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The Nature and Function of Professional Support Networks for Teachers of English Language Learners

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The Nature and Function of Professional Support Networks

for Teachers of English Language Learners

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A dissertation submitted to the faculty of
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in partial fulfillment of the requirements for the degree of

Doctor of Education

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ABSTRACT

The Nature and Function of Professional Support Networks
for Teachers of English Language Learners

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The English learner (EL) population in the United States continues to grow. To improve their pedagogy in working with this population, many educators have received training in English as a Second Language (ESL), but the gap between ELs and their native English speaking peers persists. When teachers engage as members of professional support networks, they are more likely to successfully implement the strategies learned in their ESL professional development (Echevarria, Richards-Tutor, Chinn, & Ratleff, 2011).

This study considered the nature and function of the professional support network of a district's ESL-endorsed teachers. Using network theory methods, 257 teachers and other school personnel responded to an online survey. Through an understanding of the professional support needs of these teachers, whom they contact for support, and the nature of those ties (in terms of reciprocity, homophily, frequency, influence, and relational embeddedness), district and school administrators can be better positioned to enhance successful professional support networks and facilitate the implementation of effective teacher practices learned through professional development. Based on the findings, practical suggestions are given to help district administrators strengthen these professional support networks with the intent to maintain compliance with governmental standards, help schools to meet federally and state-mandated progress requirements, and have a positive academic impact upon English-language learning students.

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Finally, I wish to express my endless love and gratitude to my mother. Her infallible support and belief in me has made possible everything good in my life. In this endeavor, as in all, she has been my greatest blessing.

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DESCRIPTION OF STRUCTURE AND CONTENT

This manuscript is presented in the format of the hybrid dissertation. The hybrid format focuses on producing a journal-ready manuscript which is considered by the dissertation committee to be ready for submission. Therefore, the manuscript focuses on the presentation of the scholarly article. This hybrid dissertation includes appended materials such as an extended review of literature and a methods section with elaborated detail on the research approach used in this dissertation project.

The targeted journal for this dissertation is *TESOL Quarterly (TQ)*. *TQ*, a Tier 1 double-blind peer-reviewed journal in education (acceptance rate <10%; ISI (5 year) = 1.424; SJR H-index = 52), has been in publication since 1967. The journal is published by TESOL International Association, headquartered in Alexandra, Virginia. The mission of TESOL International Association is to develop and maintain professional expertise in English language teaching and learning for speakers of other languages worldwide.

TQ invites submission of articles on a wide range of topics of significance to individuals concerned with English language teaching and learning. Previously unpublished manuscripts submitted for publication should be no more than 8,500 words. Manuscripts submitted to TQ should conform to the requirements of the *Publication Manual of the American Psychological Association* (6th ed.) and are double-blind reviewed. An international journal, TQ represents a variety of cross-disciplinary interests, both theoretical and practical, and targets a broad readership.

Background

The number of students learning English as a second language, or English learners (ELs[1]), in the United States public school system has risen dramatically in recent decades (Ramsey & O'Day, 2010; U.S. Department of Education, 2015). Recognizing the diverse needs of this growing population, educators have striven to develop specialized pedagogical practices to better instruct ELs. However, current data show that on state and national assessments this population continues to consistently score below their native English speaking peers (Snyder & Dillow, 2015).

Given this context, teachers must develop both the instructional pedagogy and an understanding of the moral imperative that is theirs in relation to their work with ELs, and have the support they need to effectively help them progress. U.S. Secretary of Education Arne Duncan has said, "Today, teachers are asked to achieve significant growth for all students, even as they instruct students with ever more diverse and complicated needs" (2009, para.11). However, finding adequate numbers of teachers who are well prepared to meet these needs continues to be a challenge; in 2004, nearly 36% of public schools had vacancies in positions for teachers of ELs (Potemski, 2009). Teacher training programs leave the majority of teachers unprepared to work with ELs (Reeves, 2006). It is easily understood why teachers are not sufficiently prepared, when only 20% of university preparation programs require at least one course focused on ELs, and less than a third of programs require field experiences with ELs

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[1] Terms used in this article are those most commonly identified in the literature. The term EL will be used in reference to students, except where the term LEP is necessary to identify a recognized legal or data classification. The term ESL will be used in reference to programs, except where specific instructional practices such as bilingual or dual immersion apply.

(U.S. Government Accountability Office, 2009). If teachers graduate from teacher education programs unprepared to instruct ELs, further professional development will be necessary.

Although the district in this study, located in the western region of the United States, has not experienced the same degree of EL growth as some school districts in the region, it has followed state and national population trends and experienced a significant increase in the number of ELs during the past two decades. In 2014, approximately 907 elementary students in the district were classified as ELs, amounting to approximately 5% of the district's elementary student body (R. Graham, personal communication, February 18, 2014). A disproportionate increase has been seen within specific schools resulting in much higher concentrations of EL populations in particular areas, with some schools exceeding 15%.

These shifting population trends have led the study district to invest considerable resources in professional development for teachers, with the intent that they might earn their English as a Second Language (ESL) endorsement, the required licensing credential to teach ELs, and improve their pedagogy with ELs. In the past decade, nearly 1,500 teachers and other certified faculty members have enrolled in a one- to two-year series of university courses, receiving instruction in cultural and linguistic theory as well as classroom practices specific to the EL population (W. Menlove, personal communication, February 6, 2012). This district invests considerable financial resources in these endorsement programs, approximately $60,000 each year. The dramatic increase in numbers of teachers earning their ESL endorsements has helped bring the district into compliance with OCR requirements.

However, a high number of ESL-endorsed teachers is no guarantee that EL instruction will improve or meet the EL students' increasing needs. When ESL-endorsed teachers engage as members of supportive professional networks, they are more likely to successfully implement the

strategies learned in their professional development (Echevarria, Richard-Tutor, Chinn, & Ratleff, 2011) . Formal and informal collaboration amongst individuals and groups of teachers also influences whether professional development leads to its desired impact in changed teacher practices and consequent increases in student learning (Darling-Hammond & Richardson, 2009; Dove & Honigsfeld, 2010). However, when teacher EL pedagogy remains unchanged, monies invested in teacher ESL endorsement run the risk of being wasted. Even more significant than the potential wastage of district resources is that ELs may not receive proper support in their academic progress.

The research problem presented itself. Administrators, including principals, alternative language service coordinators, and district federal programs directors, need to clearly understand the nature and function of the professional support networks of ESL-endorsed teachers serving ELs. This understanding can help administrators enhance successful professional support networks and facilitate the implementation of effective teacher practices learned through professional development. Doing so can also help administrators maintain compliance with Office for Civil Rights (OCR) standards, help schools to meet federally and state mandated progress requirements, and have a positive academic impact upon English-language learning students. If administrators fail to understand and support these professional support networks, they may find lower benefit from ESL professional development monies, greater potential for their schools and districts to fall under state and federal sanctions, and a higher likelihood that their EL population will fail to make sufficient academic progress.

The first step in understanding the moderating role of professional support networks on the relationship between the training received through ESL endorsement courses and the teachers' ESL pedagogy (see Figure 1) is to better understand the nature and function of the

professional support network itself. With that intent, this study identified the members of the professional support network of ESL–endorsed teachers in a large district, and examined the nature of this network and the function of the network exchanges. Specifically, this research examined who took an active part in the network and what types of support exchanges were being sought, with whom, and why. The nature of the dyadic ties, including types of relational embeddedness (Hite, Hite, Sudweeks, & Walker, 2011; Kilduff & Brass, 2010), was also examined, providing further explanations regarding the nature and function of the exchanges. To this end, this study addressed two essential questions:

1. What is the nature of the professional support network that is accessed by ESL-endorsed teachers in their instruction of English language learners?

2. How does this network function to provide professional support for ESL-endorsed teachers in terms of resource content flows, actor demographics, and dyadic ties?
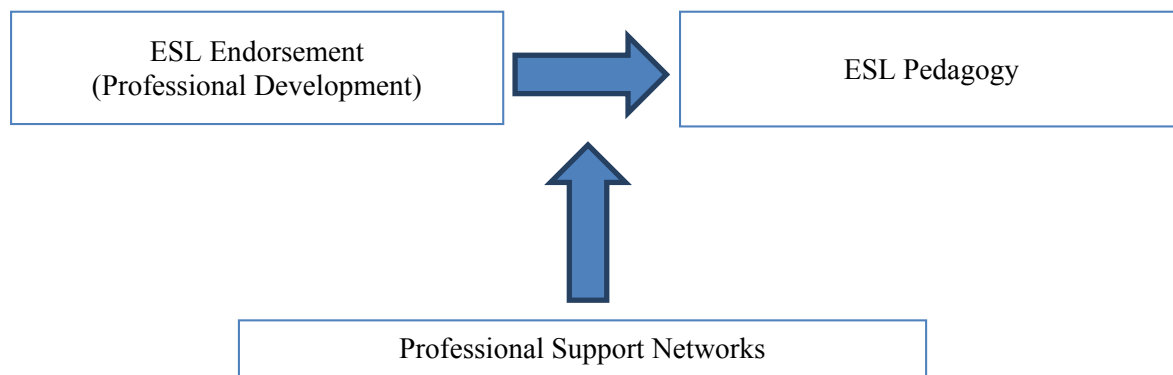
Figure 1. The moderating influence of professional support networks on the relationship between ESL endorsement and ESL pedagogy.

Methods and Procedures

A qualitative case-study method was used to examine the nature and function of the professional support network of the ESL-endorsed teachers in a large school district. "Networks lend themselves well to a case-oriented approach . . . as well as showing complex interrelationship between variables" (Miles, Huberman, & Saldana, 2014, p. 111). Although this network study utilized survey methods which generated considerable quantitative data, the data were descriptive of relationships in a social situation.   As such, these data were qualitative and characterized a specific context, and are not necessarily generalizable. Using the theoretical framework of social network theory and analysis, this study identified the structure and nature of the district's professional support network and its network content flows.

Network Methods

A network is defined as "a set of nodes and the set of ties representing some relationship, or lack of relationship, between the nodes" (Brass, Galaskiewicz, Greve, & Tsai, 2004, p. 795), with nodes referring to actors within the network boundary. In this school district, the professional support network relevant to addressing EL challenges included actors such as ESL-endorsed teachers, administrators and other educational professionals serving ELs in this district. Network research focuses on the relations between these individual actors as nodes in the network as well as the larger structure of these relations (see Figure 2).

The relationship between two individuals in a network is referred to as a dyadic tie. The ideas or resources that pass between these individuals as they interact represent network content flows (Borgatti & Halgin, 2011). The nature of dyadic network ties influences the nature of these content flows (Hite, 2003). This study examined the content flows in the professional support network of the ESL-endorsed teachers, including policy and procedure support,
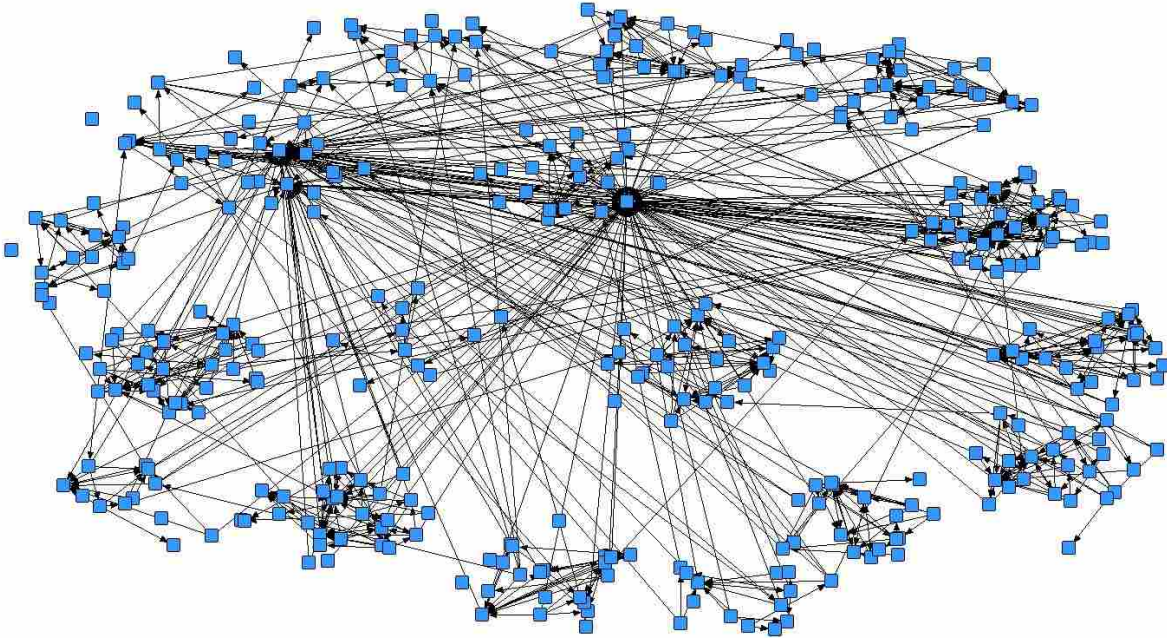
Figure 2. Example of social network structure created from data in this study.

instructional strategy support, social/emotional support, and student information and data

support, within the context of the actor attributes and the nature of their relationships.

One important aspect of the nature of network relationships is relational embeddedness.

Examining the type of relational embeddedness in dyadic network ties can assist in

understanding the type of relationship between the respondents and the alters to whom they go

for support (Granovetter, 1973; Hite, Hite, Sudweeks, & Walker, 2011; Kilduff & Brass, 2010).

These professional support relationships can be described in terms of different types of relational

embeddedness, defined by the presence (or lack) of the social components of personal

relationship, dyadic interaction, and social capital as outlined in Figure 3 (Hite et al., 2011).
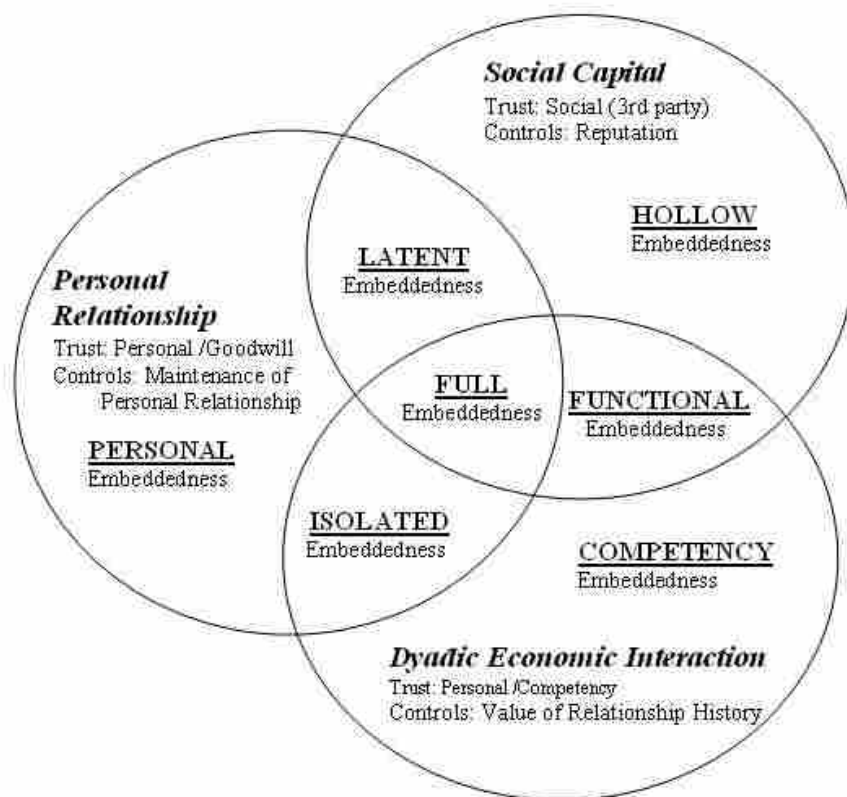
Figure 3. Typology of relational embeddedness.

Sampling and Data Collection

The target population included ESL-endorsed teachers with teaching assignments in the 27 elementary schools of the district. In order to study teachers with actual experience working with ELs, the sample population was a delimited census of ESL-endorsed teachers assigned to elementary schools with a minimum of 5% EL population and who had a minimum of one EL in any of their classes within the past three years. These ESL-endorsed teachers (actors) (n=207) participated in an online survey in which they identified up to five persons (alters) to whom they go for support to better serve ELs. A one-step snowball sample then added all the non-redundant alters identified by these initial respondents. Each of the new alters was invited to participate in the online survey.

This study administered a Qualtrics (Smith, Smith, Smith, & Orgil, 2014) online survey to the delimited sample of 207 ESL-endorsed teachers, 165 of whom responded (80% response rate). The survey was then administered to their 118 non-redundant alters of whom 92 responded (78% response rate) for a total of 257 survey respondents. In the one-step snowball survey, respondents identified 97 additional persons as alters. These persons were not administered the survey, but were included as alters in the network for a total of 354 actors.

For each alter identified by ESL teachers for support, the survey elicited demographic data, contact frequency, types of support needed, and the alter's influence. The nature of these professional support network relationships was also elicited using the Typology of Relational Embeddedness Network Data Survey (TRENDS) instrument (Hite, 2003; Hite et al., 2011). TRENDS, included in the online survey, provided a validated instrument with which to identify the relational embeddedness of these professional support network ties. Open-ended questions at the conclusion of the survey offered respondents the opportunity to identify support needs and comment on any aspect of the professional support networks for ESL-endorsed teachers.

Data Analysis

To address the first research question regarding the nature of the professional support network, demographic and network data was imported into UCINet software (Borgatti, Everett, & Freeman, 2002). UCINet facilitated the analysis of the network actors and the network structure created by their network ties—including density, degree centrality, core/periphery position, and number of components. Using UCINet's NetDraw software, the network data were visually displayed to support graphical analyses of the network structure.

To address the second research question regarding how this network functioned to provide professional support for these ESL-endorsed teachers, analyses examined resource

content flows, actor attributes of roles and ESL-endorsement, and the nature of the network ties. Demographic data provided actor and alter attributes and was analyzed in conjunction with network data. In MS Excel, the data were repeatedly sorted and examined using both an actor-by-demographic table data and the tie list of network relations data to analyze network relations and identify patterns informing the function of this network. Open-ended responses were coded for emerging categories to identify themes related to support needed. Using NetDraw, analyses examined network function as network graphics that were visually manipulated based upon demographic attributes of actors and alters.

