed Concepts
Collaborations can be classified whether they are intended for exploration or for exploitation purposes	Could you distinguish collaborations for exploration purposes such as those for research from those collaborations for exploitation such as the offering of a joint

	program?
Collaborations can be classified according to the strength of ties	Are your collaborations based on spread weak ties or on strong focused ties or do you have a combination of both and why?
Collaborations can be classified according to timeframes	What are the time frames of your collaborations? Short term…long term How do you distinguish finished collaborations from failed collaborations?
Collaborations can be classified according to size and scope of activities	Are your collaborations based on networks of various partners or they use to be peer to peer collaborations and why? What influences the scope and the size of your collaborative endeavors?

Concepts: Conditions that Allow or Facilitate Collaboration	**Interview Questions About Proposed Concepts**
There are internal conditions that facilitate or motivate the development of collaborations.	Who had that vision of the benefits that could be created through collaboration? How that person arrived at that vision? Was there an objective cognitive distance? Or on the other hand it was driven by a subjective interest? Was it driven by the control of certain critical resources? What resources does your partner control that you wish to gain some participation? How the favorable climate for collaboration was created? Who served as a trustworthy mediator? How have you managed language differences and teaching differences across cultures? Have you gained an advantage with those differences? What similarities have allowed mutual understanding and communication and what differences have allowed learning? What positive previous experiences contributed to create the grounds for communication?
There are external conditions that facilitate collaborations	What are your main relational capabilities? How do you contribute to develop these relational capabilities? How the global political climate contributes or deters your international partnering efforts?

	How did you get to interact with your current partners? What motivated you or your partner to develop those interactions and to increase them to the level of developing a partnership? Could you mention common communities in which you two or other participants in collaborations are members? Who were or are you key intermediaries? Who allowed you to enter into these collaborations? What environment, community or affiliation helped you to get in contact with your current partners

Interview 4

The fourth interview focused on the fourth research question: *How can the competency of creating cross-border partnerships be learned or developed?* This interview is about learning to collaborate, how people became skilled in the development of collaborations, and how other people can acquire those skills. In this final interview the PI sums up the findings derived from the literature and previous interviews and discuss them with the study participants.

Context. This interview follows a similar pattern to the third interview in the sense that the researcher is very familiar with the activities as well as the theories behind them. However, at this point the PI rather than expanding the exploration, tries to bring it to a conclusion. The PI will probably present and discuss his findings with the interviewees asking for their evaluation and feedback.

Salutation. Hello again, this is our fourth and last interview and I hope this one is as fruitful as the previous three. In this interview, I will show you some of my findings and ask you to help me complete my understanding about them. Today we are going to carry an interview that last between 30 minutes to one hour.

Make sure that they consent to participate in the research. As in the previous three interviews, I want to make sure that you have previously read the consent to participate in the research. If I have not sent to you, this consent I want you to read it. If you have any questions, do not hesitate to ask them. By participating in the following interview, it is understood that you have read the consent form, and that you have voluntarily agreed to participate in the proposed research. A form of implied consent will be given in print or emailed to the participant.

Explanation of the purpose of the interview and the research. The PI explains that this interview will be used as part of his D.Ed. dissertation project. He is exploring the nature of international higher educational collaborations and currently is assessing his findings from the previous interviews and the literature review. In this interview also the figures used in the first section of the findings were presented to interviewees in order to engage them in the discussion of the findings on the previous research questions.

Quotation from an interview in which the PI presents the current findings that frame the current interview questions

Below is an excerpt from an interview in which the PI and a participant discussed the PI's findings from previous interviews. The answers from this participant, which are similar to the answers of other participants, reassure the applicability and validity of the findings.

PI: My theory from searching the literature and carrying the initial interviews is that there are three types of collaboration, okay, client-provider relationships, partnerships. and friendships.
Greg: Okay.

PI: Client-provider relationships are mainly about a resource. Partnerships are mainly about a new opportunity, new knowledge, that allow exploiting, or increasing something or solving a problem. And friendships are about a personal relation. So, for example in the literature they say what are the collective interests for engaging in collaboration? Which I relate to the question, how to engage in collaborations?

Greg: Okay.

PI: So they say that there are three concepts: co-learning, co-option, and co-specialization. And what I find through the interviews is that co-learning is what drives partnerships, because it's an opportunity and we want to learn and.

Greg: Explore. Uhh...hummmm.

PI: Yes we explore, exactly. Co-specialization is about client-provider relationships—you do this, I do that, and we exchange, right. But I won't do that you do because that will undermine the relationship, right.

Greg: Yeah, keep your area.

