Introduction and Purpose

Recently, researchers and policymakers have recognized the importance of building connections across programs operating within a system of care, particularly in the field of early childhood education and care (Barnett, Carolan, Fitzgerald, & Squires, 2012). Specifically, these connections involve greater alignment and refer to the process of collaboration. Although collaboration can be a tedious and frustrating process due to disparities in agency regulations, categorical and inflexible funding, and incompatible agency structures (Petti et al., 1996), research has shown that effective collaboration produces a number of important outcomes in systems of care, including helping agencies cope with the increasing complexity of program regulations and policies, helping them meet expanding expectations, needs and demands of human service programs, and improving utilization of funds and personnel (Jones, Thomas, & Rudd, 2004; Lippitt & Van Til, 1981). Collaboration can also improve relationships among agencies and relationships among families and providers (Hodges, Nesman & Hernandez, 1999). By eliminating duplication, collaboration can also reduce individual agency and/or sector expenses (Mattessich & Monsey, 1992). By virtue of working jointly, organizations are more likely to have an improved analysis of issues and opportunities, and can increase their capacity to accomplish tasks (Gray, 1989). Collaboration can also tell us about how well a system of care has matured in order to provide access to a seamless array of services to intended groups needing services (Hernandez & Hodges, 2003; Hodges et al., 2003). Interagency collaboration holds the promise of improving systems of care by helping to reduce administrative costs (Roberts, Akers, and Behl, 1996), and it can streamline eligibility systems to allow easier and faster access to services (Roberts, Innocenti, and Goetze, 1999). Collaboration is important for the sustainability of interagency programs (Hogue, 1993; Perkins, 2002; Peterson, 1991), especially for programs with funding that is time-limited (Frey et al, 2006).

Collaboration has been studied in a variety of fields including business, industrial psychology (e.g., small group processes), community development, mental health and education (Kabler & Genshaft, 1983; Moriarty, 2000; Smith, Frey, & Tollefson, 2003; Tuckman, 1965; Tuckman & Jensen, 1977). To make collaboration effective, it should occur among agency administrators as well as front-line staff (Gardner, 1991).

In early childhood education, research has found a number of positive outcomes related to collaboration between child care and Head Start/Early Head Start. Formal partnerships between child care and Head Start, for example, help to increase the number of child care providers who improve their quality of care in order to meet the more-rigorous criteria of the Head Start Program Performance Standards (Office of Child Care, 2015). Studies of QRISs suggest that, in some states, the child care, Head Start, and pre-K programs participating in these systems received support that enhanced both structural variables of quality (such as ratios) and educator credentials (Maine Department of Education/Maine Department of Health and Human Services, 2005).

The following discussion reviews the literature regarding collaboration, as part of the Resnick/Juárez & Associates collaboration with the Los Angeles County Office of Education (LACOE) and First 5 Los Angeles (F5LA) to study second-year implementation of Quality Start Los Angeles. The purpose of this review is to answer the following key question: What does the literature tell us about how to define collaboration and the key dimensions of this construct?

This paper begins with a summary of how collaboration has been defined, followed by a discussion of the key characteristics of collaboration based on prior research evidence, the factors
that facilitate or inhibit collaboration, and the different research methods that have been used to study collaboration, typically how collaboration using these measures has been operationalized.

**Definition of Collaboration**

Collaboration has a variety of definitions and names, to the extent that such widespread and varied usage of the term has the danger of rendering it nearly meaningless. Thomson, Perry and Miller, 2007, argue that the lack of consensus among scholars on the meaning of collaboration makes it difficult to compare findings across studies and to know whether what is measured is really collaboration.

A consistent definition that has emerged in the literature and frequently cited is as follows: Collaboration is defined as “a mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals” (Mettessich, Murray-Close, & Monsey, 2001, p. 4). This definition refers to the cooperative way that two or more entities work together toward a shared goal (Mettessich and Monsey, 1992). Another definition focuses on the activities which organizations perform when collaborating but also includes the notion of there being a mutual benefit and a common purpose. According to Himmelman (2004), collaboration is defined as “…a process in which organizations exchange information, alter activities, share resources, and enhance each other's capacity for mutual benefit and a common purpose by sharing risks, responsibilities, and rewards.”