Analyses examined the nature of ties, in terms of types of relational embeddedness, using Hite's (2003) typology. Relational embeddedness types were identified through respondents' answers to the TRENDS questions which contained indicators of the three social components of relationships between the actors and alters: dyadic interaction, personal relationship, and social capital (Hite et al., 2011). A high extent of a social component is identified when an actor's social component score (mean of item responses) is one standard deviation above the sample mean. Social components with high extent combine to produce seven potential combinations creating different types of relational embeddedness (see Figure 3). When none of the social components are present to a high extent, the relationship is not relationally embedded and is often called a weak tie (Hite, 2003). When only a single component has a high extent, the types of relational embeddedness (competency, personal, or hollow) are considered uni-dimensional. Uni-dimensional ties have a lower degree of relational embeddedness than ties where more than one social component is present (e.g., functional, isolated, or latent, or full). Analyses of relational embeddedness included a distribution of types as well as their relationship with interaction frequency and alter influence.

Findings

Nature of the Network

Addressing the first research question, the nature of the network was examined in terms of actors and structure. The network actors and structure laid the groundwork for understanding the function of this professional support network and how it serves ESL-endorsed teachers.

Network actors. Combining the 257 survey respondents (first-distribution actors and snowball alters who took the survey) with the 97 additional persons named as alters (who did not take the survey), the network contained a total of 354 actors (members of the network). A total of 981 dyadic ties existed between the 354 actors in the network. The roles and ESL-endorsement status of the actors were the most informative demographics in understanding the nature of the network (see Table 1). All 15 roles given as options in the survey were identified by respondents with the exception of *parents*. In the *other* category, nine (3%) actors were named described as former colleagues, university professors, and family members of the employees. In the network, 237 (67%) actors had ESL endorsements.

Network actors at more than 30 sites within the district and a few sites outside the district included 57 (16%) male and 297 (84%) female actors along with two computer resource actors. This distribution reflects a slight proportionate increase above the district's 72 male (11%) and 594 female (89%) elementary teachers, which is perhaps reflective of the greater percentage of network males in administrative and non-teaching positions. The overwhelming majority of network actors (n=310; 88%) were certified personnel with a smaller number (n=44; 12%) of unlicensed school professionals. Actors represented diverse roles, and the length of experience working in the schools ranged from 0-42 years. The predominance of female and certified personnel actors, as expected, may explain the lack of patterns regarding gender and licensure. In

addition, no patterns were identified related to years of experience. These actor roles, ESL-endorsement status, and other demographics were used to identify patterns in the structure of the network.

Table 1

Roles and ESL-Endorsement Status of the Respondents and Actors

Roles of Network Actors	Number of Survey Respondents (*n*=257)	Number of Network Actors (*N*=354)	Network Actors with ESL Endorsement (*n*=237)
Classroom Teachers	177 (69%)	209 (59%)	187 (90%)
Special Education Teachers	16 (6%)	19 (5%)	9 (47%)
Facilitators/Staff Developers	16 (6%)	17 (7%)	8 (47%)
ESL Technicians	16 (6%)	27 (8%)	2 (7%)
Administrators	12 (5%)	22 (6%)	8 (36%)
Speech Language Pathologists	5 (2%)	13 (4%)	6 (46%)
Instructional Coaches	5 (2%)	9 (3%)	3 (33%)
District-level Certified Personnel	3 (1%)	6 (2%)	3 (50%)
Other	3 (1%)	9 (3%)	6 (67%)
Counselors/Psychologists	2 (1%)	8 (2%)	0 (0%)
Secretaries	1 (<1%)	4 (1%)	0 (0%)
District-level Classified Personnel	1 (<1%)	3 (1%)	1 (33%)
Community Members	0 (0%)	6 (2%)	2 (33%)
Computer-based Resources	0 (0%)	2 (<1%)	0 (0%)
Parents	0 (0%)	0 (0%)	0 (0%)

 *Network Actors include survey respondents and the *snowball* alters not completing the survey.

Network structure. The network structure can be seen in the graphical representation of the network. The professional support network with actors (respondents and non-respondent alters) is organized by site of employment, with roles represented by different colors (see Figure 4). The network graph shows that nearly every site was dominated by teachers, with the exception of the district office which had no teachers and the *Other* non-district group which included a variety of roles. The high number of ties directed at the two computer-based resources was also made visible, as was the high number of ties directed at a few individuals in the network. A pattern of ties directed at the administrator is found at almost every school site.
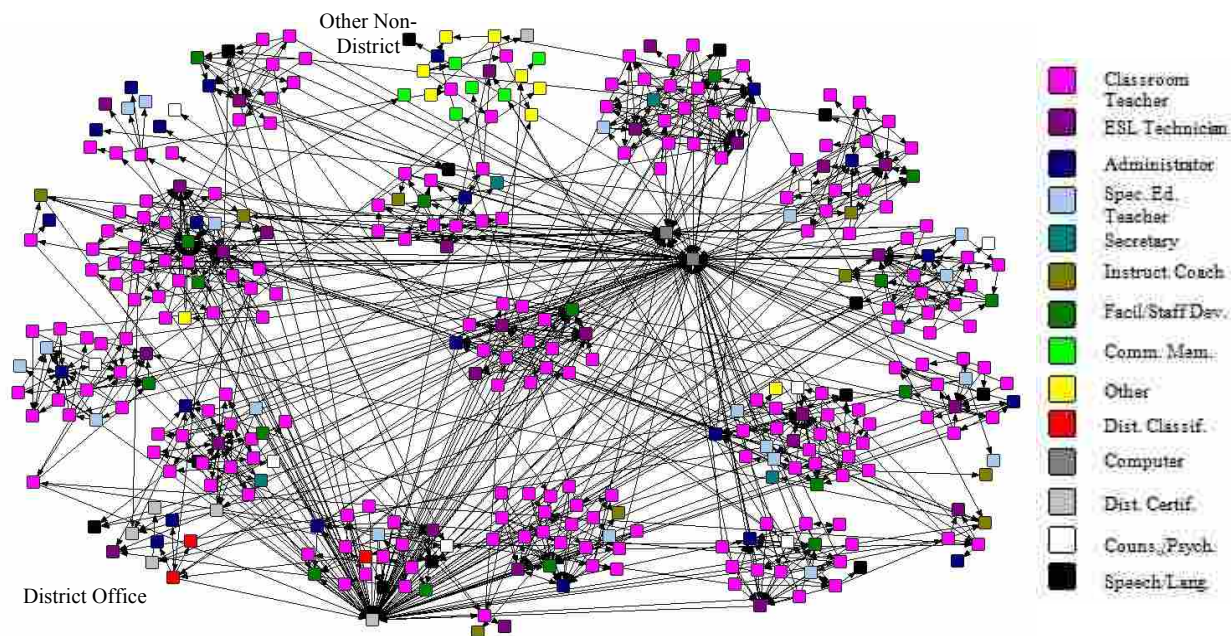
Figure 4. Professional support network by site with roles represented by color.

Using UCINet, network analyses suggested a very sparse network among the 354 actors

with network density of only 2.6%. The network also demonstrated a clear core and periphery

structure, with 133 (38%) of the actors as core members of the network (connected to one

another) and the remaining 221 (62%) as peripheral members (connected only to core members

and not to one another). This core/periphery structure is also demonstrated by the low network

centralization (0.043), which suggests very few actors played highly central roles within the

network core. This network structure indicates some members may be more active than others

given they have a higher number of ties in the network and more connections to the core.

Site proximity and ease of access played a critical role in this network. Respondents

averaged 3.5 ties with an average of 70% of their professional support ties at their own schools,

suggesting that most individuals seek help from others located at their own site. Because 12% of

support ties were with the internet (9%) and online databases (3%)—both of which would be

accessed on site, a total of 82% of professional support network ties were with on-site alters.

Function of the Network

The second research question focused on how this network functioned to provide professional support for ESL-endorsed teachers. Key factors in the function of this network were resource content flows, actor roles and ESL-endorsement, and nature of network ties.

Resource content flows. Analyses examined resource content flows based on the different types of support needed, specifically policy and procedure support, instructional strategies support, social and emotional support, and EL student data and information support. These content flows can function as independent sub-networks within the larger network. Findings regarding the types of support needed, the extent to which an actor felt qualified to offer types of support, and the likelihood of contact for types of support are identified below.

Types of support needed. Respondents ranked the need for four types of support (with 1 as high). Instructional strategies ranked the highest (1.78), student data and information ranked second (2.38), while policy and procedure (2.60) and social and emotional support (2.62) tied for third rank. Most respondents (*n*=202; 79%) also answered two open-ended survey questions regarding their greatest needs. The three highest-ranked needs met the threshold of more than 10% of respondents giving that response. Again, instructional strategies was named as needed more than any other type of EL support (see Table 2). Along with both student data/information (mid-level need) and social/emotional support (low need), these findings aligned with survey ratings. However, while policy and procedure tied for lowest in the survey ranking, it ranked third among the 19 types of support named in the open-ended responses, suggesting respondents may have felt greater need for this type of support than the survey rankings indicate.

Table 2

Types of Support Needed by Respondents in Open-ended Responses (*n*=202)

Mean Ranking of 4 Types of Support	Types of Support Needed	Total Number of Respondents
1.78	Instructional Strategies/Best Practices/Lesson Ideas	51 (25%)
	Translation/Communication with Parents	41 (20%)
2.60	Policy/Procedure	27 (13%)
	Working with Parents	19 (9%)
	More Tech/Tech Time/Personnel	18 (9%)
	Collaboration	18 (9%)
	Intervention/Ideas for Below-Grade Content Ability	16 (8%)
2.38	Student Data/Information (including L1 data)	16 (8%)
	Assessment/Interpretation	15 (7%)
	Materials/Resources	11 (5%)
	Refresher/Reviews/Ongoing Training	11 (5%)
	Cultural/Home Knowledge	9 (4%)
	Ways to Support Students' Social/Emotional Needs	8 (4%)
	Communication/Planning with ESL Techs	7 (3%)
	Tech Training	4 (2%)
	Oral Language Development	3 (1%)
2.62	Social/Emotional Support	3 (1%)
	Learn Some Teacher Spanish	3 (1%)
	Other	<3 (<1%)

The fourth-ranked open-ended response, working with parents, is worth noting given its high potential relation with need for translation and communication with parents (ranked #2) and the discovery that, despite these findings, no actors in this network reported contacting parents. The fact that translation/communication with parents was indicated second most often as the type of support needed was unexpected.

Likelihood of contact by type of support. The four types of support created four sub-networks. Where actors seek different types of support is a critical question. Figures 5-8 represent the network ties of actors who have a higher likelihood (3, 4, or 5 on 5-point scale) of contacting the alter for each of the four types of support, color-coded by role.
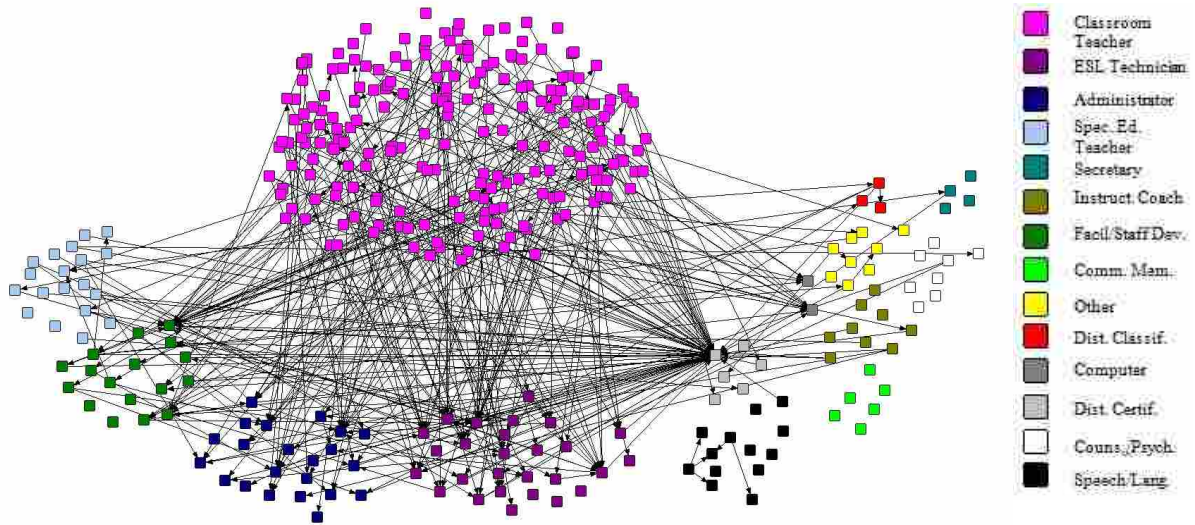
Figure 5. Policy and procedure sub-network, likelihood of contact, by role.
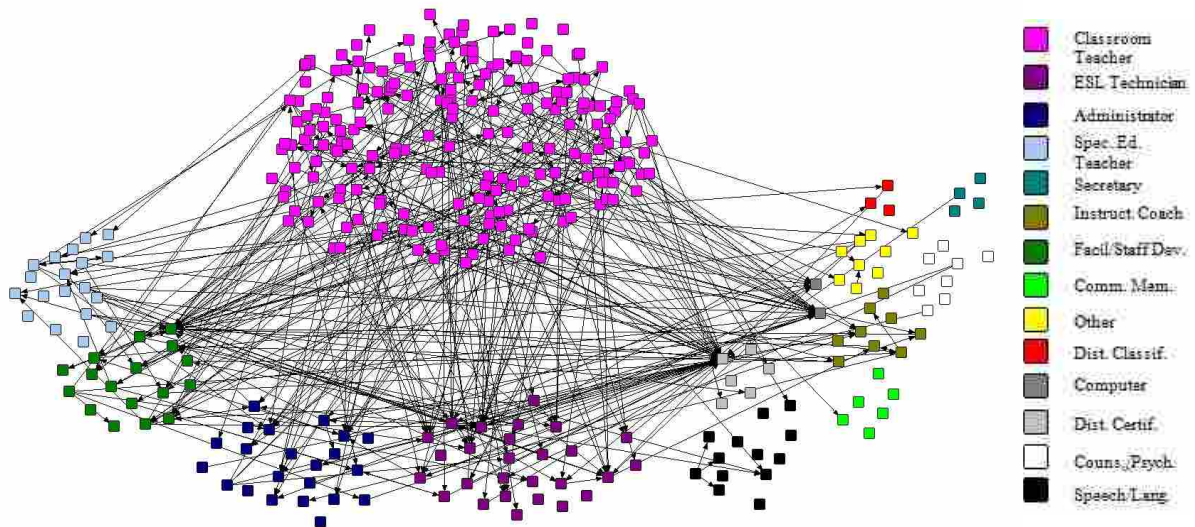
Figure 6. Instructional strategies sub-network, likelihood of contact, by role.
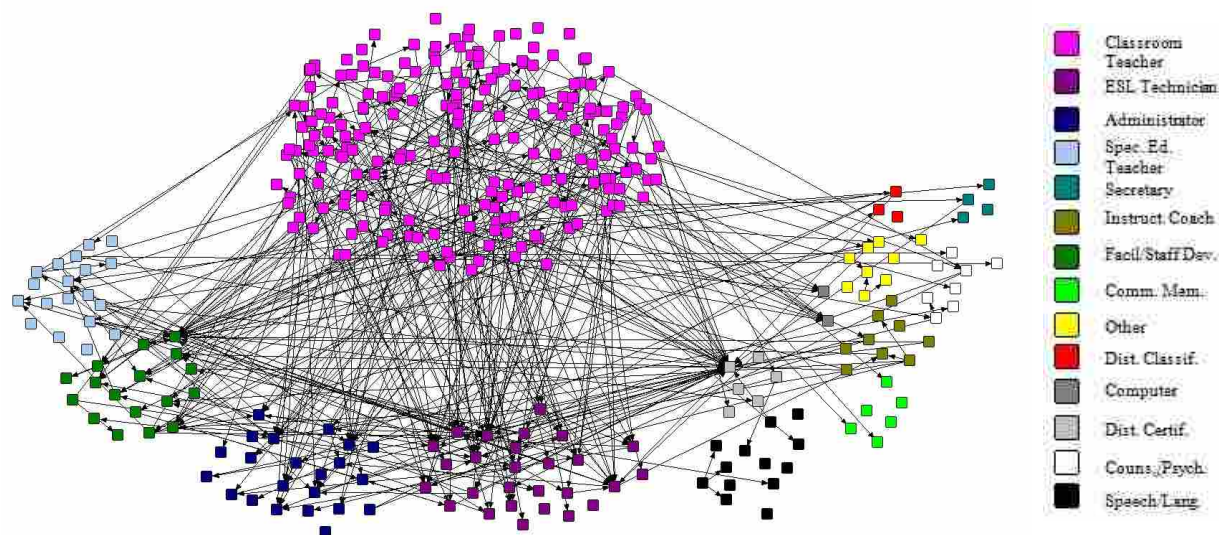
Figure 7. Social and emotional sub-network, likelihood of contact, by role.
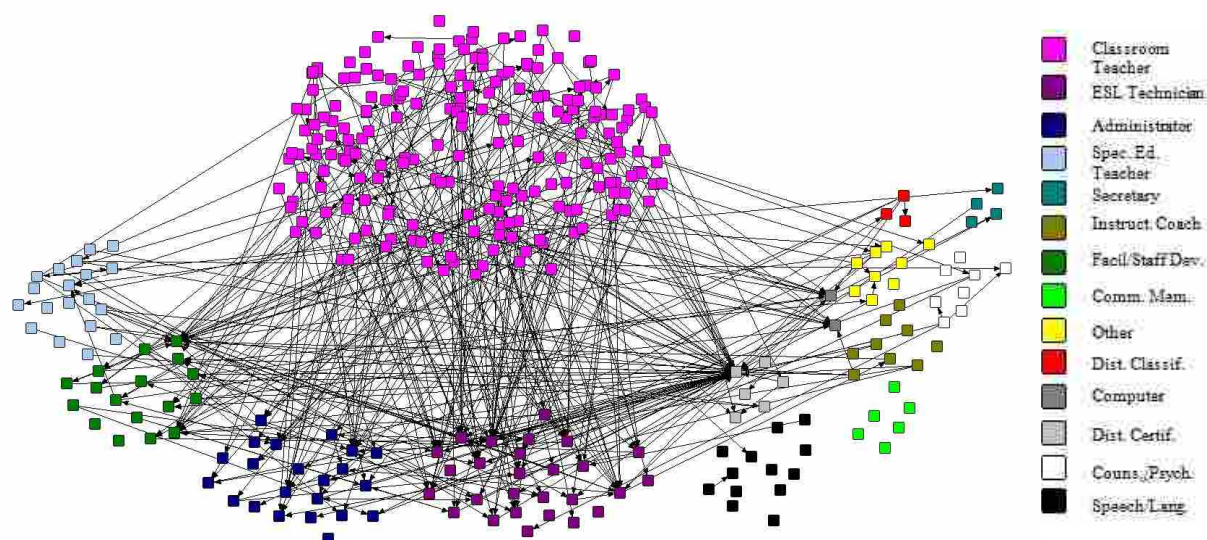
Figure 8. Student data and information sub-network, likelihood of contact, by role.