PI: And I keep my area and we exchange, and we establish an exchange, right. And co-option is the reason, or the way you engage in friendships. So you do this, I have this values, I want you to do this for me. So I exert influence on you. So we are friends, and you say, "Why don't you do that?" or just suggest me things and you exert an influence on me. So these three concepts are perfectly identifiable with these three relationships. And also as you were saying, the purposes of collaboration, partnerships, as you said, are for exploration, for research.

Greg: Uhh...hummmm.

PI: And production purposes are client-provider relationships. There are resources coming and going and we want to make profits, production.

Greg: Uhh...hummmm.

PI: But in the literature, they didn't have a concept about friendship. What is the purpose of friendships? But other scholars wrote about networking, and through the interviews when talking with the people that are participating in collaborations, they coincide that that one of the purposes for collaborations is networking, to connect people to opportunities and to resources and to connect them to the other two purposes.

Greg: Uhh...hummmm.

PI: So by putting these contributions together, I have a bigger generalization. So the purpose of collaboration is not only production, not only exploration, but also networking.

Greg: Uhh...hummmm.

PI: And what I have drawn is that for all the previous questions that I have, there are three concepts.

Greg: Uhh...hummmm.

PI: Three main concepts to address each one of the relations. In the case of client-provider relationships, one concept that describes the, the main concept that they main

conditions that drive client-provider relationships are certainty. I buy something because it's certain.
Greg: Alright, okay.
PI: And you offer me a warranty, and we know the specifications of that.
Greg: Uhh...hummmm.
PI: What drives partnerships, the conditions that support partnerships are uncertainty. I don't know. We are exploring, it's uncertain, right. And the conditions that allow friendships are affinity. Okay, you have those interests, you have those values, and you said in a previous interview that our priorities align.
Greg: Humm...hummmm.
PI: That's one quote that I have from you.
Greg: That the priorities align, yeah.
PI: So the thing, it's, I articulated all these concepts in a chain of reasoning, and by articulating these concepts in a chain of reasoning I arrived at a theory, because a theory helps to inform how and why things happen, you know.
Greg: Uhh...hummmm.
PI: And this theory I hope is an interesting contribution, hahahahahaha.
Greg: Nice.
PI: The theory that I have is that natural advantages geographically distributed become conditions that motivate collaboration.
Greg: Okay.
PI: These conditions generate individual interests on each institution about the other institution, and those individual interests could be necessity, efficiency, reciprocity in the case of client-provider relationships.
Greg: Uhh...hummmm.
PI: Or they could be about the possibilities of innovation or the sharing of skills in the case of partnerships. Or preferential conditions, high levels of interaction, access to key intermediaries, advocacy for others in the case of friendships. So these individual interests of each institution about the other institutions required collective interests that allow developing collaborations. So in the case of client-provider relationships, you need to develop agreements of transaction and co-specialization.
Greg: Uhh...hummmm.
PI: In the case of partnerships you have to develop process of co-learning or research, yeah.
Greg: Right, yeah.
PI: And in the case of friendships, you need to develop influence or co-option according to interests, values, and previous experiences. Friends can say, "We should do that in that way."
Greg: Right.

PI: So those collective interests establish the purpose of a collaboration—indicate if it exploratory, if it is for production or if it is for networking. And each one of those purposes require an approach to develop collaboration. And the approach to develop collaboration in the case of client-provider relationships could be engineered, designed. You just know what goes in each way very precisely. In the case of exploration, you require seeking relations that can become opportunities, uncertainty. So you need to find a relation, if you do that, that happens and there is a potential to use it in this way, you have to find a correlation.

Greg: Uhh...hummmm.

PI: So that becomes an opportunity, we can do business with that.

Greg: Right, right.

PI: And in the case of friendships, they evolve through planned and unplanned interactions, and that is where you said it requires time to get to know people, to know their interest that people don't pull up a sheet saying what their interests are, but through interactions you get to know.

Greg: Right.

PI: How the interests and priorities of people align.

Greg: Right, right, right.

PI: So those are three approaches, and also the literature provide these three approaches. Some are engineered, evolutionary, and the other are embedded.

Greg: Embedded, okay.

PI: So my contributions is to put together different contributions to build a framework that wrap different contributions into a generalizable theory. And the management of collaborations could be: In the case of client-provider relations is visioning and process design. You have certainty, you can envision that with this you can make profits. In the case of partnerships is assessment and research. We are measuring, and we do research, and we find that there's an opportunity. We can find an opportunity. And in the case of friendships is facilitation, guiding, and persuasion. Okay, the thing is, my theory is that when we talk about collaboration, we don't talk just about one type of type of relation, we talk about three possible types of relations.

Greg: Different types of relationships.

PI: And the understanding of collaboration also has three dimensions. In the case of clients, the expectations from collaborations. In the case of clients, it's coordination and competition to increase cost-benefit correlations. If someone gives you a better price, you think that he is collaborating with you, okay.