Based on a comprehensive review of the literature combined with extensive field research, Thomson, Perry and Miller offer the following definition of collaboration:

“Collaboration is a process in which autonomous or semi-autonomous actors interact through formal and informal negotiation, jointly creating rules and structures governing their relationships and ways to act or decide on the issues that brought them together; it is a process involving shared norms and mutually beneficial interactions (Thomson, Perry and Miller, 2007).”

These definitions share several key defining characteristics and identify the underlying constructs that cut across the research literature, including formal and informal negotiations around purposes and goals, rules and governance for decisions to be made, shared norms, and posit that the interactions are mutually beneficial.

Some researchers have distinguished between collaboration, cooperation, coordination, and networking while others have used these terms interchangeably (Hodges, Nesman, & Hernandez, 1999). Still others have viewed interagency collaboration as an aspect of organizational culture or “the way things are done in an organization” (Glisson, 2007) versus organizational climate or “the way people perceive their work environment” (Glisson, 2002). As an organizational cultural variable, interagency collaboration is viewed as reflecting the organization's norms and values of how the agency responds to and works with other organizations, as displayed through its policies, practices and activities.

Collaboration involves more than just sharing information or transferring knowledge because it requires more effort even than coordination, in order that each party can achieve its goals. Rather, the aim of collaboration “is to create a shared vision and joint strategies to address concerns that go beyond the purview of any particular party” (Chrislip and Larson 1994). The agreement to work together and the coordination of services toward a shared goal are both necessary but not sufficient conditions for collaboration to occur (Chrislip and Larson 1994; Butterfoss, Goodman, and Wandersman, 1993).
The defining characteristic of collaboration, in comparison to other types of cooperation, involves a shift from supporting one agency’s own “parochial interests” to advocating for a joint understanding of a problem and promoting solutions that are in the best interests of the organizations as a whole (Butterfoss, Goodman, and Wandersman, 1993). Collaboration is more than the coordination of efforts toward mutually beneficial ends because in coordination the efforts of multiple entities are directed in the most efficient and effective manner to accomplish mutually known ends. This falls short from true collaboration where the collective effort is greater than the sum of the individual agencies, and often where the problem might be viewed differently by consortium members so that there is not clear consensus on its definition or how to solve it (Heifetz, 1994). If there is a clear consensus on the definition of a problem and how to solve it, then coordination, not collaboration, might be the best strategy for proceeding.

**Key Dimensions of Collaboration**

In systems of care, key characteristics of a collaborative effort include shared vision, agreement on goals and desired outcomes, agreement on the target population, focus on building relationships, role clarification with responsibility for each of the partners, a system for building consensus and managing conflicts, and concentrated and continuous commitment (Simpson et al., 1998; Stroul et al., 1992). Defining characteristics of interagency collaboration typically include:

- Developing and agreeing to a set of common goals and directions
- Sharing responsibility for obtaining those goals
- Working together at all levels of an organization to achieve those goals (Bruner, 1991; Cumblad, et al., 1996).

As a collaboration among multiple organizations develops, there are shifts along two dimensions. The collaboration becomes increasingly integrated and increasingly formalized (Todeva and Knoke, 2005). That is, collaborations grow from loose integration to greater consolidation, with more formalized decision-making processes (e.g., structures for reaching agreement and acting on decisions), particularly in government and nonprofit interactions (Arsenault, 1998). These two dimensions, increased integration and increased formalization, are identical to the two features identified by Chrislip and Larson (1994) in a three-year study of highly successful collaborations within the National Civic League: strong process leadership, and the presence of an open and credible process.

*Process leadership* involves bringing the appropriate people to the table and keeping them there through difficult periods, facilitating the expression of divergent points of view in a manner that respects difference yet fosters convergence and making sure that all stakeholders feel competent, trusted and valued throughout (Chrislip and Larson 1994, 53).