While overlaps clearly existed between the four support sub-networks, distinct ties in

each network are also evident, indicating respondents did contact alters with different roles

depending upon the type of support needed. For example, no one contacted community

members for policy and procedure support or for student data and information, only one person

contacted a community member for instructional strategies support, and a few people contacted

them for social and emotional support. In all four sub-networks, many ties are directed toward

one district-certified person, with the largest number of these ties found in the policy and procedure and the student data and information sub-networks. In addition, computer-based resources were also contacted for all four types of support, although most heavily for instructional strategies. Many ties were directed at teachers for instructional strategies and for social and emotional support, while teachers had fewer incoming ties for policy and procedure or for student data and information support.

   Feeling qualified to offer support. While different types of support were exchanged in the network, not all respondents felt equally qualified to provide specific types of support. Respondents indicated how qualified they felt to give support in the four support areas (3-point scale: 1 not qualified, 2 somewhat qualified, and 3 qualified). They felt most qualified to provide instructional strategies (2.4) and social and emotional support (2.38), indicating they felt relatively qualified to offer these two types of support. However, respondents felt only somewhat qualified to provide student data and information support (2.03), and less qualified to provide policy and procedure support (1.89). An unexpected finding was that instructional strategies support was both most needed and yet it was also the type of support that respondents felt most qualified to offer. This apparent contradiction suggests although respondents feel qualified, they still sought continuing instructional strategies support. Respondents indicated feeling least qualified to provide policy and procedure support, further reinforcing previous findings for the need of this type of support. However, within each type of support, some individual respondents indicated they did not feel qualified to provide support (1.0); thus, not all alters felt qualified to provide the support asked of them.

   Analyses then examined the extent to which a match existed between type of support needed by respondents and their alter feeling qualified to offer that type of support. Policy and

procedure support demonstrated the best match between being asked and feeling qualified to provide this support. Yet, respondents felt least qualified in this area, suggesting that individuals did indeed select alters who actually felt qualified to provide this type of support.

Actor roles and ESL endorsement. Actor roles and ESL-endorsement were the most informative demographics in the sub-network analyses. Findings show these two demographics related to support needed, likelihood of contact, and feeling qualified to offer support.

Support needed. Findings indicated patterns between respondents' role and their mean overall support needed (see Table 3). Administrators and district-level certified personnel had the highest mean for support needed. Conversely, district-level classified personnel and secretaries had the lowest mean for support needed, which was not surprising given their highly specific role responsibilities. However, most surprising was that classroom teachers had the second lowest mean for overall support needed. Support needed was then analyzed by role and ESL Endorsement based on the specific number of respondents providing each Likert scale response, which provided clearer patterns of support needed. Overall, while the majority of respondents (66%) felt that they had sufficient support, 30% would like more support. Of licensed personnel in the school, instructional coaches had the lowest need for more support. Of administrators and certified district personnel, 67% wanted more support, aligning with overall need. Also aligned with overall need, the majority of teachers had sufficient or did not need support (76%), with only 23% of classroom teachers reporting need for more support. However, 23% still indicates a critical portion of ESL teachers need more support. Table 3 also highlights the general need for support to the teachers' ESL endorsement status and teaching experience. Of the 76 (30%) respondents indicating the need for more support, 52 (68%) had ESL endorsements and 63 (83%) had five or more years of teaching experience, suggesting that even

Table 3

Respondents' Need for Support by Role, ESL Endorsement, and Years of Experience

Respondent Roles	Mean Support Needed	Need for Support		
		Did Not Need Support	Had Sufficient Support	Would Like More Support
Total Respondents (*N*=257)	2.26	12 (4%)	169 (66%)	76 (30%)
Administrators (*n*=12)	2.67	0 (0%)	4 (33%)	8 (67%)
District Level Cert. Personnel (*n*=3)	2.67	0 (0%)	1 (33%)	2 (67%)
Speech Language Pathologist (*n*=5)	2.60	0 (0%)	2 (40%)	3 (60%)
Counselors/Psychologists (*n*=2)	2.50	0 (0%)	1 (50%)	1 (50%)
Special Education Teachers (*n*=16)	2.38	0 (0%)	10 (63%)	6 (38%)
Facilitators/Staff Developers (*n*=16)	2.31	1 (6%)	9 (56%)	6 (38%)
ESL Technicians (*n*=16)	2.31	0 (0%)	11(69%)	5 (31%)
Instructional Coaches (*n*=5)	2.20	0 (0%)	4 (80%)	1 (20%)
Classroom Teachers (*n*=177)	2.19	10 (6%)	124 (70%)	43 (23%)
Secretaries (*n*=1)	2.00	0 (0%)	1 (100%)	0 (0%)
District Level Class. Personnel (*n*=1)	2.00	0 (0%)	1 (100%)	0 (0%)
Other (*n*=3)	2.00	1(33%)	1 (33%)	1 (33%)
ESL Endorsed (*n*=206)	2.20	11 (5%)	143 (69%)	52 (25%)
Not ESL Endorsed (*n*=51)	2.45	1 (2%)	26 (51%)	24 (47%)
0-4 yrs. Teaching Experience (*n*=37)	2.35	0 (0%)	25 (68%)	13 (35%)
5+ yrs. Teaching Experience (*n*=220)	2.23	12 (5%)	144 (65%)	63 (29%)

Scale. 1) not in need of support, 2) had sufficient support, or 3) needed more support

those with an ESL endorsement and years of experience sense a need for more support in

working with ELs.

Analyzing types of support needed by role indicated that instructional strategy support

was ranked highest (or tied for highest) by 9 of the 12 roles (75%). Roles not ranking

instructional strategies as the highest need—secretaries, classified district office personnel, and

special education teacher—instead ranked student data and information as the highest need.

Additionally, the pattern of instructional strategies ranking first among all respondents, both ESL

and non-ESL endorsed, is consistent with other findings.

Likelihood of contact. When examining types of support by role, findings indicate

likelihood to be contacted for ESL support may be related to the alter's role. Regular education

and special education classroom teachers were the initial population and represent the majority

of network members. However, the professional support network clearly included network alters

from a variety of roles. For example, while each of the 14 schools included in the original

sample had one administrator, 22 administrators are named as persons contacted for support.

Yet, the opposite pattern is found in seeking out instructional coaches. The 14 schools have a

total of 12 instructional coaches (due to assignments at more than one school). However, only 9

instructional coaches are named as persons contacted for ESL support in the network.

One role-related pattern in the data is that, while the role of parent as a person to contact

for support was included in the survey, not one of the 257 respondents named a student's parent

as an individual they contacted for support. While teachers or other school personnel may not

contact a parent for instructional strategies or policy and procedure support, one might expect

them to contact a parent for student data and information.

Findings support that actors were more likely to contact an alter for support if the alter

had an ESL endorsement (see Table 4). This finding held for all types of support with the

exception of student data and information. To understand this exception, further analyses

examined the 489 ties with non-ESL endorsed alters who were likely to be contacted for student

data and information support. Of these ties, 219 (45%) were with ESL technicians (mean 4.17),

which may account for the discrepancy. While 93% of these ESL technicians are not endorsed,

they carry great responsibility for managing EL student data and information. Thus, while

respondents were more likely to go to alters with an ESL endorsement for needed support, the

alters' roles may have a moderating impact on the likelihood of contact.

Table 4

Mean Likelihood of Contact for Support by Alters' ESL-Endorsement Status

Type of Support	Policy and Procedure	Instructional Strategies	Social and Emotional	Student Data and Information
All Ties (*N*=981)	3.58	3.80	3.73	3.62
Ties w/ESL Endorsed Actors (*n*=485)	3.78	4.02	3.82	3.58
Ties w/Non-ESL Endorsed (*n*=489*)	3.38	3.58	3.62	3.67

Likelihood of contact on a scale of 1-5, where 5 is high. *There are 7 ties with unknown ESL-Endorsement status.

Feeling qualified to offer support. A few patterns emerged in relation to role, ESL-endorsement status, and feeling qualified to offer support among respondent alters (see Table 5). Using a threshold of 2.5 to indicate a person's relative sense of *feeling qualified to offer support*, some role groups indicated feeling qualified. ESL-endorsed facilitators and staff developers felt qualified to offer instructional strategy and social and emotional support, while instructional coaches and ESL technicians felt qualified to offer student data and information support. Instructional coaches, regardless of ESL-endorsement status, and administrators without an ESL endorsement also felt qualified to offer instructional strategies support. ESL-endorsed teachers and ESL-endorsed respondents nearly meet the 2.5 threshold for feeling qualified to offer instructional strategies support, with a higher mean than non-ESL endorsed teachers in that area.

While it might be argued that ESL-endorsed respondent alters felt slightly more qualified to provide support in most areas, patterns were not entirely consistent. For example, non-ESL endorsed instructional coaches and ESL technicians felt more qualified to offer social and emotional support than those in corresponding roles with ESL endorsements. Both ESL-endorsed and non-ESL endorsed instructional coaches' feelings of being qualified to offer support for instructional strategies and social and emotional support were relatively high. It is also apparent that fewer respondent alters felt qualified to provide support in the area of policy and procedure than in other areas, regardless of endorsement.

Table 5

Mean Feeling of Being Qualified to Offer Support by Roles and ESL Endorsement

Respondents Roles and ESL Endorsement	Policy and Procedure Support	Instructional Strategies Support	Social and Emotional Support	Student Data & Information Support
All Respondents	1.84	2.40	2.38	2.03
ESL End. Respondents	1.84	2.47	2.40	2.01
Non-ESL End. Respondents	1.82	2.12	2.30	2.10
ESL End. Facil./Staff Dev.	2.25	2.75	2.75	2.50
Non-ESL End. ESL Technicians	2.15	2.23	2.38	2.62
ESL End. Administrators	2.13	2.25	2.25	2.25
Non-ESL End. Facil./Staff Dev.	2.00	2.38	2.25	2.13
Non-ESL End. Administrators	2.00	2.50	2.25	2.25
ESL End. ESL Technicians	2.00	2.50	2.00	2.00
ESL End. Teachers	1.80	2.45	2.40	1.95
Non-ESL End. Teachers	1.20	1.70	2.20	1.70
ESL End. Instr. Coaches	1.67	3.00	2.33	2.67
Non-ESL End. Instr. Coaches	1.50	2.50	3.00	1.50

Scale: (1) I do not feel qualified, (2) I feel somewhat qualified, and (3) I feel qualified

Nature of dyadic ties. The nature of the dyadic ties may help explain the function of the network (Borgatti, Everett, & Johnson, 2013). Dyadic ties were analyzed for patterns of reciprocity, homophily, frequency, influence, and relational embeddedness.eciprocity between actors and alters informs the nature of the directionality of content flows. Findings clearly indicated low reciprocity. Each of the 981 dyadic ties existing between the 354 actors in the network was directed. Yet, only 7% of these ties demonstrated reciprocity, with support flowing both directions. The fact that the study included only a one-step snowball, where alters named in the second round of survey distribution did not have the opportunity to respond about whom they contact, may have decreased the network reciprocity. Additionally, more than one-third of the respondents went to the internet for support, and those ties are, of course, not reciprocated. However, when computer-based ties were removed, reciprocity only rose to 8%. Thus, the dyadic ties in the network have strong patterns of uni-directionality. Tie homophily was found in

gender and location. Most ties demonstrated gender homophily, as expected, given 84% female respondents. Given 70% of ties were with people located at the same site, location homophily was also indicated. An additional 12% of ties were with onsite internet or online databases, for a total of 82% of ties with location homophily. No pattern was evident for ESL endorsement or role homophily.

Respondents indicated frequent contact with alters within the support network, with 78% of respondents contacting alters at least monthly and nearly one-third having weekly contact. The distribution of contact frequency is visually represented by the network graphic in Figure 9. Additionally, the respondent's role may be related to contact frequency. Special education teachers and facilitators/staff developers indicated at least monthly contact with 90% of their ties, followed by classroom teachers indicating 78%, and ESL technicians only indicating 67%. The majority of support ties occurred at a frequency of weekly or monthly. ESL-endorsed respondents may engage slightly more frequently in the professional support network (more daily and weekly) than non-ESL endorsed actors (more monthly). No differences were noted at lower frequencies (yearly; no contact).

For the 981 ties, 49% of alters were *quite influential* or *very highly influential*. Thus, when individuals needed support, they tended to go to those alters whose input was more influential (see Table 6). The mean influence of an ESL-endorsed alter was often higher than that of a non-ESL-endorsed alter, however, this pattern was not consistent across the various roles. This finding may indicate that the influence of an alter's role may outweigh that of having an ESL endorsement. For example, respondents were likely to be influenced by an administrator without regard to the administrator's ESL-endorsement status; and while ESL technicians carried

Contact at least once per year

Contact at least once per month

Contact at least once per week

Contact daily

Legend:
- Classroom Teacher
- ESL Technician
- Administrator
- Spec. Ed. Teacher
- Secretary
- Instruct. Coach
- Facil/Staff Dev.
- Comm. Mem.
- Other
- Dist. Classif.
- Computer
- Dist. Certif.
- Couns./Psych.
- Speech/Lang.
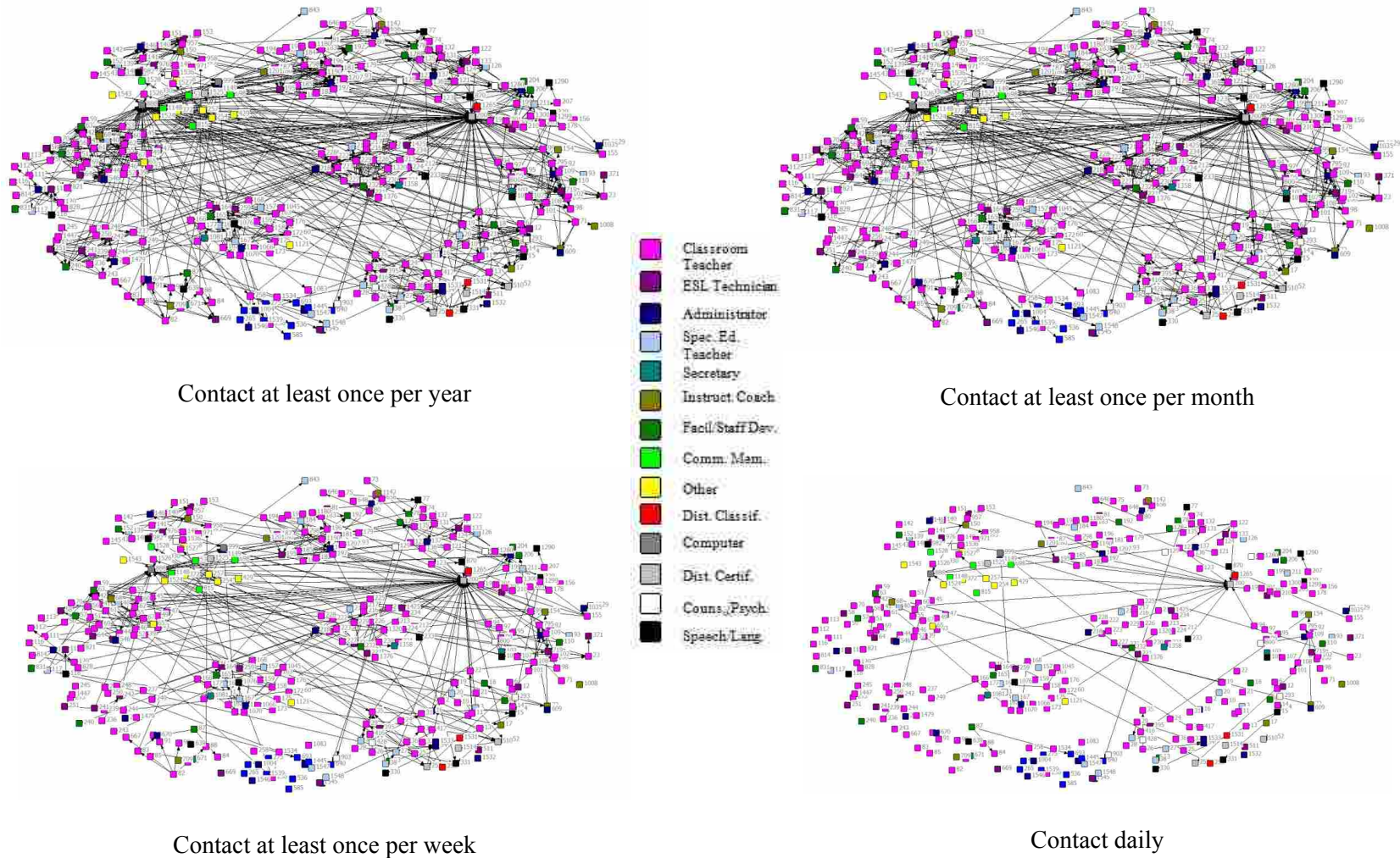
Figure 9. Frequency of professional support network contact (clustered by site; color coded by role).

Table 6

Mean Influence and Percentage of Network Alters by Role and ESL-Endorsement

Roles of Alters	Mean Influence		
	All Alters	ESL Endorsed	Not ESL Endorsed
All Roles Combined (*N*=981)	3.47	3.66 (90%)	3.29 (10%)
Distr.-level Cert. Personnel (*n*=103)	4.01	4.06 (92%)	3.38 (8%)
Other (*n*=12)	3.92	4.25 (67%)	3.25 (33%)
Distr.-level Class. Personnel (*n*=5)	3.80	3.33 (60%)	4.50 (40%)
Facilitators/Staff Developers (*n*=106)	3.74	3.92 (59%)	3.47 (41%)
Administrators (*n*=108)	3.68	3.67 (62%)	3.68 (37%)
Instructional Coaches (*n*=20)	3.65	3.54 (55%)	3.78 (45%)
Speech Language Path. (*n*=23)	3.63	3.07 (61%)	3.22 (39%)
ESL Technicians (*n*=221)	3.50	3.32 (13%)	3.52 (87%)
Classroom Teachers (*n*=216)	3.40	3.45 (86%)	3.04 (11%)
Counselors/Psychologists (*n*=11)	3.36	(None)	3.36 (100%)
Special Education Teachers (*n*=23)	3.22	3.63 (50%)	3.00 (50%)
Computer-based Resources (*n*=121)	2.78	(None)	2.78 (100%)
Secretaries (*n*=7)	2.71	(None)	2.71 (100%)
Community Members (*n*=6)	3.33	4.00 (33%)	3.00 (67%)
Parents (*n*=0)	(None)	(None)	(None)

Scale: 1-5, 1=not influential, 5=very highly influential

high influence, 87% were not licensed personnel and generally could not have an ESL

endorsement.