Greg: Hahahaha.

PI: In the case of partnerships is solving each other's problems or creating opportunities to each other. If someone teaches you something which allow you to develop an activity he is collaborating with you. You can say.

Greg: I have a question. So looking at partnerships and clients, right, if someone gives you a better price, you are thinking yes, they are working along with me, right. But if the if the actual commodity is a skill, it's partnership?
PI: It's partnership.
Greg: Right, but if you are giving me a better price for providing your skills.
PI: That is an interrelation among these three.
Greg: That is what I was about to ask. They don't sit independently. You actually see them as being able to overlap.
PI: They are interrelated.
Greg: Right, that is what I wanted to, because I am thinking about. Through time, I am seeing that in my work I constantly move from these, these two relations. In all three, I move though all three in what I do.

Interview questions.

Concepts	Interview Questions About Proposed Concepts
There are concrete methods or instruments to learn to collaborate	How have you learned to develop international collaborations? How do you continue to learn about developing international collaborations in your area?
The experience in collaborations allow learning from them	What kind of assessment, experiments or evaluations do you run that allow you to learn more about the development of collaborations? How do you allow the evolution of new ideas for partnering? Or how do you let initiatives for partnering evolve?
Success and failure both give some important lessons	What aspects of your organization and/or of your partner's organization allow the success of a partnering enterprise? What aspects of your organization and/or of your partner's organization cause the failure of a partnering enterprise?
Entering into collaboration implies gaining control of some aspects and losing control over other aspects	How do you reconcile the control that you lose and the control that you gain when entering into collaboration? When entering into collaboration do you delegate or outsource some functions that you could do, if so why do you delegate? When entering into collaboration does your partner delegate or outsource to you some functions that he could do, if so why does

	he delegates?
Entering into collaboration implies loosing discretion over some activites	What have you learned about the discretion of your own plans and the dependence on someone else when participating in collaborations?
Dealing with collaborations also implies negotiating	What have you learned about reaching agreeable deals when sharing the benefits of a collaborative endeavor? What have you learned about negotiating agreements?
Collaborations change dynamically	How do you change a partner when you get to find a better partner? Or how do you assess new promises of collaboration? Have you ever been trapped with an undesirable partner?
Collaboration implies losing certain degrees of control	How do you assess trust, reliability and dependability on your partners? What have you learned about that?
Collaboration implies your participation as well as the participation of the international partner	How do you measure your degree of control over your critical resources? How do you measure the criticality or centrality of your resources? How do you measure the centrality or criticality of an international resource?
Power and centrality gives control over collaborative activities	Do you make explicit considerations about power and centrality in your collaborations and how do you use those considerations?
Collaborating internationally also implies engaging partners abroad	What have you learned about motivating partners abroad? How do you locate complementary resources? How do you increase your degree of control over critical resources? What have you learned about letting some of your key resources be controlled by someone else?
Excessive collaboration can become detrimental	Do you have a point where you consider that there is too much collaboration? What reasons have led you to discontinue collaborative efforts?

Vita

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Education

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Selected Professional Experience

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Selected Publications and Executive Contributions

Soler, F. (2014, August 2). Cultural differences and challenges on developing international collaborations, a proposed research. *General faculty assembly*. Bogota, Colombia: ECCI.

Soler, F. (2013, December 3). *Trends on the future of higher education.* Retrieved October 26, 2015, from Youtube: https://www.youtube.com/watch?v=2oIXVtdDoe0

Soler, F. (2014, April 3). *Inter-personal and Inter-organizational relations.* Retrieved October 26, 2015, from Youtube: https://www.youtube.com/watch?v=oVwA6xzoAnI

Soler, F. (2012, August 20). Explanation of Human Capital and Social Capital through the 7 up British Documentary. *General faculty assembly*. Bogota, Colombia: ECCI.

Soler, F. (2008, August). Network and Collaborative work to carry institutional learning assessment. *General faculty assembly*. Bogota: ECCI.

Soler, F. (2009, March 10). Continuous Improvement of a Course. *ECCI informative documents*. Bogota, Colombia: ECCI. http://www.ecci.edu.co/main/index.php/component/remository/func-download/192/chk,67321ccddc4437b34767e9a08ae04d26/no_html,1/

Soler, F. (2008, February). Guidelines for institutional continuous improvement. *General faculty assembly*. Bogota, Colombia: ECCI.

Soler, F. (2007, January). Strategizing the curiculum, course sizes and schedules to maximize institutional growth. *General faculty assembly*. Bogota: ECCI.

Soler, F. (2011, February 24). Guidelines for making argumentative and opinion essays. *ECCI informative documents*. Bogota, Colombia: ECCI.