“*Open and credible process*” refers to the extent that stakeholders perceive the process to be fair and authentic. That is, stakeholders perceive that all are treated equally, secure in the knowledge that decisions have not been made in advance with the process simply serving as legitimation for those decisions. Stakeholders must be confident that the process is free from behind-the-scenes manipulation and that safeguards are in place to check the disproportionate influence of powerful individuals. In short, stakeholders must feel secure that all involved in the process have equal opportunity to directly influence the decision-making and that decisions are likely to have some impact on the root problems the participants are addressing.
Thomson, Perry and Miller (2007) conceptualize the collaboration process in terms of five dimensions: governance, administration, organizational autonomy, mutuality and norms, with each described as follows:

**Governance** refers to the structures that have to be created to allow the partners to jointly make decisions about rules that will govern their behavior and relationships. Members have to develop sets of working rules about who is eligible to make decisions, which actions are allowed or constrained, what information needs to be provided, and how costs and benefits are to be distributed.

**Administration** involves the administrative structure that must be created to move from decision-making to action. The focus is on implementation and management, that is, doing what it takes to achieve a goal.

**Organizational autonomy** is defined as the intrinsic tension between organizational self-interest and collective interest. That is, how can one maintain one’s own organizational mission and identity while maintaining accountability to collaborative partners and their stakeholders (Bardach 1998; Tschirhart, Christensen, and Perry 2005; Van de Ven, Emmett, and Koenig 1975; Wood and Gray, 1991). Because no formal authority hierarchies exist among collaborating partners, partners operate on the “edge of chaos” (Innes 1999, 644) whereby participating organizations can find the potential dynamism implicit in this tension between individual and collective interests.

**Mutuality** refers to the mutually beneficial interdependencies based either on differing interests or on shared interests. Members of the collaboration agree to forego the right to pursue their own interests at the expense of others and work towards accommodating everyone’s needs in order to allow for mutually beneficial interactions.

**Norms** refer to reciprocity and trust. There is a perception among partners of fair dealing and, while some may be willing to bear disproportional costs at first, they expect their partners will equalize the distribution of costs and benefits over time. Behaviors that signify such fairness include making good-faith efforts, to be honest in negotiations leading to making commitments, and to not take excessive advantage of another even when the opportunity is available (Cummings and Bromiley, 1996). Through repeated interactions, partners are able to build reputations for trustworthy behavior over time, which lead to less formalized *quid pro quo* and towards a form of institutionalized “psychological contracts.” When these develop, it indicates the partnership has reached high levels of mutuality because they do not need to formalize all exchanges and activities.

These dimensions are also at the core of the four factors identified by Hicks, Larson, Nelson, Olds and Johnston (2008), that is: Structural Integrity, Authenticity, Equity and Treatment. Structural integrity would be akin to the Governance, Administration and Organizational Autonomy dimensions of Thomson, Perry and Miller (2007), because they refer to what was previously referred to as Process Leadership, that is, the decision-making process and structures for arriving at decisions by the consortium or coalition. Authenticity, Equity and Treatment are clearly related to the notion of the collaboration having an open and credible process.

Hicks et al (2009) offer an important explanation about why decision-making/leadership and an open and credible process develop in collaborations. They identify a cycle whereby initial
perceived fairness of the procedures that organize members of the consortium or coalition lead to judgments about whether they will be exploited or rejected by the others. As members experience the decision-making process and how members and leadership of the consortium work on identifying the common problem and ways to work at addressing it, they make judgments on whether the procedures and actions of others are fair and reflect everyone’s voice, even if there are disagreements. On the other hand, if members of the consortium perceive that there is a lack of fairness in how they and others are treated, then they will feel they are being exploited or taken advantage of, which could lead people to pursue lower risk, lower reward self-oriented goals, and the belief that one or more of the structural conditions are being manipulated. On the other hand, when people perceive that they are being treated fairly—understood in terms of positive attributions of trust, neutrality, and standing—they will, in turn, feel valued, respected, and cared for by the group. The result is that they will come to see their individual identity in terms of their group membership: an identification that, in turn, results in an increased commitment to the groups’ projects and goals (Hicks et al, 2009). Thus, what begins as increased formalization, noted above, becomes a part of members’ identities and, over time, they proceed based on a shared understanding without needing to put additional procedures in place to ensure decision-making.