The types of relational embeddedness and presence of the underlying social components

(see Table 7) indicate 54% non-embedded ties which is typical of many network samples, given

efforts required to sustain relational embeddedness (Hite et al., 2011). The most frequent type of

relational embeddedness was full embeddedness (16%), meaning respondents indicated these ties

had high degrees of all three social components. Classroom teachers, the largest group of

respondents in the study and the group with the largest number of ties, reported similar tie

distributions as other respondents.

Not surprising was that personal and competency embeddedness, and their combined

isolated embeddedness (see Figure 3), were most prevalent types of relational embeddedness,

greater in number than hollow, latent and functional embeddedness. When seeking support in

Table 7

Number and Percentage of Ties by Type of Relational Embeddedness

Type of Relational Embeddedness	Total Ties (*N*=981)	Classroom Teacher Ties (*n*=664)
Not Embedded	534 (54%)	357 (54%)
Competency	58 (6%)	38 (6%)
Personal	61 (6%)	31 (5%)
Hollow	23 (2%)	14 (2%)
Functional	33 (3%)	25 (4%)
Isolated	87 (9%)	56 (8%)
Latent	25 (3%)	18 (3%)
Full	160 (16%)	125 (19%)

their work with ELs, respondents went to those with whom they had personal relationships and those whom they believed were competent to help. The social components of personal relationship and interaction, rather than social capital, also appear to influence the general distribution of relational embeddedness type.

Contact frequency may be related to relational embeddedness (see Table 8). The majority of ties (54%) were not relationally embedded, with 75% of these ties demonstrating weekly or monthly contact. Yet, 68% of the relationally embedded ties demonstrated high weekly or monthly contact. A pattern also appeared between contact frequency and the social components of relational embeddedness. Weekly contact generally aligned with high personal relationships (e.g., personal, latent and isolated embeddedness). Monthly contact generally aligned with high interaction (e.g., competency, functional, and isolated embeddedness). Less frequent contact (e.g., yearly) was most common among ties with high social capital (e.g., hollow, functional and latent embeddedness). Full embeddedness, which has a high extent of all three components, occurred highly at weekly, monthly and yearly frequencies.

Greater relational embeddedness may enhance an alter's influence (Kilduff & Brass, 2010; Moolenaar, Sleegers, Karsten, & Daly, 2012). Findings align with the literature given

Table 8

Frequency of Contact by Type of Relational Embeddedness

	% Total Ties	Not Yet Contacted	Once or more each year	Once or more each month	Once or more each week	Daily
Total Ties (*n=966**)	100%	38 (4%)	173 (18%)	377 (39%)	311 (32%)	67 (7%)
Not Embedded (*n=250*)	54%	15 (3%)	77 (15%)	194 (37%)	189 (36%)	45 (9%)
Competency (*n=58*)	6%	3 (5%)	7 (12%)	30 (52%)	18 (31%)	0 (0%)
Personal (*n=60*)	6%	0 (0%)	9 (15%)	22 (37%)	23 (38%)	6 (10%)
Hollow (*n=23*)	2%	1 (4%)	7 (30%)	10 (43%)	3 (13%)	2 (9%)
Functional (*n=33*)	3%	0 (0%)	10 (30%)	17 (52%)	6 (18%)	0 (0%)
Isolated (*n=87*)	9%	7 (8%)	16 (18%)	41 (47%)	19 (22%)	4 (5%)
Latent (*n=25*)	3%	1 (4%)	9 (36%)	6 (24%)	5 (20%)	4 (16%)
Full (*n=160*)	17%	11 (7%)	38 (24%)	57 (36%)	48 (30%)	6 (4%)

*Of 981 ties, 15 did not include frequency data

all types of relational embeddedness had greater mean influence than non-relationally embedded

ties (see Table 9). Findings also indicated that ties with personal relationships alone had lower

influence than other types of relational embeddedness while ties based on competency or social

capital had greater influence. This pattern is consistent with the study's earlier findings

regarding certain roles being highly influential and suggests some roles may carry greater

influence than either personal relationship or ESL-endorsement status alone.

Table 9

Mean Influence by Type of Relational Embeddedness

Type of Relational Embeddedness	Total Ties (*N=981*)	Mean Influence
Not Embedded	534 (54%)	3.19
Competency	58 (6%)	3.90
Personal	61 (6%)	3.38
Hollow	23 (2%)	3.96
Functional	33 (3%)	3.94
Isolated	87 (9%)	3.71
Latent	25 (3%)	3.48
Full	160 (16%)	4.01

Note. Influence was reported on a scale of 1-5: 1 not influential, 2 somewhat influential, 3 influential, 4 quite influential, 5 very highly influential

Discussion

This study examined the nature and function of the professional support network of ESL-endorsed teachers in one large district in the western region of the United States. Although approximately 1,500 teachers and other certified faculty members in the district had completed ESL endorsements, the need to implement this professional development is ongoing and supported through this informal network. To facilitate the effective functioning of this network, the findings suggest several system and procedure recommendations for the district.

Nature of the Network

The district has an active network of individuals seeking various types of support in their work with ELs. The two primary findings in relation to the nature of the network are that actors primarily contacted on-site alters and that parents were not represented in the membership of the network.

The convenience of on-site contact and the relative ease of seeking support from those with whom actors already have established relationships provide an explanation of the on-site finding. Given this tendency, the district may wish to clearly designate individuals at each school as specific contacts for ESL-related issues, which may increase network density and the performance of teachers at that site (Kane & Borgatti, 2011). These on-site individuals can serve to strengthen the network, receiving ongoing training, and providing the specific support needed by individuals at each school. Given the importance of maintaining compliance with the many laws and regulations pertaining to work with ELs, the district could make policy and procedure information more readily accessible to personnel through these individuals.

Furthermore, considering that the 70% on-site ties were supplemented with an additional 12% computer-related ties also accessed on site, and more than one-third of the respondents

utilized the internet for ESL support, the district may want to create an online website. This site might provide selected resources based upon the types of support most requested in this district. A website would provide the district with the control over site content, ensuring that the support is aligned, in compliance, and current with district policies. The district might also moderate an online forum discussion in which district personnel can post questions and seek support on ESL-related issues. Ease of access and the tendency of teachers, particularly among the younger "digital natives," to turn to the internet for ideas, resources, and other types of support, make this trend of internet usage understandable and the creation of a district website a natural course of action.

The study clearly indicated that teachers did not contact parents for support in working with ELs. Yet, one of the six classes included in the ESL-endorsement program was titled *Family, School, and Community Partnerships* which encouraged teachers to engage with parents in the education of their English language learning children. This lack of contact is likely explained by the finding that teachers expressed a great need for translation and support in communicating with parents. The district should evaluate its parent involvement practices, particularly at schools with higher populations of ELs. The development of enhanced parent partnerships may strengthen the sense of bilateral support felt by teachers and parents alike, leading to improved student outcomes.

Function of the Network

Regarding the function of the network, two findings were both clearly evident and somewhat unexpected. The first was that the role of an actor was a primary factor in an individual's function in the network. The second was that, after instructional strategies, network members most desired support in translation and communication with parents. Support in

working with parents also ranked high, and these two measures combined indicate that teachers feel an overall need for greater support in their efforts with the parents of ELs.

This study found that a person's professional role was likely related to their being contacted for support, their frequency of contact, and their potential influence. The alter's role was more compelling in attracting an actor than the alter's years of teaching experience or ESL endorsement. It is possible that the alter's positional authority or perceived competence factored in these interactions. Actors did contact different alters for specific types of support needed which demonstrates the willingness of personnel to network with different individuals and potentially be flexible in their ties as the district network continues to grow, thus benefiting the network with new knowledge and resources they acquire (Granovetter, 1973). Given many actors went to alters based upon the alters' roles, and that many of these roles highly influenced decisions, the district should ensure that individuals in key roles have accurate and updated information. The district may provide training to personnel in pivotal roles—such as certified district-level personnel, administrators, and facilitators/staff developers—either through an ESL-endorsement program or through continuing professional development.

A potential pattern between role and relational embeddedness emerged. When ties demonstrated hollow embeddedness, based mostly on social capital, they had greater influence, which may be due to alters' roles. To strengthen relational embeddedness among the support network ties, the district could facilitate training in interpersonal skills, particularly to those in those roles of high competence and influence. Additionally, identified support personnel at each site could be directed to establish frequent contact with those teaching ELs, to develop relationships and provide opportunities for ongoing communication and support.

The greatest concern among nearly all members of the network was improving their instructional strategies. However, an unexpected finding was identified among open-ended responses, where translation and communication were a primary concern among respondents, second only to instructional strategies. When combined with the high need to work with parents, respondents felt a distinct need for greater support in communicating with and building partnerships with parents of ELs. Thus, increasing support for teachers in the area of parental involvement, particularly with translation and communication, is an essential next step for the district. To enhance parent partnerships at the school and classroom levels the district could utilize native language parent volunteers in the classrooms, sponsor EL parent nights, provide EL homework support and implement other programs to support teachers in their work with ELs. Effective response to these ESL support needs will help personnel to feel supported and have a positive impact on student learning among the EL population.

There is much more to be learned about the professional networks of support for ESL-endorsed teachers. Given that assessment results dominate many aspects of education, the district could examine schools with rising test scores in language proficiency to assess how this increase may be related to the nature and function of the support networks of ESL-endorsed teachers at that school. Further research on the relationship between the nature and function of the professional support network and language proficiency may inform how this network may be influencing the linguistic development of ELs.

Conclusion

The achievement gap between ELs and their native English speaking peers continues to plague U.S. schools. In spite of legislative mandates, governmental oversight, professional development, and myriad policies, this achievement gap persists. Understanding the nature and

function of the professional support networks of ESL-endorsed teachers serving ELs is a first step for administrators, including principals, alternative language service coordinators, and district federal program directors, as they seek to ensure that professional development given in ESL endorsement training leads to strong ESL teacher pedagogy. Knowing the nature of this network to be comprised of actors in many roles, with and without ESL endorsements, who access most support on site, district administrators can identify site-based personnel and create resources for teachers, such as an online website, to provide current and specific ideas and information responsive to the needs of those serving ELs. District leadership, through an understanding of the function of this network, is also able to consider the types of support most needed, including assistance with appropriate instructional strategies, translation, and parental involvement, and to provide the ongoing professional development and support needed by those in this network. As district administrators enhance these professional support networks, they can better maintain compliance with the governmental standards and regulations, help schools to meet mandated progress requirements, and, most importantly, help teachers effectively use what they have learned in their ESL-endorsement courses to have a positive academic impact upon English language learning students.

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APPENDIX A: REVIEW OF LITERATURE

The review of literature will first explore the past and predicted demographic changes in the English Learner (EL) population, and the resulting need for specialized language instruction. Next it will consider the policies and regulations pertaining to the instruction of ELs. Then the review of literature will describe the achievement gap between ELs and their native English speaking peers, followed by an exploration of the professional development provided to teachers in an effort to close that gap. Finally, a consideration of the moderating role of professional networks of support in facilitating teacher pedagogy related to ELs will be presented.

Terminology

The terms used in this review will be those most commonly identified in the literature. Among educators, researchers, and policy makers, a variety of terms is used. Usage is typically dependent upon the regional norms as well as the specific needs and preferences of the individual (National Clearinghouse for English Language Acquisition, 2011a). While the terms English learner (EL) and English language learner (ELL) are used interchangeably in the literature, the term limited English proficient (LEP) carries a connotation of government identified status. LEP is clearly defined in the Elementary and Secondary Education Act (ESEA), and is most often utilized when referring to state and federal classification or data collection (Office of English Language Acquisition, 2012a). Less often seen is the term culturally and linguistically diverse (CLD) and its counterpart linguistically and culturally diverse (LCD). More particularly in reference to younger students, the term dual language learner (DLL) is becoming increasingly present in the literature. Although often confused with EL and ELL, the term English as a second language (ESL) is misapplied when speaking of individuals as it refers to programs and services provided to these students. To minimize

confusion, the term EL will be used in the review of literature in reference to students, except where the term LEP is necessary to identify a recognized legal or data classification. The term ESL will be used in reference to programs, except where specific instructional practices such as bilingual or dual immersion apply.

Individual states vary in the terminology used to reference the authorization given teachers to work with ELs. The terms endorsement, license, degree, and credential are often used interchangeably. For clarity of purpose in this review of literature, the term ESL endorsement will be used, without hyphenation, based on the convention of the Utah State Office of Education (Utah State Office of Education, 2011a).

Demographic Changes in the EL Population of the U.S.

The demographics of the nation's school-age population have changed dramatically in recent decades. Between 1980 and 2009, the number of school-age children who spoke a language other than English at home increased from 4.7 million to 11.2 million (National Center for Education Statistics, 2012a). In 2009, this number represented 21% of the school children ages 5-17 (National Center for Education Statistics, 2011a). However, not all students who come from homes where English is not the primary language are considered ELs, nor are they necessarily classified as LEP. After increasing to 7% in 2000, in 2009 only 5% of students coming from non-English speaking homes spoke English with difficulty (National Center for Education Statistics, 2011a).

Challenges in data collection. Different sources report varying numbers of ELs in the United States. This can be attributed to data collection at different times of the year from different offices, agencies or individuals, all of whom might define EL status differently (Wilde, 2011). Additionally, the many government agencies, private organizations, and non-profit

groups contributing data relative to ELs each have their own agendas, stated or unstated, political or otherwise. The various ways in which they collect their data for their own myriad purposes can result in discrepancies in the numbers and lead to intentional or unintentional manipulation of the data.

Given this understanding, some discrepancies in the numbers are not surprising, and each data set should be considered in terms of its source. Although varying statistics are available regarding the numbers of ELs in the public schools, there is general consensus that the population continues to grow significantly (National Clearinghouse for English Language Acquisition, 2011a; Office of English Language Acquisition, 2012a; Ramsey & O'Day, 2010). A Title III Policy Brief from 2010 gives the EL population for the 2007-08 school year as approximately 4.7 million, while for the same year the Migration Policy Institute suggests that the number is closer to 5.3 million – a more than 10 percent variance (Batalova & McHugh, 2010b; Ramsey & O'Day, 2010). In The Biennial Report to Congress On the Implementation of the Title III State Formula Grant Program, the number of LEP students for 2007-08 is given as more than 4.6 million, and the population is described as one of the fastest growing student demographic groups in the United States (Office of English Language Acquisition, 2012a).

Trends within the EL population. Changes in the EL population are not only limited to growth in numbers, but are also reflected in the growing diversity within the EL population (National Center for Education Statistics, 2011a; Office of English Language Acquisition, 2012a; Ramsey & O'Day, 2010). These varying demographic characteristics include such things as race/ethnicity, native language, citizenship status, poverty status, and age (National Center for Education Statistics, 2011a). While the percentage of White public school students decreased from 67% to 54% between1990 and 2010, during that same period the percentage of those who

were Hispanic increased from 12% to 23% (National Center for Education Statistics, 2012b).   It

is critical to observe here that the decrease in the White population is almost entirely replaced by

the increase in Hispanic population. This is significant because 73% of school children in 2009

who spoke English with difficulty spoke Spanish (National Center for Education Statistics,

2011a). The nation's fastest growing population of students appears to be those for whom

learning English poses the greatest challenge.

The 2010 Title III briefing gives the total number of Spanish speaking ELs at 90%, and

emphasizes that over 400 different languages are spoken among students in American public

schools (Ramsey & O'Day, 2010). The five most commonly spoken non-English languages

among K-12 LEP students are Spanish, Vietnamese, Hmong, Arabic, and Chinese, with Spanish

speakers numbering in the clear majority at nearly 3.8 million in 2007-08, followed by

Vietnamese at nearly 87,000 (Office of English Language Acquisition, 2012a). Some states have

different languages listed as their most dominant non-English languages; for example, Native

American and Alaska Native languages were given among the five most commonly spoken

languages in 10 states in 2007-08, and there are a number of states in which there is no non-

English linguistic majority (Office of English Language Acquisition, 2012a).

Differences found among the racial and ethnic groups, and other differences among the

EL population as a whole also carry significance. For example, for Hispanic subgroups, 19% of

Dominican school-age children were found in 2009 to speak English with difficulty, compared

with only 7% of Puerto Rican school-age children (National Center for Education Statistics,

2011a). In reference to citizenship, only 4% of native-born U.S. citizens came from homes

where English was not the primary language and spoke English with difficulty, while 11% of

naturalized citizens and 35% of non-U.S. citizens fell into this category (National Center for

Education Statistics, 2011a). Poverty is also an issue for ELs, with rates nearly twice as high for ELs as those for English proficient children (National Center for Education Statistics, 2011a; Ramsey & O'Day, 2010). The population of young ELs is growing, and among the school-age population, younger ELs tend to speak English with greater difficulty (National Center for Education Statistics, 2011a; National Clearinghouse for English Language Acquisition, 2011a).

State and local demographics. While the numbers of ELs across the nation have steadily increased, individual states and districts have experienced widely differing growth patterns. Some states have been only minimally impacted by changes in the EL population, while other states are experiencing high rates of growth (Batalova & McHugh, 2010a; National Center for Education Statistics, 2012b; Ramsey & O'Day, 2010; U.S. Department of Education, 2011b). South Carolina's EL population, for example, grew more than 800% between the 1997-98 and 2007-08 school years, from 3,077 to 28,548, ranking it first in the nation in the percent of growth in that period of time (Batalova & McHugh, 2010a). For the 2007-08 school year, the numbers of ELs enrolled in each state ranged from fewer than 2,000 students in West Virginia and Vermont to more than 1.5 million in California (Ramsey & O'Day, 2010). Such dynamic changes present varying challenges to the infrastructure of the state educational system, and amongst local districts and schools.

Utah demographics. The state of Utah has also experienced tremendous growth in its EL population. The change in EL enrollment in Utah public schools from 1997-98 to 2007-08 is 37.5% (Batalova & McHugh, 2010a; Office of English Language Acquisition, 2010). Although it has had overall growth, Utah is one of many states that have experienced recent fluctuations in the EL population. Whether attributed to the onset of difficult economic times leading to changing migrant patterns, or whether successful instruction in the schools is leading to fewer

numbers of students being classified as LEP, the total number of LEP students in Utah dropped

from 56,103 in 2006-07 to 52,070 in 2007-08 (Office of English Language Acquisition, 2012a).

In 2009-2010, the number of ELs in Utah had decreased to 47,390, which comprised 8.1% of the

total student population (National Clearinghouse for English Language Acquisition, 2011b).