Agencies involved in collaboration are often at different stages in their “collaborative capacity,” which includes not only the level of integration but also the social costs to each participating organization in the collaboration (Bardach, 1999). Thus, models of collaboration within social-service-oriented alliances are really considered stages of collaboration through which interagency initiatives might progress and that it is only at the more advanced stages that collaborations can be effective (Bailey & Koney, 2000; Gajda, 2004; Hogue, 1993; Peterson, 1991). In mature collaborations there is less overt formalization but rather a psychological sense that everyone has the collective interests at heart and that members’ opinions are given with the best interests of the collaboration at heart. But this is often a long and torturous pathway that some consortia or coalitions never reach, being thwarted by lack of leadership combined with a lack of perceived fairness. Stage theories add an important developmental factor to how collaborations become successful and thus it is important to understand that the joint issues of increased integration and formalization do not happen overnight. Further, by considering the stages that consortia or coalitions go through, we can describe the level of the collaboration they are currently located, with the lowest level being little or no collaboration and the highest level being full collaboration or, ultimately, complete unification. While the models differ on the number of stages, the range of levels included, and the definitions of various stages, but they have much in common (Frey, Lohmeier, Lee, and Tollefson, 2006).

Factors Facilitating or Inhibiting Collaboration

Researchers studying collaborations from the perspectives of public policy, juvenile justice, public health, and early childhood programs have examined the characteristics and benefits of collaboration (Coffman, 2007; Kagan, Carroll, Comer, & Scott-Little, 2006; Wandersman, 2010). Studies have found that collaborations are more likely to achieve desired results if there is:

- Agreement on the desired goals and outcomes of the collaborative
- A process is in place that addresses differences in program standards and desired measurable outcomes
- There are high levels of commitment among stakeholders participating in the collaborative,
- Members have perceptions of fairness regarding the collaborative processes
• There are sufficient resources devoted to the collaborative (in terms of time and funds), (Campbell, 2003; Chavis, 2001; Clothier, 2006; D. Hicks, C. Larson, C. Nelson, D. L. Olds, & E. Johnston, 2008; Kagan, et al., 2006; Lund, Rous, Moffett, Wood, & O'Keefe, 2002; Wandersman, 2010; Wat & Gayl, 2009). These factors are consistent with the dimensions of collaboration discussed earlier. We can consider these as the key conditions necessary for collaborative processes to be successful. Hicks (2010), in a review of literature and the design of a theory of change in collaboration, for the Child Care Policy Research Consortium, identified a similar set of factors that facilitate collaboration, including the importance of authenticity, norms, inclusion and equality (similar to the notion of having an open and credible process) as well as problem focus, support, identification, facilitation, generativity and purpose, all of which refer to the procedures used by the consortium or coalition for leadership, governance, decision-making and having a consensual definition of the problem and methods for making decisions and taking action.

Factors that have been identified as facilitators or inhibitors of collaboration can be clustered into three domains: Attitudinal (Knitzer & Yelton, 1990, behavioral (National Network for Collaboration, 1998); DeChillo et al., 1994), and structural/organizational factors (Knitzer & Yelton, 1990). Inhibiting factors produce anti-collaborative attitudes, behaviors or structural/organizational barriers and work against the creation of mutually reinforcing activities across the three domains. Facilitating factors create pro-collaborative attitudes, behaviors, and structures and are mutually reinforcing across the three domains. That is, for optimum collaboration, attitudinal, behavioral and structural/organizational elements must work synergistically in a mutually reinforcing manner. The National Coalition on Dialogue and Deliberation (2010) created a tongue-in-cheek “Principles for Creating Chaos” which drives home the point that there are many issues that, seen in retrospect, can sabotage a collaborative effort. These include:

- Do Everything at the Last Minute
- Gather the People that are Easiest to Gather
- My Way or the Highway
- Trust Us – We Know How to Solve This
- Keep Your Cards Close to Your Vest
- Don’t Expect to Make a Difference
- Work in Silos and Ignore Those Who Don’t Vote

Collaboration, in essence, is a communicative process, with relationships built on commitment (Hicks, 2010). Ultimately, collaboration “travels through” the entire system of care so that high-quality collaboration increases the level of community and parental involvement, and ensures that caregivers build strong relationships with those they serve (Hicks, 2010).

Conducting Research on Collaboration

The construct of interagency collaboration is difficult to conceptualize and measure, and there are a variety of research approaches used to understand interagency collaboration. In this two-part section, we discuss the different research methods used in collaboration research and then focus on existing measures of collaboration that have been used in research studies.

Methods/Strategies. Research studying the effects of collaboration has employed a variety of methods, drawing from both qualitative and quantitative approaches. Some qualitative work has
been done involving collaboration at the community levels among early childhood education and care providers (Schilder, Kiron and Elliott, 2003). A case study research conducted by Selden, Sowa, and Sandfort a decade ago used a small sample of early education and care providers participating in a collaborative alliance (Selden, Sowa and Sandfort, 2006). Other qualitative studies used interviews and focus groups of early education and care center directors and family child care owners (Schilder, 2003). This research tradition pointed to the promise collaboration between child care and other early education providers but the findings were limited in their generalizability and validity due to small convenience samples. However, most research on collaboration has relied primarily on qualitative approaches, or what Hicks, Larson, Nelson, Olds and Johnston (2009) term “partial and nonsystematic” where associations with outcomes are not measured, nor is collaboration quantified in some way.

Some quantitative studies on the benefits of collaborations for early childhood education programs have reported a great deal of variation in the child care centers and family child care providers engaged in collaborations in terms of numbers of children served, auspices (e.g., for-profit versus non-profit), budgets, urbanicity, organizational capacity, and the demographics of the population served (Schilder, Chauncey, Smith, and Skiffington, 2005). Studies in Ohio and New York focused on collaborations among programs serving preschool-aged children have reported improved outcomes at the program, teacher, and classroom levels (Schilder et al., 2009a; Schilder et al., 2005). Moreover, findings suggest that in some instances collaborations are predictive of benefits that extend beyond the target group of low-income families; higher income parents at partnering centers reported greater supports for employment and services for themselves and their children than parents of similar incomes at comparison centers (Lim, Schilder, & Chauncey, 2007). But the samples for this research were limited to collaborations in Ohio and New York and did not focus on infant-toddler care (Sandfort & Selden, 2001; Schilder, 2006).

Another issue in collaboration research is the level in which the collaboration takes place and there could be up to four levels in which collaboration occurs; national, state, local and direct practice (Hodges et al., 1999). By operating at multiple levels, and measuring collaboration at each of these levels, quantitative research can document whether the collaboration has achieved simultaneous and synergistic activities across all levels that are mutually supportive and sustaining (National Network for Collaboration, 1998; DeChillo, Koren, & Schultzke, 1994; Ellmer, Lein & Hormuth, 1995). But multi-level studies of collaboration are difficult because they require sufficient sample sizes at the highest level of a nested design. For example, if examining collaboration by county agencies and the providers within the county, the highest level – the county – requires a sufficient number of agencies to meet statistical power requirements, and this is often difficult in smaller-scale studies.

Advances in analytic techniques, such as the use of structural equation modeling and latent variable analysis in collaborative research allows for the detection of a multi-dimensional and richer view of collaboration and whether the desired outcomes are achieved. As well, it would be important to place quantitative strategies for collaboration research within more rigorous research designs. Most of the current research on collaborative rely primarily on correlational designs to link collaboration to outcomes. Rigorous designs with a form of counter-factual or control group, are necessary but are rarely applied in this type of research.