 School district demographics. Paralleling the growth patterns of Utah, the study school

district's has also experienced great growth in recent years. Statistics from the NCELA report

that the number of ELs grew from only 505 in the 1999-2000 school year to 1,149 in the 2009-10

school year, an increase of 127.5% (National Clearinghouse for English Language Acquisition,

2011c). Reflective of state demographics, the numbers of ELs grew during this time period,

while their percentage of the total student population decreased from 2004-05 to 2009-10 from

8.9% to 8.1% (National Clearinghouse for English Language Acquisition, 2011c). However,

while the state of Utah has seen a slowing of growth in its EL population, the study district is still

designated by NCELA as a "high growth" district for this population (National Clearinghouse

for English Language Acquisition, 2011c).

 At the same time, the EL population is not evenly distributed throughout the study

district. Individual schools have widely varied population patterns. While some schools have

only a few EL students in the entire student body, others have populations comprising over 15%

of the total school enrollment. Additionally, ELs are often found to be unequally represented

among individual classroom populations. Based upon an EL's proficiency level as determined

by the Utah Academic Language Proficiency Assessment (UALPA), the student may need to be

placed in an ESL-endorsed teacher's classroom. Also, as administrators seek to appropriately

place students based upon their personalities, learning styles, and other academic and social

needs, the resulting demographics of ELs at the school and classroom level vary considerably.

EL population projections. As difficult as it is to reach consensus on the present number of ELs currently enrolled in schools, it is even more challenging to accurately predict future growth in this population. Although sources agree in their broad prediction that the population will continue to grow, there is limited agreement in the predicted numbers. In its annual report *Projections of Education Statistics*, NCES does not specifically address the EL population. It does, however, make predictions regarding the growth of groups based upon their race and ethnicity. According to the 40th edition of this report, published in January of 2013, it is predicted that between the years 2011 and 2021 the Hispanic population of students enrolled in public elementary and secondary schools will increase by approximately 2.5 million (Hussar & Bailey, 2013). While not all of these students will qualify as ELs, this does predict a significant increase in the largest racial group represented among ELs nationwide. These numbers will be augmented by increases of ELs from other ethnic and racial groups. The impact upon our schools and their demographic make-up will indeed be significant.

Policies and Regulations Pertaining to the Instruction of English Learners

Policies pertaining to language instruction, as well as the language of instruction have existed since the earliest history of the nation's system of education. As a nation comprised of immigrants from around the globe, combined with indigenous speakers of many American Indian languages, language policies, and policy evaluation have been unavoidable. Various immigrant groups established community schools in different languages, and the language of instruction was usually determined by which groups lived in the area, their differing levels of political and economic power, and their views and expectations of schools, although the learning of the English language was typically included (Hacsi, 2002). Ovando characterizes the 18th and

19th centuries "as inconsistent and contradictory regarding the ideology, policies, and politics of language diversity" (2003, p. 3).

The language of instruction became an increasingly more contentious issue in the mid-nineteenth century:

> In Herman, Wisconsin, a Lutheran minister who did not speak English was hired as a teacher; other residents who wanted the school to teach in English succeeded in ousting him. In San Francisco conflict raged throughout the 1870s over the appropriate language of instruction for some immigrant groups. A Republican majority took control of the school board in 1873 and temporarily ended the practice of teaching some immigrant children in French and German, but the language programs were back in business a year later at the insistence of the immigrant community. Three years later the governor of California refused to sign a bill banning bilingual education. And segregated schools taught in other languages did not come about just because of some immigrant groups' desire for them. In 1885 San Francisco established a Chinese-language school, and the city later segregated several other groups the same way, at least somewhat due to a desire on the part of white residents to keep the immigrant groups out of the schools their own children attended. (Hacsi, 2002, pp. 66-67)

These controversies regarding the language of instruction continue in education today.

Legislation impacting language instruction for ELs. In America's more recent history, the language of instruction in education has continued to be a divisive topic. As in the more distant past, social and political events have continued to influence educational practices and legislation. In the mid-1960s, the Cuban revolution influenced bilingual efforts in Miami schools. A pluralistic experiment began as native English speaking students were invited to

participate in a bilingual program (de Jong, 2011). Latino groups, following the pattern of the African-American civil rights movement of the 1960s, sought to improve their children's education, with a particular focus on the treatment given those entering school with little or no English language skills (Hacsi, 2002).

Significant progress in language policy attending to the needs of second language learners was made in the 1960's. The two major legislative acts which proved instrumental at this time included Title VI of the Civil Rights Act of 1964 and Title VII of the Elementary and Secondary Education Act (ESEA). Title VI of The Civil Rights Act of 1964 prohibited discrimination on the basis of race, color, or national origin in any federally assisted program. As a part of the reauthorization of the 1965 ESEA, Title VII (The Bilingual Education Act) was added in 1968. Title VII established, for the first time, federal policy for bilingual education for economically disadvantaged language minority students. Recognizing the specific challenges of English language learners, the provisions of this legislation allocated funding for innovative programs to serve the needs of these learners. These two federal policies established a legal foundation for support services for ELs to ensure that they received sufficient academic and linguistic support to achieve success with their native English speaking peers (Mikrow-Porto, Humphries, Egelson, O'Connell, & Teague, 2004).

Since the time of these ground-breaking legislative acts, many additional policies have been enacted and formerly established laws have been judicially reinterpreted and applied to the education of language minority children. The ESEA has undergone numerous reauthorizations, many of which have contributed to policies for ELs. Title VII of ESEA was amended a number of times over subsequent decades, and with its reauthorization in 2001, the competitive grants of Title VII were replaced with grant formulas under Title III, and provisions were added for

focusing on English language acquisition and helping ELs to meet academic standards (Ramsey & O'Day, 2010). Most recently, the No Child Left Behind (NCLB) reauthorization of ESEA brought attention to student progress among various subgroup populations, including ethnic and linguistic groups, and provided many of the current policies for educators of ELs.

Individual states have also enacted legislation regarding the instruction given to ELs in their respective jurisdictions. Some have been controversial, as they have either limited or expanded the use of a student's native language for instructional purposes, while others address the qualifications required of those who will teach. Utah Administrative Code R277-716-4B states:

> . . . a school district/charter school shall (4) provide adequate staff development to assist ELL/LEP teachers and staff in meeting AMAOs; (5) provide necessary staff, curricular materials approved by the Instructional Materials Commission consistent with R277-469, and facilities for adequate and effective training. (Division of Administrative Rules, 2013)

 Further, Utah Administrative Code R277-716-5 reads that:

> A. Utah educators who are assigned to provide instruction in language acquisition programs shall comply with the State ESL Endorsement requirements provided in R277-520.

> B. Teachers whose primary assignment is to provide English language instruction to ELL students shall have an ESL or ESL/Bilingual endorsement consistent with the assignment. (Division of Administrative Rules, 2013)

Litigation and EL policy. Litigation in the courts has had a tremendous impact on policies for the education of ELs. In 1970 the case of Kinney Lau, a first-grade Chinese

American boy who was being taught in a San Francisco school in English with no targeted language instruction, was brought before the courts. This case ended with the landmark decision of the Supreme Court which stated that, "There is no equality of treatment merely by providing students with the same facilities, text-books, teachers, and curriculum; for students who do not understand English are effectively foreclosed from any meaningful education" (Lau v. Nichols, 1974). This case led that very same year to the Equal Education Opportunities Act (EEOA), another amendment to the ESEA, which asserted that institutions of education must "take appropriate action to overcome language barriers that impede equal participation by its students" (U.S. Congress, 1974).

Litigation regarding language instruction continued. A case was filed against the Raymondville Independent School District (RSID) in Texas in 1978, a part of which wherein the plaintiff, Mr. Castañeda, citing Lau as a precedent, claimed that the RSID failed to establish sufficient bilingual education programs (Sparrowe, Liden, Wayne, & Kraimer, 2001). While the district court ruled in favor of RSID, the case was appealed to the United States Court of Appeals for the Fifth Circuit, where it was in part reversed, and the court established criteria for the assessment of bilingual programs and their compliance with the EEOA. Despite the court's rulings, state referenda including California's Proposition 227 and Arizona's Proposition 203 continue to battle against bilingual instruction, and the issue remains widely contested.

In 1982 a Texas case involving whether or not the state should provide education for undocumented immigrant children influenced what educational services would be provided to ELs. In this case, Plyler v. Doe, the Supreme Court asserted the following:

Public education is not a "right" granted to individuals by the Constitution. *San Antonio Independent School Dist. v. Rodriguez,* 411 U.S. 1, 35 (1973). But neither is it merely

some governmental "benefit" indistinguishable from other forms of social welfare legislation. Both the importance of education in maintaining our basic institutions and the lasting impact of its deprivation on the life of the child mark the distinction. (Plyler v. Doe, 1982)

Government regulation of EL policy. Various government bodies have been given responsibility for the oversight of these policies. The United States Department of Education, officially enacted into existence in 1979, includes multiple divisions with responsibilities for the education of students with limited English proficiency. The Office for Civil Rights is a division of the United States Department of Education whose mission is to ensure equal access to education and educational excellence through the enforcement of civil rights (Office for Civil Rights, 2012). Under the Deputy Secretary of Education was organized the Office of English Language Acquisition. This office "establishes and implements policy and national dissemination efforts of the bilingual education programs that serve the limited English proficient (LEP) children and adults" (Office of English Language Acquisition, 2012b).

Because there are such a great number of legislative acts and judicial pronouncements pertaining to English language learners, and even numerous departments created to administer their oversight, the policies can be overwhelming and difficult to conceptualize. It behooves administrators to gain clarity of understanding of these policies, their underpinnings, and their impacts upon the educational systems and the students entrusted to their care.

Achievement Gap of the EL Population

Although intended to bring equal educational opportunities to the EL population, policies have failed thus far to result in equal educational outcomes. Policies alone are rarely sufficient to achieve such challenging goals. Discrepancies between the educational attainments of ELs

and their native English speaking peers is one piece of a multi-faceted problem often referred to as the achievement gap. In its Data Express Definitions page, the U.S. Department of Education defines achievement gap as "[t]he difference in academic performance between ethnic groups" (2013b). In another article, an expanded definition is given by the U.S. Department of Education that includes "[d]ifferences in academic performance between subgroups of students and their peers" (U.S. Department of Education, 2013a). Documentation of what was then termed a performance gap, particularly between white and non-white students, began appearing in educational journals from the early 1970s, and over the years has expanded to include achievement differences between white students and racial minorities, students of poverty and students of wealth, native English speakers and English learners, and students with disabilities and those without (U.S. Department of Education, 2013a).

The achievement gap between ELs and their native English speaking peers is well recognized across all content areas, and is more greatly pronounced in academic areas with high English literacy demands (Abedi & Gándara, 2006; Roberts, Mohammed, & Vaughn, 2010). The gap can be attributed to many factors including parent education level, poverty, the challenges inherent in second language acquisition, various inequitable schooling conditions, poor measurement tools, and teachers with little experience who are ill-prepared to teach this population (Abedi & Gándara, 2006). These factors, combined with other student demographic characteristics such as citizenship status, ethnic origin, and age, lead to within group variations among ELs that often vary as much or more than the between group variations of ELs and their native English speaking peers (National Center for Education Statistics, 2011b).

National achievement gap data. The most commonly used measure of national student achievement and growth is The National Assessment of Educational Progress (NAEP).

The National Assessment of Educational Progress (NAEP) is the largest nationally

representative and continuing assessment of what America's students know and can do in

various subject areas . . . NAEP provides results on subject-matter achievement,

instructional experiences, and school environment for populations of students (e.g., all

fourth-graders) and groups within those populations (e.g., female students, Hispanic

students) . . . NAEP results are based on representative samples of students at grades 4, 8,

and 12 for the main assessments, or samples of students at ages 9, 13, or 17 years for the

long-term assessment. These grades and ages were chosen because they represent critical

junctures in academic achievement. (National Center for Education Statistics, 2012c)

NAEP 2011 reading results showed that among all fourth-grade students the average

reading score was higher in 2011 than in 1992, but showed no significant difference from 2009

(see Figure 10). ELs also showed no significant increase in score from 2009 to 2011, but did

demonstrate an improvement in average reading score from that of 1998. While the percentage

of ELs performing at or above Basic improved between 1998 and 2011, the percentage

performing at or above Proficient in 2011 was not significantly different from either the 1998 or

2009 results. Only 31% of ELs scored at or above Basic, while only 7% scored at or above

Proficient on the Reading test, while 72% of their non-EL peers scored at or above Basic, 37%

scored at or above Proficient, and 9% scored Advanced. (National Center for Education

Statistics, 2012c).

In mathematics, according to reports from the National Center for Education Statistics,

the NAEP results demonstrated greater growth for the general population than for ELs. For all

fourth-grade students in the nation, the average mathematics score was higher in 2011 than in

any previous year of assessment (see Figure 11). However, while the average score of ELs was
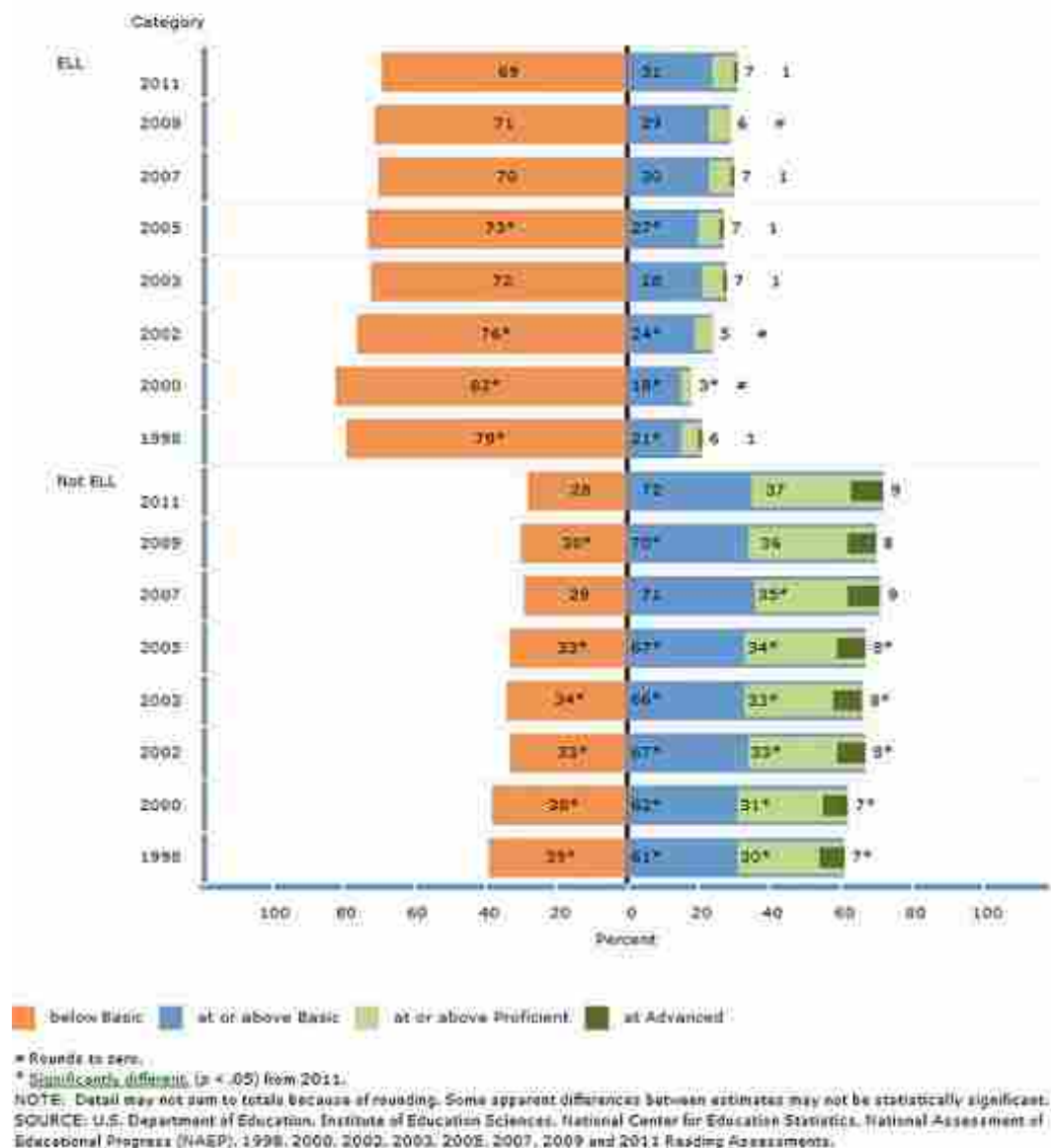
Figure 10. Percentages for reading achievement levels, grade 4 by year for EL and non-EL.

higher in 2011 than in 1996, it was not significantly different from the average score of ELs in

2009. A positive change was that a higher percentage of fourth-grade ELs performed at or above

Basic in 2011 than in 1996, but there was no statistical significance in comparison to the 2009

results. The percentage of ELs who performed at or above Proficient was higher in 2011 than in

either 1996 or 2009. Results for fourth-grade ELs showed that 59% scored at or above Basic,

14% scored at or above Proficient, and 1% scored at the Advanced level. The percentage of non-

Category

ELL

Year	below Basic	at or above Basic	at or above Proficient	at Advanced
2011	41	59	14	1
2009	43	57	12*	1
2007	44	56	13	1
2005	46*	54*	11*	1
2003	51*	49*	9*	#*
2000	70*	30*	4*	#
1996	70*	30*	4*	#

Not ELL

Year	below Basic	at or above Basic	at or above Proficient	at Advanced
2011	15	85	44	7
2009	16*	84*	42*	6*
2007	15	85	42*	6*
2005	17*	83*	39*	5*
2003	20*	80*	35*	4*
2000	32*	68*	25*	3*
1996	35*	65*	22*	2*

Percent

■ below Basic ■ at or above Basic ■ at or above Proficient ■ at Advanced

Rounds to zero.
* Significantly different. (p < .05) from 2011.
NOTE: Detail may not sum to totals because of rounding. Some apparent differences between estimates may not be statistically significant.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996, 2000, 2003, 2005, 2007, 2009 and 2011 Mathematics Assessments.

Figure 11. Percentages for math achievement levels, grade 4 by year for EL and non-EL.

EL fourth-grade students scoring at or above Basic was 85%, while 44% scored at or above

Proficient, and 7% scored at Advanced (National Center for Education Statistics, 2012c).