**Measuring Collaboration**

If one purpose of research on collaboration is to inform practice, then measurement becomes important because policy makers rely on research findings to make substantive changes in policy (Thomson, Perry, and Miller, 2007).
There are three key methods used in research to measure collaboration:

- **Qualitative measures including interviews and focus groups** of staff or targets of the collaboration, conducted by knowledgeable experts who then make global ratings of interagency collaboration (Macro International, 2000);
- **Network analysis**, which involves mapping formal and informal links among collaborators (Calloway, Morrissey, & Paulson, 1993; Friedman, Reynolds, Quan, Call, Crusto, & Kaufman, 2007; Wasserman & Faust, 1994); and
- **Self-report questionnaires** that measure informants' perceptions of their organization's level of collaboration.

The early literature on collaboration research utilized few psychometrically-sound instruments and most were only valid for the immediate context of a particular study. For example, Berkowitz’s (2001) review of community-based coalitions cites many careful case studies that highlight the value of community collaboration but typically focus solely on the factors that make for effective functioning of community coalitions, without directly testing the relationship between collaboration and program outcomes.

Network analysis is based on the principles of social network analysis, which is the mapping and measuring of relationships and flows between people, groups, organizations, computers or other information/knowledge processing entities (Krebs, 2002). The focus is on the interaction between individuals or groups who are engaged in collaboration. Network analysis provides a rich quantitative dataset that allows for the mapping of interactions and the analysis of key metrics including: a) Clustering, which is a measure of the degree to which a network consists of interconnected pockets of centers; b) centralization, which is a measure of the degree to which links are concentrated toward one or a few centers; and c) density, which is the number of actual connections between members divided by the number of possible connections. Network analysis of a collaboration across time can show whether the network has become denser, with agencies creating greater centralization, and clusters and there is less scatter or isolated agencies (Krebs, 2002).

The need for more sophisticated accounts of collaboration using standard instruments for evaluating the effects of collaboration, regardless of the form interagency collaboration takes, has led to the development of self-report scales with good psychometric properties based on rigorous measurement testing. As a result, survey-based questionnaires have emerged as one of the more widely used methods for measuring interagency collaboration. Questionnaires can be used in large scale studies to collect data across a wide geographic area and can be administered repeatedly to monitor collaborative processes over time, thus serving the needs of both continual program monitoring and program evaluation. At the same time, questionnaires suffer from rater or self-report bias, in which perceptions of the collaboration are colored by each individual’s experiences in that group and thus may not reflect reality. Later we will see that there is a potential solution for the weakness of questionnaires and surveys.

Dedrick and Greenbaum listed a number of questionnaires that measure various aspects of collaboration. These include Morrissey et al.’s (1994) questionnaire that measures service coordination (e.g., “Creating opportunities for joint planning”), Harrod’s (1986, cited in Dedrick and Greenbaum, 2011) instrument that measures collaborative activities such as joint needs assessment, planning, program development and or program evaluation, the questionnaire developed by Darlington, Feeney, and Rixon (2005) that measures interagency collaboration practices involving child protection and mental health services (e.g., “Providing information or guidance for managing...
cases”). Smith and Mogro-Wilson (2007) developed a questionnaire that measures child welfare and substance use workers’ inter-agency collaborative behavior while Brown, Hawkins, Arthur, Abbott, and Van Horn’s (2008) measure of community prevention collaboration (e.g., “Organizations [in community] share money or personnel when addressing prevention issues”). The above list represents the tradition from which more current measures of collaboration developed. The newer measures, listed below, are those that are considered more universal, so that they can be used by collaborations across disciplines and service grouping, and they were rigorously tested and determine to have good psychometric properties.

*The Interagency Collaboration Activities Scale (ICAS)* measures specific organizational collaborative practices and activities in three areas: Financial and Physical Resource Activities, Program Development and Evaluation Activities, and Collaborative Policy Activities (Dedrick and Greenbaum, 2011). The scale authors report reliability estimates of the three factors at the agency level were .81, .60, and .72, respectively. In the Child Care Collaboration Study, internal consistency with samples of child care providers was high, ranging from Alphas of 0.85 to 0.99 (Resnick, Broadstone, Kim, and Hamby-Hopkins, 2016).