The NAEP did not assess fourth-grade students in the area of science in 2011. The

eighth-grade results for that year showed that the percentages of all students performing at or

above Basic and Proficient were higher in 2011 than in 2009, while the percentages of ELs

performing at or above Basic and Proficient were not significantly different between 2009 and

2011. Eighth-grade non-EL students scoring at or above Basic was 68%, while 34% scored at or

above Proficient. Only 17% of eighth-grade ELs scored at or above Basic, and only 3% scored

at or above Proficient. The most recent scores available for fourth-grade students are from the

2009 NAEP. The assessment was changed to a degree that the results from 2009 cannot be

compared to those of previous years' assessments. However, among fourth-grade non-EL

students, 76% scored at or above Basic and 37% scored at or above Proficient, while among their

EL peers, only 33% scored at or above Basic and only 5% scored at or above Proficient (see

Figure 12) (National Center for Education Statistics, 2012c).
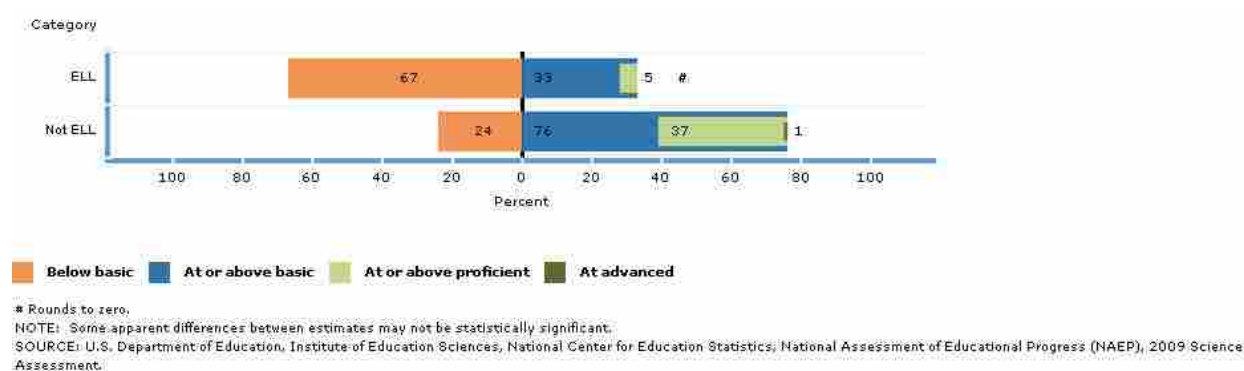
Figure 12. Percentages for science achievement levels, grade 4 for 2009 for EL and non-EL.

Utah's achievement gap data. At the state level, Utah's fourth-grade NAEP average

Reading scores were exactly matched with national scores, and percentages at or above Basic,

Proficient, and at Advanced nearly mirrored those of the nation. While the national scores

include sub-population scores for ELs, the data is not disaggregated to that degree at the state

level in Utah. However, sub-population scores by race/ethnicity are given for the state level, and

whereas the EL population in Utah is mostly Hispanic, a state trend that follows the national

trend is visible. It must be remembered, however, that results for the Hispanic population as a

whole will be higher than those of the EL population, due to ELs' limited proficiency with the

English language as compared with the Hispanic population in its entirety. The percentage of

White fourth-grade students scoring at or above Basic on the Reading test was 74%; of those

students, 38% scored at or above Proficient, and 7% scored Advanced. Among Hispanic

students, only 41% scored at or above Basic; of that total, only 13% scored at or above

Proficient, and a mere 2% scored Advanced. (National Center for Education Statistics, 2012c)

Another measure of reading proficiency for ELs in Utah is the Utah Core Criterion Reference

Tests (CRT). In 2012, only 36.5% of LEP students passed the Language Arts portion of the test,

while 86.3% of native-English ability students passed (Utah State Office of Education, 2012).

Utah scored slightly above the national average in 2011 on the NAEP Mathematics exam.

Fourth-grade Hispanic students had an average score that was 24 points lower than White

students, but not significantly different from the gap between the groups in 1992. Of the fourth-

grade students tested, 90% of White students scored at or above Basic, 49% scored at or above

Proficient, and 8% at Advanced. Their Hispanic peers in Utah scored 64% at or above Basic,

17% at or above Proficient, and 1% at Advanced (National Center for Education Statistics,

2012c). On the Mathematics CRTs for 2012, 28.5% of LEP students earned a passing score,

while 71.4% of native-English ability students passed (Utah State Office of Education, 2012).

Data from the 2009 fourth-grade NAEP Science exam shows that Utah's average score

was higher than that of the nation. Utah also scored higher than the nation in the percentage of

students who scored at or above Basic and the percentage of students who scored at or above

Proficient. Utah students identified as White had 84% at or above Basic, and 45% at or above

Proficient. Of the fourth-grade students in Utah identified as Hispanic, 50% scored at or above

Basic, and 12% scored at or above Proficient.

At the state level, the data clearly demonstrate that ELs score significantly below their

native English speaking peers in all content areas tested on the Elementary CRTs and across

grade levels. In the most recent Consolidated State Performance Report: Part I and II for the

State of Utah, elementary students classified at LEP scored below all other sub-group populations, including those of ethnicity, students with disabilities, economically disadvantaged students, and migratory students. This was consistent in all tests–Reading/Language Arts, Mathematics, and Science–for all grades assessed–third, fourth, fifth, and sixth (U.S. Department of Education, 2011a).

All states must report annually on the progress of ELs in acquiring English language proficiency. For the 2007-08 school year, the state of Utah reported that 57% of its LEP population was making progress and 20% were reported as attaining English language proficiency (Office of English Language Acquisition, 2012a). Individual states are permitted to use different standards, assessments, and criteria for determining this proficiency. Utah uses its criterion referenced end-of-level tests (CRTs). The CRT results for the 2007-08 year offer a more positive result than do the NAEP results for 2009. Using the CRT results, the state of Utah reported that 50% of the LEP subgroup scored proficient or above in reading and language arts, while 49% scored proficient or above in mathematics (Office of English Language Acquisition, 2012a).

Study district's achievement gap. ELs in the study district, although making progress, continue to score below their native English speaking peers and below ELs across the state. Under NCLB, states establish Annual Measurable Achievement Objectives (AMAO), and districts are evaluated as to whether or not they meet these AMAO requirements (Office of English Language Acquisition, 2012a). Of the three AMAOs for the state of Utah, the first relates to the percentage of ELs who demonstrate progress based upon two years of UALPA scores, and has a target of 37.5% for the 2011 school year. The second AMAO addresses the percentage of ELs who are designated as Advanced or Fluent based upon their current year's

UALPA score, and has a target of 26.8% for the 2011 school year. The final AMAO considers whether the EL subgroup of the district or local education authority (LEA) achieves adequate yearly progress (AYP) in both language arts and mathematics (Park, 2011). For the 2010-11 school year, the study district met all three of the AMAO requirements (Utah State Office of Education, 2011b).

However, the evidence regarding EL progress in language proficiency and academic achievement for the study district is not fully represented through AMAOs. Although AMAOs were met, the 2012 Utah CRT results show that ELs scored far below their non-EL peers in all content areas, and below the statewide average of all ELs in all content areas. This is despite the fact that non-EL study district students scored the same as or above their non-EL statewide peers in all content areas ([Study] School District, 2012).

The Need for Professional Development for Teachers of ELs

In an effort to close the achievement gap, some districts, universities, and public and private agencies have worked to provide professional development for teachers, to improve their instructional practices for ELs. U.S. Secretary of Education Arne Duncan has said, "Today, teachers are asked to achieve significant growth for all students, even as they instruct students with ever more diverse and complicated needs" (2009, para.11) However, finding adequate numbers of teachers who are well prepared to meet these needs continues to be a challenge; in 2004, nearly 36% of public schools had vacancies in positions for teachers of ELs (Potemski, 2009). As of 2009, there were 255,000 teachers of ELs in the United States, and it was anticipated that an additional 67,000 teachers of ELs would be needed by 2013 (National Clearinghouse for English Language Acquisition, 2010). Teacher training programs leave the majority of teachers unprepared to work with ELs (Reeves, 2006). It is easily understood why

teachers are not sufficiently prepared, when only 20% of university preparation programs require at least one course focused on ELs, and less than a third of programs require field experiences with ELs (U.S. Government Accountability Office, 2009). If teachers graduate from teacher education programs unprepared to instruct ELs, further professional development will be necessary.

Professional development "refers to processes and practices that improve the job-related knowledge, skills, and attitudes of school employees" (Wilde, 2010, p. 2). However, although teachers feel that they lack adequate training to work with ELs, one study found that nearly half of them are uninterested in receiving this training (Reeves, 2006). The challenge for schools and districts includes not only providing effective professional development for teachers of ELs, but also motivating teachers to participate in the professional development and then to utilize what they have learned.

Professional development for teachers of ELs in study school district. The study school district has nearly 1,000 teachers who have their ESL endorsements (W. Menlove, personal communication, February 6, 2012). Although a significant number, this does not yet meet the previously discussed State of Utah Administrative Code requirement for every EL to receive English language instruction from a certified, ESL-endorsed teacher. Working in conjunction with the U.S. Office for Civil Rights, the study district has developed an Alternative Language Services (ALS) plan, which includes the goals and timelines for providing this professional development to educators of ELs. The ALS plan describes how the study district is either in compliance with all OCR requirements or will come into compliance.

ESL endorsement program. The ALS plan also includes the goals for teacher participation in the ESL endorsement program, outlines how the program is administered in the

study district, and describes the incentives offered teachers for participation in an endorsement program. The program seeks to improve the education of EL students through teacher professional development, and while it provides specific instruction in working with culturally and linguistically diverse students, it encourages improved pedagogy inclusive of all students. The district seeks to endorse approximately 60 teachers each year. Working in conjunction with Brigham Young University's Teaching English Language Learners (TELL) program, a distance education model, a series of seven university courses is provided to teachers over the course of two years under the direction of local facilitators at district sites. To encourage teacher participation, all registration and materials are paid for by the district, a $500 stipend is given upon completion of the endorsement, and credit earned as a part of the program may be applied towards lane change, a district-approved Master's Equivalency, or a university master's program ([Study] School District, 2010).

    Monies spent on professional development. Extensive financial resources are expended each year in efforts to increase teachers' qualifications and instructional abilities. In 2004-05, the federal government spent approximately $1.5 billion on professional development for educators (Desimone, 2009). Professional development for teachers of ELs consumes a part of these monies. In the study school district, with an operating budget of greater than $238 million each year, approximately $60,000 is spent annually in providing courses, material, and stipends for teachers enrolled in the ESL endorsement programs (W. Menlove, personal communication, February 29, 2012). It is vital that districts attend to the efficiency of spending their professional development dollars; however, it is no less important to attend to the efficacy of those dollars spent. If teacher practice fails to change, the monies invested by federal and state governments and local school districts are effectually wasted. When those resources are spent in

preparing teachers to more effectively instruct ELs, and teacher behaviors remain unchanged, not only are financial resources squandered but second language students are not given proper support in their academic progress. Additionally, schools and districts may have compliance issues with the Office of Civil Rights, and may not make AYP or other legislated progress benchmarks.

Characteristics of professional development for teachers of ELs. Effective professional development has identifiable features, including such things as appropriate content focus, active and engaging learning, coherence with teachers' previous knowledge and skills, sufficient duration, collective participation, practice and follow-up, measuring increases in teacher knowledge, and measuring increases in student achievement (Desimone, 2009; Echevarria et al., 2011; Wilde, 2010). In addition, for teachers of ELs, it is recommended that professional development include a commitment to long-term, schoolwide change and a strong, ongoing university/school partnership (Reeves, 2006). Certainly, in order to impact student achievement, teacher learning necessitates implementation of new practices in the classroom (DuFour & Eaker, 1998).

Although second language acquisition is a relatively new discipline of study, considerable research in the field has been published in the last few decades by Banks, Cummins, Krashen, Darling-Hammond and others. Significant disagreement among EL researchers about best program models and practices still exists (Potemski, 2009). Goldenberg (2008) asserts that while the diversity amongst ELs makes it impossible to employ a single best method, we can utilize the research to form guidelines for best practice for language minority students. University endorsement courses help teachers to develop an understanding of the

major theories and their practical applications, and guide them to develop the skills to successfully instruct ELs.

The SIOP Model of professional development for EL teachers. A number of theories have been synthesized and published in various books and journals to assist schools in successful implementation. One of the most widely used is *Making Content Comprehensible for English Learners: The SIOP Model* (Echevarria et al., 2007). Multiple universities have adopted the Sheltered Instruction Observation Protocol (SIOP) model for use in their ESL endorsement courses as a means for assisting teachers in the planning of their instruction and in the evaluation of their practice. The study district, in an effort to comply with OCR requirements for evaluation of ESL-endorsed teachers, has adopted the SIOP both as an instructional tool for its teachers and as an evaluation tool to be used by all administrators.

The SIOP model includes eight components of lesson preparation, presentation, and assessment that help teachers to adapt and modify the grade-level content to make it accessible to ELs (Honigsfeld & Cohan, 2008). Teachers who have received training in SIOP have been found to experience a change in their knowledge base for instruction of ELs, demonstrate effective sheltered instruction teaching skills, and show a commitment to working with ELs (Honigsfeld & Cohan, 2008). When implemented consistently and with fidelity, SIOP is shown to have a positive impact on student outcomes (Echevarria et al., 2011). Collaboration amongst a support network of teachers and other school personnel who serve as coaches is essential for this to occur. While schools and districts may strive to establish formal means for this collaboration, much effective networking is done in an informal manner. Echevarria, Vogt, and Short (2007), in *Making Content Comprehensible for English Learners: The SIOP Model,* encourage the use of

both formal and informal coaching strategies to encourage reflection, feedback, and fidelity of implementation.

SIOP in the study school district. Teachers in the study school district are encouraged to participate in the ESL endorsement program, which includes SIOP instruction. All classes are taught on site in the study district schools in order to facilitate ease of participation. The cost of registration and all materials are covered by the district, and a modest stipend is offered upon completion of the endorsement ([Study] School District, 2010). However, upon completion of the endorsement, nothing further is formally done at the district level to assist teachers in implementing those things they have learned and to support them in further professional development related to ELs.

The Need for Organizational Change and Professional Networks of Support

The professional development courses taken by teachers pursuing ESL endorsements are intended to help them respond appropriately to the changing demographics of the student population and to the needs of the students and the communities in which those students live and work. Many areas of the nation have traditionally had a fairly homogeneous environment, and this heterogeneity in population has increased the complexity of the responses needed to an ever-evolving social and demographic environment. The structure of schooling, in an organizational sense, has been a part of this changing dynamic.

The need for organizations to respond to change is well researched in the realm of organizational theory. In this discipline, Scott (2003) explains that the technology or work of an organization includes "the skills and knowledge of workers" and even "the characteristics of the objects on which the work is performed" (p. 231). In education, the schooling of students is the work, and the increasingly diverse characteristics of the students served by the schools have

demanded an increasingly diverse set of skills and competencies, or technology of the profession, in educators.

One way in which organizations must change in order to successfully meet the demands of changing skills and competencies is in their communication and interaction patterns. When tasks are routine, little interaction between organizational members may be necessary, but when new technology is introduced, the need for communication becomes critical (Papa, 1990). Papa continues, "Learning how to use new technology is not a passive process but an active one in which employees exchange information so they can adapt to new ways of performing work" (p. 346). Galbraith (1977) suggests that the greater the complexity of the work and the need to increase the organization's capacity to process information, the greater will be the structural complexity of the organization in order to accomplish it, leading to greater diversification in the organization. He contends that this includes the development of vertical information systems and lateral relations. Scott (2003) supports Galbraith's assertions, arguing that to successfully deal with the increasing demands of technologies on structures, and to process the greater amounts of information, organizations must make structural modifications.

Because education is a very complex work, and becoming increasingly more so as the needs of students continue to diversify, the structural complexity of the governing entities at all levels has grown, with various hierarchal positions being created in recent years. As various governmental departments, states, districts, schools, and individual personnel must coordinate with and report to one another, there are heavy demands on communication and coordination with the structure at and between the various levels (Owens, 1998). As Bolman and Deal explain, "As complexity grows, organizations need more sophisticated—and more costly— coordination strategies. Rules, policies, and commands have to be augmented by lateral

strategies" (2008, p. 73). These exchanges typically take place within the formal and informal networks of government and schooling organizations as well as those of individual professional educators.

Network composition. A network is defined as "a set of nodes and the set of ties representing some relationship, or lack of relationship, between the nodes" (Brass et al., 2004). Nodes refer to the actors within the network boundary and can represent, for example, organizations or individuals. In the study school district, the educational network relevant to addressing current EL challenges includes actors such as ESL endorsed teachers and other educational professionals serving ELs in this district. Network research focuses on the relations between these nodes (Brass et al., 2004).

This relationship between two individuals in a network is referred to as a dyadic tie, and the strength of a tie is comprised of the amount of time, the emotional intensity, the mutual confiding, and the reciprocal services characterized by the tie (Granovetter, 1973). The ideas or goods that pass between nodes as they interact are known as flows (Borgatti & Halgin, 2011). Thus, the dyadic ties or relationships between individuals in the network create bridges or conduits through which various types of network content can flow. Network theory identifies and places importance on the structure created by the set of ties in the network, as the outcomes for and future characteristics of a network actor can be dependent upon its position in the larger network structure (Borgatti, Mehra, Brass, & Giuseppe, 2009).

Network research provides considerable insight into the types of relations, exchanges, and flows between individuals, and their impact upon organizations. For example, relationships with others affect performance, particularly when those relationships provide individuals with access to requisite information and expertise (Brass et al., 2004). When more proficient

members of a group are highly central in the group's communication and workflows network, the group will typically perform better (Kane & Borgatti, 2011). Papa (1990) found that, following a technological change in an organization, performance was impacted by the activity, size, diversity, and integrativeness of the employee communication network. Further, relationships among workers in diverse organizational departments may provide these individuals with deepened perspectives on how their jobs affect others in the organization (Kilduff & Brass, 2010). The success of ESL-endorsed teachers in implementing the policies and pedagogy learned through their professional development will be significantly impacted by the individual teacher's placement in and access to the network of support.

The typology of network relations. Networks may be classified by the types of nodes and/or content flows within them (Borgatti, 2005; Borgatti et al., 2013). The types of nodes may include a great variety of entities, from office employees, to animals, to companies, to governments, and so forth (Borgatti et al., 2013). The nodes in an educational network might include teachers, administrators, paraprofessionals, and others, and the network typology can be defined by the selection of nodes that are included or excluded in the network.

The roles of these various individuals, of course, influence the types of ties and the content that flows between them. Borgatti, et al. (2009) describe four basic types of ties, including similarities, social relations, interactions, and flows. Borgatti et al. (2013) further explain these types of ties. Ties described as similarities consider such things as co-membership in groups, physical distances and similarity in attributes. Social relations might include friendships or affective relations. Interactions of ideas, information, or goods might be classified as flows. In a school setting, it is presumed that any and all of these varieties of ties might exist. In the professional networks of support for ESL-endorsed teachers in the study district, the

content flows embedded within the social relations of co-members of the network are important to consider.