*The Thomson Multi-Dimensional Collaboration Scale* assesses Governance; Administration; Autonomy; Mutuality; Norms/Trust (Thomson, Perry and Miller, 2007). Internal consistency in the Child Care Collaboration Study among a state-wide sample of early education and care providers was 0.99 (Resnick, Broadstone, Kim, and Hamby-Hopkins, 2016).

*The Hicks Process Quality Scale* (Hicks, Larson, Nelson, Olds, and Johnston, 2008) consists of 20 questions scored on a 1-6 scale related to the functioning of a collaborative process. The items ask respondents about the collaborative process, whether it is “open and credible,” fair to all members, and free from outside influences. The items are grouped into four subscales: Structural Integrity (items evaluating procedural fairness), Authenticity (the openness and sincerity of the process), Equity (the distribution of outcomes regardless of organizational affiliation), and Treatment (items related to feelings of dignity and respect from the group). Hicks, Larson, Nelson, Olds, and Johnston, 2008) reports internal consistency of the total Process Quality scale score to average 0.87 across a number of studies using this measure with agency administrators and childcare providers. The Child Care Collaboration Study reported internal consistency of 0.76 for the three-item Authenticity subscale (Resnick, Broadstone, Kim, and Hamby-Hopkins, 2016).

Finally, a hybrid measurement developed by Dr. Resnick combines an online survey with network analysis. A survey is given to multiple respondents in each of the agencies in the collaboration that includes the *Levels of Collaboration Scales* (Frey, Lohmeier, Lee, and Tollefson, 2006). Each respondent rates each of the participating agencies on the degree to which they collaborate, from no interaction to networking to coordination and to the highest level, collaboration. This four-point scale provides reciprocal ratings amenable to social network analysis at the agency level. UCINET network software and NetDraw analyzes the network data and can represent collaboration using two-dimensional network maps (agencies with the most interactions are at the center of the map), and can yield network statistics such as closeness and density. This method was developed by Dr. Resnick and used in several countywide evaluations of First 5 programs (Resnick, Martinez, Lee, and Harder, 2011), in addition to the Child Care Collaboration Study (Resnick, Broadstone, Rosenberg, and Kim, 2015). The larger benefit of this method, in addition to using a somewhat more objective measure of collaboration that decreases self-report bias (since everyone rates everyone else and the network is based on both To/From ratings), is that in collaboration research it is possible to connect network statistics (e.g., density, closeness, etc.) at the agency level with outcomes to families, children and staff using multi-level analyses.
Questionnaires should be administered to multiple informants within an organization, with data being aggregated to represent the organization's level of collaboration (Dedrick and Greenbaum, 2011). The multiple informant approach assumes that within each partner agency there are diverse collaboration activities and practices, carried out by different individuals, which may result in varying perceptions of interagency collaboration. It would be important to obtain input from those individuals in an agency representing multiple constituencies involved in the collaboration. Using information from multiple informants, rather than a single informant, gives a more comprehensive and reliable assessment of an agency’s level of collaboration that is less sensitive to rater or self-report bias (Bliese, 2000). Additionally, techniques and statistical software are available to analyze multilevel data (e.g., HLM, Mplus) using two-level nested designs (e.g., individuals nested in organizations) to adjust for the effects of clustering of individuals within the organization (which means that individuals are not independent of each other – an essential assumption of statistical analysis). Multilevel confirmatory factor analysis (MCFA) has the potential for providing new insights into the construct of interagency collaboration.

**Implications for Implementation of Quality Start LA (QSLA)**

Implementation of Quality Start LA, now its third year, is guided by the QSLA Consortium, the local planning body comprised of representatives from the Los Angeles County Office of Education (LACOE), Los Angeles County Office of Child Care (LAC-OCC), LAUP, Child Care Alliance of Los Angeles (CCALA) (representing L.A. County Child Care Resource & Referral Agencies) and First 5 LA. LACOE is the lead agency for QSLA Block Grant. LAUP & CCALA are the two coaching partners offering capacity-building services to providers & LAC-OCC & First 5 LA serve as advisory members.