Relational embeddedness of network ties. There are many ways to consider the various exchanges of any given network. The dyadic ties between the same set of nodes may be represented as multiple network structures, based upon the different content flows facilitated by each network structure (Hite, Reynolds, & Hite, 2010). These content flows are embedded in and affected by the interpersonal relationships of the nodes in the network (Hite et al., 2010; Kilduff & Brass, 2010). Hite et al.(2010) assert that the extent of relational embeddedness is a critical type of network content.

The relational embeddedness of a tie has significant implications for the content flows between the nodes. The social relations within which a job is embedded serve as the lens through which the job is viewed, and work-related decisions and outcomes are influenced by these relations (Granovetter, 1985; Kilduff & Brass, 2010). Relational embeddedness impacts the opportunities for members of a network to identify, access, and utilize various content flows (Hite, 2005). The relational embeddedness of the members of the professional networks of ESL-endorsed teachers will therefore significantly impact the access that each individual has to information, resources, and support.

The role of informal networks. Not only the formal, but also the informal networks of an organization play a role in the performance of an organization and individuals within an organization. The informal social structure of an organization is comprised of network flows such as communication, advice, and friendship (Kilduff & Brass, 2010). Individual performance is affected by what flows across these relationships with others (Brass et al., 2004). The strength of a tie between the actors in a network does not have to be strong to have significant impact.

Indeed, Granovetter (1973) asserts that weak ties often provide information not found elsewhere in the network (e.g., lack redundancy) and therefore may serve as a bridge between an individual and other larger networks, exchanging flows of new information that may have a significant impact upon performance.

The structure and nature of teachers' professional support networks can have significant impact upon the success, or lack thereof, in the implementation of instructional practices they learn. McLaughlin (1991) asserts that "the 'embedded structure' of greatest import to teachers might have nothing or little to do with policy–it might have to do with professional networks, with school departments or other school-level associations, or with colleagues however organized" (pp. 151-152).

When the structure of the communication network supports the information-processing requirements of a task, performance is better (Brass et al., 2004). Engaging the natural professional support networks of teachers into reforms or policies can support more sustained change efforts and enhance classroom practices (McLaughlin, 1991). The plentiful research showing the impact that participation in a professional support network has upon the job performance of members of the network, particularly those learning a new technology, clearly suggests the potential value of and the need for ESL endorsed teachers to actively participation in their professional networks (Kane & Borgatti, 2011; Kilduff & Brass, 2010; Odden, 1991; Papa, 1990).

Professional support networks for teachers of ELs in study school district. In the study school district, those with responsibilities for ESL services include district-level and school-level personnel. The superintendent delegates oversight of ESL policy, programs, funding, and training to the federal programs director, who in turn delegates direct supervision of

all ESL-related activities to Wade Menlove. Mr. Menlove coordinates district and school ESL activities, including direct communication with building administrators, hiring and training of ESL technicians, administration of ESL endorsement programs, directing summer migrant education programs, and facilitating communication and compliance with state and federal level governmental agencies. Building principals provide direct supervision and instruction to their faculty and staff, including teachers, ESL technicians, and secretaries.

Although there are those tasked with specific responsibilities, a formal network of support in the study school district is undefined. And while some ESL-endorsed teachers may contact those with specific responsibilities for ESL services, the names and positions of those contacted, for what purposes, and with what frequency is unknown. Additionally, it is supposed that many ESL-endorsed teachers contact other teachers, paraprofessionals, other individuals, and potentially even family and community members, as they seek support. This study will identify the members, both those with formal responsibilities for ESL services and those without those responsibilities, and the structure of the greater professional support network for ESL-endorsed teachers.

If the study school district is to improve instruction in its schools and maximize the outcomes of monies spent on professional development for teachers of ELs, it must attend to the professional networks that exist to support ESL-endorsed teachers. This study uses network theory and analysis to examine and describe the structure and content of the professional support network for ESL-endorsed teachers in the district. An understanding of the types of support most requested by ESL-endorsed teachers enables the district to ensure that those supports are in place. Identifying the members in the network enables the district to provide the key actors access to the most accurate and updated information regarding ESL policies and practices.

Understanding the structure of the network can enable the district to bridge any holes where needed support is currently unavailable. All of this can serve to better support and strengthen the competencies of ESL-endorsed teachers to provide the quality of instruction requisite to improving outcomes for ELs, leading to greater success for this at-risk population.

APPENDIX B: METHODS AND PROCEDURES

A qualitative case-study method was used to learn about the nature and function of the professional support network of the ESL-endorsed teachers in the study school district. "Networks lend themselves well to a case-oriented approach . . . as well as showing complex interrelationship between variables" (Miles et al., 2014, p. 111). Using social network methods, analysis, and theory, this study sought to identify the members of the network and explore the types and frequency of the flows and exchanges between those members and the relational embeddedness of their dyadic ties. The study district in Utah was selected as the case due to its accessibility to the researcher, its significant population of ELs, and the high number and proportion of ESL endorsed teachers employed by the district. The district is also consistently seeking to improve its instructional practices for all students, and as such was willing to participate in the research and was interested in the resulting analysis of the data collected.

This study examined the nature and structure of the professional support network for ESL-endorsed teachers within the boundary of the study district.   The district has personnel who hold the responsibility of ensuring that the educational services provided to ELs maintain compliance with the law, district policies, and best educational practices. These personnel include the federal programs director, alternative language services coordinator, and ESL technicians at each school. While it might be assumed that the members of this group are contacted by ESL-endorsed teachers needing support, this study sought to identify who in the district and community are actually contacted, by whom, and for what purposes. It identified the presently unknown members of the network and the types of support they provide ESL-endorsed teachers serving ELs in their local schools.

Network Sampling

      The configuration and complete membership of the professional support network was prior to the study unknown. The position of each teacher (actor) in this network structure, as well as the social relations among the actors and those from whom they seek support (alters), and the types of flows were all central to understanding nature and structure of this network (Borgatti et al., 2009). Thus, the professional support network consists of the direct egocentric networks (the persons directly contacted by an individual) of the census of ESL teachers in the study school district. These teachers identified those from whom they receive professional support for ELs and each of the people they identified were also included in the sample of network actors. Thus, the actors in this network sample included district personnel, non-ESL-endorsed teachers, and even community members the teachers identified as providing professional support. Role labels for these individuals included building principals, facilitators, staff developers, instructional coaches, certified district-level personnel, classified district-level personnel, non-ESL-endorsed teachers, counselors, psychologists, secretaries, paraprofessionals, and any others needed to describe those identified by the ESL-endorsed teachers.

      Initial ESL-endorsed teacher census. The target population of this study included the ESL-endorsed teachers with teaching assignments in the 27 elementary schools of the study school district. Due to the differing demographics of the elementary schools within the district, and in order to study teachers with actual experience working with ESL students, a delimited census of teachers who meet the criteria was taken. These criteria limited participation to the study district's ESL endorsed teachers currently assigned to elementary schools with a minimum of 5% EL population, who have had a minimum of one EL in any of their classes within the past three years. All of these ESL-endorsed teachers (actors) were asked to participate in the survey,

in which they identified the ESL-endorsed teachers and other individuals (alters) they utilize as resources in helping them to serve the ELs.

While over 1,500 certified personnel in the study district have received their ESL endorsements, many of those are administrators, speech/language pathologists, psychologists/counselors, and secondary classroom teachers, rather than the elementary teachers upon whom this study focuses. Due to the high degree of turnover in the teaching profession and the criteria for participation, the number for this study was even further reduced to an approximate population of 200. Although a delimited census of all ESL-endorsed teachers with teaching assignments in elementary schools with a minimum of 5% EL population who have had at least one EL in their classes during the previous three years was intended, some teachers declined to participate. A minimum response rate of 80% of this population of approximately 200 teachers was desired for the purposes of this study. Kosstinets (2006) asserts that although non-response rates may interact with other types of sampling issues, researchers working with undirected data may accept a response rate of as low as 70%. Because the ties in this study included some directed ties, an 80% response rate is supportable. Costenbader and Valente (2003) agree that a higher than 80% response rate is generally accepted as sufficient to minimize the negative effects missing data may have upon the resulting network structure. These purposeful inclusion delimitations helped to reduce coverage error and enabled the researcher to identify the structure of the networks of support that exist among teachers who are active members of the networks.

Snowball sampling. After the initial survey distribution to the actors, the responses were analyzed to determine to whom the respondents go for support (alters). A one-step out snowball sample was then taken of all the alters identified by the respondents. The alters were each

contacted personally and invited to participate in the study. Each was then administered the survey.

As with the initial ESL-endorsed teacher delimited census, a minimum response rate of 80% of the one-step out snowball sample was desired. The approximate size of this population was prior to the study unknown. Whereas each ESL-endorsed teacher in the initial delimited census was asked to name up to five individuals whom they contact for various kinds of ESL-related support, this was potentially a very large group. However, it was anticipated that a number of those named in the one-step snowball will have been included in the initial delimited census of qualifying teachers (actors). Additionally, a certain amount of overlap was expected among those named in the one-step snowball (non-actor alters). Consequently, the size of the snowball sample was entirely determined by the number of unique alters identified.

Network Data Collection

The study district's research project application was submitted to the Coordinator of Research and approved by the Curriculum Staff Committee. Permission to access the databases and to use the district and its personnel as the context and content of the study was granted by this committee. The superintendent determined the key district office personnel to assist in coordinating communications and identified the process for accessing the databases and information of the various departments. The director of federal programs and alternative language services coordinator were both involved in monitoring the data collection process and kept informed of the progress and eventual findings of the study. A Brigham Young University Institutional Review Board (IRB) application was submitted and approved prior to data collection. Survey respondents, including the alters they identified, were asked to participate

voluntarily and without compensation. It was anticipated that potential risk to participants was minimal, and they would suffer no negative effects.

The ESL-endorsed elementary school teachers were identified from the databases of the human resources department of the study district. Minimal attribute data, including school and specific teaching assignment, were also gathered from these databases, and cross-referenced with attribute data collected in the survey in order to verify participation of identified ESL-endorsed teachers. Data regarding school demographics, including EL populations, was gathered from other district databases and cross-referenced with the teacher data with the assistance of district technical services programmers and analysts in order to verify desired sampling.

Prior to the start of data collection, the researcher made a personal contact with each intended respondent via email. The goal of this contact was to inform the participants about the study, invite questions, address concerns, and secure an email agreement for participation. The survey and informed consent (see Appendix D) was then given online via email to the qualified census of all elementary school ESL-endorsed teachers who have had an ESL student in their classes in the past three years, teaching in schools with a minimum 5% EL population. The survey was administered online, in order to permit respondents to complete it at a time conducive to their schedules.

Because a minimum response threshold of 80% was desired for the purposes of this study, it was anticipated that follow-up contact with intended participants would be necessary. Three days after the initial distribution of the survey, a second email contact was made. This second contact was for purposes of either thanking each individual for participation or reminding the individual about the survey and encouraging participation. If, after another several days, the minimum response threshold was still not reached, a phone call was made or a letter from the

researcher was sent via intra-district media collection (IMC) mail, again requesting participation and encouraging contact to resolve any potential concerns. The decision to make a phone call or send a letter was based upon participants' availability and the district calendar, which impacted access to IMC and teacher availability.

The information collected in the survey included data on the actor demographics, nature of the network, network relations, nature of the ties, and nature of the content flows. For each of these constructs, questions were either posed in the survey to elicit the data or measures were determined through analysis of the data. The summary of Data Collection and Analyses for Research Questions 1 and 2 (see Appendix C, Tables C.1 and C.2) provides an overview of the data collected, the sources of the data, and the specific analyses that were completed.

Demographics. In addition to the attribute data the researcher received from the district databases, the survey questions also elicited responses from the respondents regarding their personal demographic data. The purpose of this was two-fold. First, it helped to establish the accuracy of the data in the district databases. Secondly, the intent was that by beginning the survey with these relatively easy and innocuous questions, survey respondents would be put at ease.

Demographic data collected included the actors' roles, sites of employment, years of experience, receipt of ESL endorsement, and gender. In addition to questions regarding their own demographics, actors were asked to provide some information regarding the alters they named so that they could be identified and contacted for the one-step out snowball. Respondents were also asked attribute questions regarding the degree of support they feel they need as well as how qualified they feel to offer support.

Network structure. No data was collected explicitly about the network structure. Prior to the study, the structure of the network was unknown. District databases contained no direct data to describe the network structure, and the survey had no questions designed to gather direct data on the network structure.

Rather than collecting data that described the nature of the network, the data collected about demographics, the core relations, the nature of ties, and the nature of content flows was analyzed. This analysis of this data permitted the researcher to create both statistical and graphical representations of the network structure.

Network core relation. To identify the members of the network, the researcher administered the online Qualtrics survey. In the survey, the ESL-endorsed teachers were asked to list the first and last names of up to five people with whom they communicate regarding English learners and ESL issues. The question states that these are people to whom the respondents go when they wish to discuss information, concerns, instructional strategies, issues, and questions regarding ELs. In naming an individual, the respondent established the existence of a tie. Those named in response to this question were those with whom there is a core network relation. These alters were then included in the snowball sample.

The survey was then administered to the non-redundant alters in the one-step snowball sample. Respondents to this one-step sample were also asked to list the first and last names of up to five people with whom they communicate regarding English learners and ESL issues. Those named by the respondents included some who had previously taken the survey and others who had not. Their answers established the existence of further ties and core network relations.

Nature of ties. In addition to questions regarding the structure of the network, the survey elicited information as to the nature of the dyadic ties. The survey included items from the

Typology of Relational Embeddedness Network Data Survey instrument (Hite et al., 2011).

These items elicited responses to help enable the researcher to describe the network relationships

in terms of relational embeddedness. The typology explains the multiplexity of ties and provides

for the combining of multiple continua of tie types to define relationally embedded ties and to

operationalize them (Hite et al., 2011). Working with colleagues, Hite further piloted and

refined the instrument and validated it, as seen in Table 10 (Hite et al., 2011).

The survey for this study was written to include TRENDS items due to their purposeful

design, which facilitates the collection of data useful to construct a model of a given network,

including the structural relationships between the actors and the alters, the relational

embeddedness between network members, and the nature of the content flows that they share

with one another.

Network flows. The online survey administered also included questions to elicit

information as to the specific types of support given. For example, after the following prompt,

the responder was given a sliding scale on which to indicate their response. "On a scale of 1-5, 1

being low and 5 being high, please indicate the degree to which you contact each person for

support with ESL policies and procedures." This question was included in the survey for each of

the network flows–ESL policies and procedures, ESL instructional strategies, emotional/moral

support, and accessing EL data and information.

The survey also included additional items intended to help the researcher better

understand the nature of the flows. For example, respondents were asked to rank order their

needs regarding English language learners. In order to identify possible flows unanticipated by

the researcher, an open-ended question was given with the sentence stem, "The type of support I

Table 10

A Comparison of Hite's (2003) Typology and the Revised Model of Relational Embeddedness
(Hite et al., 2011)

Component	Hite's (2003) Theoretical Construct Hierarchy		Revised Theoretical Model based on TRENDS Data	
	Attributes	Relevant Elements	Attributes	Relevant Elements
PERSONAL RELATION-SHIP: The extent to which there is a non-work related relationship between two people (Hite, 2003).	**PERSONAL KNOWLEDGE**	• Identifies With • Knows Personally • Caring	**PERSONAL KNOWLEDGE**	• Knows personally
	AFFECT	• Respect • Personal Loyalty	**AFFECT**	• Friendship
	SOCIALITY	• Socialize • Know Tie's Life & Family	**SOCIALITY**	• Talk about Tie's Life & Family
			VALUE OF PERSONAL RELATIONSHIP	• Value of Personal Relationship
DYADIC WORK-RELATED INTER-ACTION: The range, scope and comprehensive-ness of work interaction between dyadic partners (Hite, 2003).	**EXTENT**	• Frequency • Amount Intensity • Reciprocity • Interdependence • Multiplexity • Duration	**EXTENT**	• Frequency • Duration
	EFFORT	• Working for Partner • Education • Responsiveness • Helpful • Problem Solving	**EFFORT**	• Problem Solving
			EDUCATION	• Learning
	EASE	• Proximity • Technological Compatibility • Convenience • Goal Congruence • Communication Quality • Familiarity • Knowledge of Business Needs	**EASE**	• Goal Congruence • Communication Quality
	QUALITY	• Working Well Together • Satisfaction • Loyalty to Interaction	**VALUE OF DYADIC INTERATION**	• Works Well Together • Value of Interaction
DYADIC SOCIAL CAPITAL:* The extent to which social capital is available in the relationship, representing both the dyadic level of social capital (Hite, 2003).	**OBLIGATIONS**	• Asymmetry • Expectations • Norms	**RECIPROCITY**	• Expectations of Reciprocity • Value of Reciprocity
	RESOURCE ACCESSIBILITY	• Ability to Access Resources	**RESOURCE ACCESSIBILITY**	• Potential for Resource Accessibility
	BROKERING	• Introductions to Third Party	**THIRD PARTY CONNECTIONS**	• Potential for Brokering to Third Parties
	STRUCTURAL EMBEDDEDNESS	• Connectedness of Dyad's Mutual Ties		• *Relationally Embedded Third Party Ties***

need most in relation to my work with ELLs is . . ." These items helped to gather further information about the network content flows within these support relationships.

Data Management

Data collected from the study district was stored on the researcher's computer. Data collected from the study district's databases for purposes of identifying the sample were not sensitive in nature. The majority of this data is available to the public on district internet web sites, and the remainder is available upon request. It was requested from the district databases due to ease of collection and organization. Because most of the data was given to the researcher in the form of Excel spreadsheet files, they were stored on the researcher's computer in that form. This also enabled data sorting and cross-referencing to verify school and teacher data for the sample.

Survey data collected was automatically stored in the HIPAA-compliant, Qualtrics-secure database until it was deleted by the primary investigator. The Qualtrics data was exported to Excel and stored in multiple spreadsheets to facilitate the organization, analysis, and graphical representations of the results. In Excel, the data was checked for consistency in the areas of demographics, TRENDS, fixed response survey items, and open-ended survey response items. The data was then converted into the various formats required for analysis.