An important element of the success and effectiveness of QSLA is the extent to which the consortium collaborates. Phase II of the current evaluation of QSLA is particularly interested in how the Leadership Team of the consortium as well as two key workgroups; Coaching and Incentives, and Consumer Education, work together, based on what is known about the defining characteristics and dimensions of collaboration from this literature review. It also looks at the successes and challenges experienced by LT and workgroup members in collaborating with each other in order to implement the QSLA and the findings from Phase II will hopefully inform how collaboration can be enhanced.

Phase II is designed to address these study questions by using a mixed method design that combines an online survey to consortium members with telephone interviews. For the online survey, the following collaboration measures reviewed previously in this paper are being utilized:

- Hicks Process Quality Scale (Hicks, Larson, Nelson, Olds, and Johnston, 2008)
- Thomson Multi-Dimensional Collaboration Scale (Thomson, Perry and Miller, 2007)
- The Interagency Collaboration Activities Scale (ICAS, Dedrick and Greenbaum, 2011)
- Levels of Collaboration Scales (Frey, Lohmeier, Lee, and Tollefson, 2006)

As a result, all of these measures will identify the key collaboration dimensions mentioned in this review. While the Thomson scale assesses Governance; Administration; Autonomy; Mutuality; Norms/Trust, the Hicks scale measures Structural Integrity (items evaluating procedural fairness), Authenticity (the openness and sincerity of the process), Equity (the distribution of outcomes regardless of organizational affiliation), and Treatment (items related to feelings of dignity and respect from the group). The Interagency Collaboration Activities Scale (ICAS) focuses more on resources, capacity and measures specific organizational collaborative practices and activities in three areas: Financial and Physical Resource Activities, Program Development and
Evaluation Activities, and Collaborative Policy Activities. Finally, the Levels of Collaboration Scale allows members of the consortium to rate the level of integration or collaboration that occurs in interactions with other members of the consortium, which will identify the developmental stage of the QSLA Consortium in its third year and whether it is sufficiently mature to be successful, that is, that there is sufficient integration and formalization among partner agencies to achieve its goals. By identifying the current stage of the collaboration, we can determine potential factors that may enable the consortium to move forward towards greater collaboration. These scales were selected because they each underwent rigorous psychometric analyses to confirm their reliability and validity, and all have been used in prior studies, providing a baseline with which to compare the findings from Phase II of the QSLA implementation evaluation.

Regardless of the different labels assigned by each measurement developer, these scales assess those dimensions considered important for successful collaboration. There should be high levels of commitment among members of the consortium, a decision-making structure agreed upon by consortium members that puts collective interest ahead of individual organizational goals, by perceiving that the process has fairness, trust, and respect in how members are treated. Additionally, there should be agreement on the desired goals and what outcomes are expected from the consortium, related to improving quality for children in LA County and increase access to high-quality care for families, and there should also be sufficient resources and capacity to achieve these outcomes. As noted earlier, successful collaborations have strong process leadership that values and facilitates the convergence of diverse opinions and positions, rather than holding on to hierarchical norms or historical turf; and it has an open and credible process such that stakeholders “perceive the process to be fair and authentic,” feel that all participants are treated equally, and believe they can genuinely influence group decisions (Hicks, 2010).

A collaboration is a difficult entity to measure and operationalize, which mirrors the difficulty in how the consortium can be successful in achieving its goals. As the Office of Planning, Research and Evaluation (OPRE) of the federal Department of Health and Human Services points out, individual agencies should “go beyond their own limited vision of what is possible” in order to collaborate effectively (Chien et al., 2013). The findings from Phase II of the current evaluation will identify the “bright spots,” that is, those areas where the consortium scored high and determine how these can be applied to the more challenging parts of the process. Ultimately, evaluation data can inform the degree to which collaboration has been successful in negotiating the inherent risks and opportunities so that partners work better together than they do separately. There is always opportunity for continuous improvement, on behalf of the collaborative and on behalf of the young children and families in LA County.
References