The demographics data was prepared for the analyses that took place in various software programs. Using Excel, the researcher created an actor-by-demographics table. The demographic data was imported as a data table for use as actor attributes in various analyses. Additionally, the researcher imported the data table as actor attribute data into UCINet for statistical analysis as well as for graphical analysis in NetDraw

As with the other data, the TRENDS data was exported from Qualtrics. A conversion program designed specifically for export of TRENDS named-list data was used to create a comma-separated values (CSV) file, which was opened and manipulated in Excel. The conversion program creates a tie list table, the columns of which were labeled with the associated TRENDS item names. For each tie, a total was calculated for each of the three social components of TRENDS – personal relationship, dyadic interaction, and social capital. The combination of the totals in these three areas is used by the conversion program to determine the type of relational embeddedness – not embedded, competency, personal, hollow, functional, isolated, latent, or full. The conversion program also creates a valued matrix with each tie's type of relational embeddedness. This matrix was imported for use in UCINet.

The data from the fixed-response items included both actor-level and dyadic tie-level data. The actor-level data was imported into an Excel worksheet and the researcher created an actor-by-variable table titled "Fixed Actor Responses." The dyadic tie-level data generated by the fixed-response items was imported into an Excel worksheet titled "Dyadic Tie Data," and the researcher created matrices for each dyadic response. Columns of each matrix were labeled with their associated fixed-response name.

The open-ended survey responses were extracted and prepared for analysis. Using Excel, the open-ended responses, which were not yet categorical, were coded for emerging categories. In Excel, the data was repeatedly sorted and statistical analyses run with the classifiable actor-by-demographic table data and the relations data to identify patterns within the core network relations (e.g., the types of support needed and the roles of those people who are contacted for support).

Data Analysis

Data analysis of the demographic, TRENDS, fixed-response, and open-ended data identified the structure of the professional support network, the existence of the ties, the nature of the network ties in terms of their relational embeddedness, and the nature and content of the network flows. Tables C1 and C2 in Appendix C, *Summary of Data Collection and Analyses for Research Questions #1 and 2,* provide an overview of the data collected, the sources of the data, and the specific analyses that were completed.

A variety of software programs were used in the data analysis. The data from the online Qualtrics survey were exported to MS Excel software and be prepared for social network analysis using UCINET software (Borgatti et al., 2002). MS Excel was also used for statistical analysis of survey responses. NetDraw was used to create visual graphic analyses.

Nature of the network. To address the first research question, the nature of the network was examined in terms of actors and structure. The actors and structure lay the groundwork for better understanding the function of this professional support network and how it serves ESL-endorsed teachers.

Demographics. Demographic data was analyzed in conjunction with network relation data to identify trends within the network. In the survey, some answers to demographic questions were categorical, others were nominal, and others were continuous interval. The demographic data tables created by the researcher in Excel and MS Word were used as actor attributes for purposes of analysis. The open-ended responses, which were not yet categorical, were coded for emerging categories. Using Excel, data sorts were run with the classifiable actor-by-demographic table data and the relations data to identify patterns within the core network

relations (e.g., the types of support needed and the roles of those people who are contacted for support).

Demographic data were also essential in the analysis of the network structure. The data tables created in Excel were imported as actor attribute data into UCINet. Using the files created by UCINet, the researcher used NetDraw to organize the data into various visual graphic analyses. These graphical representations were redesigned and visually manipulated based upon the inclusion of various demographic attributes. In so doing, patterns of network structure emerged.

Network structure. The network data were imported into UCINet software which facilitated the analysis of the network structure. The network structure was analyzed to determine density, degree of centrality, and core/periphery position for the combined instruction, policy, data, and social/emotional networks. Additionally, analysis included using graphic models created using NetDraw, a network visualization tool within UCINet, to make the nature of the network structure explicit.

The analysis of the network structure was critical in understanding the nature of the network that is accessed by ESL-endorsed teachers to support their instruction of second language learners. It enabled the researcher and the district to identify patterns within the network – including the patterns of those to whom the ESL-endorsed teachers are going for support, their assigned roles in the schools, district, and community, and the patterns of within- and between-site interactions. It made visible the centrality of key actors and how their ties influence the structure of the network.

Function of the network. The tie list table and matrix table generated by the TRENDS conversion program facilitated the analysis for the network core relations. These tables

identified the presence or absence of a tie between each actor and alter. The matrix table generated by the program populates with the TRENDS relational embeddedness type. It was used in this form for analysis of the network core relations.These matrices were imported into UCINET for further analysis. UCINet facilitated the analysis of the tie strength, reciprocity, influence, and frequency, as well as the multiplexity of the ties. To enable visual representation of these analyses, NetDraw was used to prepare them in a variety of graphical forms.

Resource content flows. The nature of the content flows within the network was analyzed to determine the types of support that are exchanged within the network of ESL-endorsed teachers. Analysis included type and directionality of the flows. This analysis was also facilitated using UCINet software to visualize the structure of these content flows.

Given the potential that not all types of network flows may have been predetermined, the researcher categorized types of network flows which emerged as the data were analyzed. The content flows were analyzed in terms of demographic patterns of actors and alters, network structure, and relational embeddedness.

Nature of ties. The data regarding the nature of the dyadic ties between the actors and alters were analyzed using the TRENDS conversion program and the types and degrees of relational embeddedness were presented in a table in Excel. This data was also imported into UCINet and NetDraw to enable graphical display of the relational embeddedness of the network ties. This data was used to help understand the way in which the degree of relational embeddedness impacts the types and frequency of the exchanges between the actors, and to explore for patterns related to the network structure.

The analysis of the nature of the ties included a look at the reciprocity between the actors and alters. It considered the directionality of the flows in those dyadic ties. The researcher

sought to understand which ties are reciprocated, as support flows in a bidirectional manner, and which ties are asymmetrical, with support flowing only one direction. Noting patterns of reciprocity helped to give the researcher a deeper understanding of the nature of the ties within the network of support.

The data analysis was conducted to address the two research questions: (1) What is the nature of the network that is accessed by ESL-endorsed teachers to support their instruction of second language learners; and (2) What is the function of the network? The analysis made visible the structure of the whole and sub-networks, and enabled the researcher to describe the nature of the network in terms of the attributes of its members and the patterns of their relations. Analysis also enabled the researcher to describe the ties between the members of the network in terms of their relational embeddedness and the exchanges between them. Through this analysis and the resulting understanding of the network, administrators will be enabled to increase supports for the network, and thereby enhance the educational practices used to serve English language learners in the study school district.

APPENDIX C: Summary of Data Collection and Analyses for Research Questions 1 and 2

Table C.1

Summary of Data Collection and Analyses for Research Question #1: What is the nature of the professional support network that is accessed by ESL-endorsed teachers in their instruction of English language learners?

Constructs	Variable	Definition/Citation	Indicators (measures) Specific survey item questions	Source	Type of Data	Specific Analyses
Demo-graphics (Actors)	Role	Position of employment in the district	Please indicate your current role in education: (Multiple-choice answer)	(Survey) Actor Demo-graphics (D)	Categorical	Use Excel to run data sorts and statistical analyses with demographic (D) and network relations (N) data

Use UCINet and NetDraw to analyze network data and to create visual graphic analyses |
	Site	Specific school or district location of employment	Please indicate the site where you work. If you share a contract between multiple sites, please indicate your home site, if available from the choices.	(Survey) Actor Demo-graphics (D)	Nominal	
	Years of Experience	Number of years as an educator	Are you a certified educator? If yes, how many years have you been an educator?	(Survey) Actor Demo-graphics (D)	Categorical and nominal	
	ESL Endorse-ment	Current educator license with endorsement for approved ESL university courses (Hite, 2005)	Do you have an ESL endorsement? If yes, how many years have you been an educator since receiving your ESL endorsement?	(Survey) Actor Demo-graphics (D)	Categorical and nominal	
	Gender	Male/Female/ Computer Database	Please indicate your gender.	(Survey) Actor Demo-graphics (D)	Categorical	
	Support Needed from Others	The degree of ESL related support needed by respondent	In relation to your work with ELLs and ESL issues, which of the following best describes how you feel?	(Survey) Actor Demo-graphics (D)	Continuous interval	
	Support Qualified to Offer	The degree of ESL related support respondent feels qualified to provide to others	Which types of support do you feel best qualified to provide to others?	(Survey) Actor Demo-graphics (D)	Continuous interval	
Network Structure (Nature of	Density	A measure of cohesion which expressed the number of tied in the network as a proportion of the	(Not measured through survey questions, but through data analysis)	Network Analysis	Network Data	Density

Constructs	Variable	Definition/Citation	Indicators (measures) Specific survey item questions	Source	Type of Data	Specific Analyses
Network)		number possible (Borgatti et al., 2013)				
	Centralization	The extent to which a single node dominates a network (Borgatti et al., 2013)	(Not measured through survey questions, but through data analysis)	Network Analysis	Network Data	Degree Centralization
	Core/ Periphery	The degree to which a network is comprised of core nodes (connected to each other and other nodes) and periphery nodes (connected only to core nodes) (Borgatti et al., 2013)	(Not measured through survey questions, but through data analysis)	Network Analysis	Network Data	Core/ Periphery Position
Network Core Relation (Ties)	Existence of Tie	A tie exists if there is a relationship or link between two nodes (Borgatti et al., 2013)	Please list the first and last names of up to 5 people with whom you communicate regarding English language learners and ESL issues. These are people to whom you go when you wish to discuss information, concerns, instructional strategies, issues, and questions regarding ELLs.	(Survey) Network Relations (N)	Combined Networks	Tie Strength Influence Frequency

Table C.2

Summary of Data Collection and Analyses for Research Question #2: How does this network function to provide professional support for ESL-endorsed teachers in terms of resource content flows, actor demographics, and dyadic ties?

Constructs	Variable	Definition/Citation	Indicators (measures) Specific survey item questions	Source	Type of Data	Specific Analyses
Nature of Ties: Relational Embedded-ness	Type of RelEmb	Network ties are classified to identify different types or patterns of embeddedness based on interactions of personal relationship, social capital, and dyadic personal economic relationship (Granovetter, 1985)	16 TRENDS Items	(Survey) TRENDS Items	Continuous interval	TRENDS Types
	Degree of RelEmb	Ties differ as to the degree to which the embeddedness demonstrates high levels in one or more of the areas of personal relationship, social capital, and dyadic personal economic relationship (Granovetter, 1985)	16 TRENDS Items	(Survey) TRENDS Items	Continuous interval	TRENDS Degrees
Network Flows (Nature of Flows) (N)	Information: Instructional Strategies	Information regarding pedagogical practices for ELs	On a scale of 1-5, 1 being low and 5 being high, please indicate the likelihood that you would contact each person for support with ESL *instructional strategies.*	(Survey) Network Relations (N)	Instruction Network	Structure of Network Explanation of Flows Demographic Patterns Patterns of Type/Degree of Relational Embeddedness
	Information: Policy/ Procedures	Information regarding state/school/district policies and procedures relating to work with ELs	On a scale of 1-5, 1 being low and 5 being high, please indicate the likelihood that you would contact each person for support with ESL *policies and procedures.*	(Survey) Network Relations (N)	Policy Network	
	Information: Student Data	Information relating to student permanent record, family situation, ESL status, academic achievement, etc.	On a scale of 1-5, 1 being low and 5 being high, please indicate the likelihood that you would contact each person for support with *ELL student data and information.*	(Survey) Network Relations (N)	Data Network	
	Social/ Emotional Support	The feeling of support from others that the respondent is valued, cared for, and encouraged relative to work with ELs	On a scale of 1-5, 1 being low and 5 being high, please indicate the likelihood that you would contact each person for *social and emotional* support related to ESL issues.	(Survey) Network Relations (N)	Social/ Emotional Network	

APPENDIX D: Survey Tool

Informed Consent Form

<u>**Introduction**</u>
This study attempts to collect information about the professional networks of English as a Second Language (ESL) endorsed teachers in [Study] School District, and how members within the network work with, associate with, and support one another.

<u>**Procedures**</u>
You will be asked to provide some information about yourself and your current position and to identify those in the district from whom you seek support in your work with English language learners (ELLs). You will then be asked questions to help the researcher better understand the nature of the professional network within which you work. This questionnaire will be conducted with an online Qualtrics-created survey, and should take approximately 15 minutes or less to complete.

<u>**Risks/Discomforts**</u>
Risks are minimal for involvement in this study, and no negative effects are anticipated.

<u>**Benefits**</u>
There are no direct benefits for participants. However, it is hoped that through your participation, researchers will learn more about the professional networks of ESL-endorsed teachers in [Study] School District. The goal is to know how to better provide ESL-endorsed teachers the needed resources and support. Additionally, to thank you for your participation, after you submit the survey, a CD will be sent to you with a variety of teaching resources (games, lessons, web sites, etc.) that can be used when teaching English language learners.

<u>**Confidentiality**</u>
All questionnaires will be confidential, and no one other than the primary investigator and assistant researchers will have access to them. The data collected will be stored in the HIPAA-compliant, Qualtrics-secure database until it has been deleted by the primary investigator. Individual results will be combined into an aggregate report of the data, providing a holistic view of the networks of the ESL endorsed teachers in [Study] School District. Individual results will not be reported, but rather only in the context of the network as a whole.

<u>**Participation**</u>
Participation in this research study is completely voluntary, although it will be very much appreciated by the researcher and district personnel.

Your completion of this survey implies your consent to participate. To continue, please select the arrow button in the lower-right corner.

<u>**Questions about the Research**</u>
If you have questions regarding this study, you may contact Betsy Ferguson, at 801-370-0767 or betsy.ferguson@nebo.edu. Thank you!

Survey

DEMOGRAPHICS

D1 Please indicate your current role in education:

- ❍ Classroom Teacher
- ❍ Special Education Teacher
- ❍ Counselor/Psychologist
- ❍ Facilitator/Staff Developer
- ❍ Instructional Coach
- ❍ Speech/Language Pathologist
- ❍ Administrator
- ❍ ESL Technician
- ❍ Secretary
- ❍ District-level Certified Employee
- ❍ District-level Classified Employee
- ❍ Parent
- ❍ Community Member
- ❍ Other

D2 Please indicate your gender.

- ❍ Female
- ❍ Male

D3 Please indicate the site where you work. If you share a contract between multiple sites, please indicate your home site, if available from the choices.

Art City	Larsen	Santaquin
Barnett	Mapleton	Sierra Bonita
Brockbank	Mt. Loafer	Spanish Oaks
Brookside	Orchard Hills	Spring Lake
Canyon	Park	Taylor
Cherry Creek	Park View	Westside
East Meadows	Rees	Wilson
Foothills	Riverview	District Office

D4 Are you a certified educator?
- ❍ Yes
- ❍ No

D5 If certified, for how many years have you had your teaching license? If not certified, for how many years have you been employed in the field of education? _____

D6 Do you have an ESL endorsement? If yes, how many years have you been an educator since receiving your ESL endorsement?
- ❍ Yes _____
- ❍ No

D7 If you are a school site employee (not a district-level employee, parent, or community member), for your specific assignment in the school(s), please use the slider bar to show approximately how many total ELLs you have worked with in the past 3 years?

_____ Regular or special education classroom teacher or SLP
_____ ESL technician
_____ Other school-wide assignment

D8 In relation to your work with ELLs and ESL issues, which of the following best describes how you feel?
- ○ I do not need support.
- ○ I have sufficient support.
- ○ I would benefit from greater support.

D9 Which types of support do you feel best qualified to provide to others?

	I do not feel qualified to offer this type of support.	I feel somewhat qualified to offer this type of support.	I feel qualified to offer this type of support.
Policy & Procedure Support	○	○	○
Instructional Strategy Support	○	○	○
Social & Emotional Support	○	○	○
ELL Student Data & Information	○	○	○

NETWORK CORE RELATIONS (TIES)

Name List
Please list the first and last names of up to 5 people with whom you communicate regarding English language learners and ESL issues. These are people to whom you go when you wish to discuss information, concerns, instructional strategies, issues, and questions regarding ELLs. In addition to the names of people, if you consult the internet (perform a search) or online database (SIS/Aspire/NEAT), you may enter "Internet" or "Online Database."

Person 1
Person 2
Person 3
Person 4
Person 5

AD1 Please list the genders of the following people.

	Male	Female	Computer
Person 1	○	○	○
Person 2	○	○	○
Person 3	○	○	○
Person 4	○	○	○
Person 5	○	○	○

AD2 Given the list of people you named, what are their current, primary assignments/roles?

	Classroom Teacher	Special Education	Speech/ Lang.	Couns/ Psych	Facilitator/ Staff	Instruct. Coach	Administra tor	ESL Tech.	Secretary	Computer (Internet or	District Office	District Office	Parent	Communit y Member	Other
Person 1															
Person 2															
Person 3															
Person 4															
Person 5															

AD3 For the individuals named below, please indicate whether they are assigned to your school.

	This person is at my school.	This person is located at a different site.
Person 1	○	○
Person 2	○	○
Person 3	○	○
Person 4	○	○
Person 5	○	○

NEWORK FLOWS (NATURE OF FLOWS)

N1 On a scale of 1-5, 1 being low and 5 being high, please indicate the likelihood that you would contact each of the 5 persons you listed for:
- support with ESL policies and procedures.
- support with ESL instructional strategies.
- social and emotional support related to ESL issues.
- support with ELL student data and information.

N1 On a scale of 1-5, 1 being low and 5 being high, please indicate the likelihood that you would contact each person for
- ESL support with policies and procedures
- ESL support with instructional strategies.
- social and emotional support related ESL issues.
- support with ELL student data and information.

N2 Please indicate how frequently you contact the individuals regarding English language learners and ESL issues.

	I contact this person daily regarding ELLs and/or ESL issues.	I contact this person once or more each week regarding ELLs and/or ESL issues.	I contact this person once or more each month regarding ELLs and/or ESL issues.	I contact this person once or more each year regarding ELLs and/or ESL issues.	I have not contacted this person in the past, but could contact this person in the future regarding ELLs and/or ESL issues.
Person 1	○	○	○	○	○
Person 2	○	○	○	○	○
Person 3	○	○	○	○	○
Person 4	○	○	○	○	○
Person 5	○	○	○	○	○

N3 Please indicate how influential the people listed below have been in your decisions, actions, and strategy usage regarding ELLs and ESL issues.

	Not Influential	Somewhat Influential	Influential	Quite Influential	Very Highly Influential
Person 1	○	○	○	○	○
Person 2	○	○	○	○	○
Person 3	○	○	○	○	○
Person 4	○	○	○	○	○
Person 5	○	○	○	○	○

Specific Instructions:
In the survey questions that follow, please interpret the term "work-related" to refer to your ESL-based interactions.

NATURE OF NETWORK TIES

Relational Embeddedness (Agree/Disagree: 4-point scale)

	Not Descriptive	Somewhat Descriptive	Moderately Descriptive	Very Descriptive
Person 1	○	○	○	○
Person 2	○	○	○	○
Person 3	○	○	○	○
Person 4	○	○	○	○
Person 5	○	○	○	○

Please consider how well the following statements describe your relationships with each your relationship with each individual listed below:

Dyadic Interaction
1. I learn from my interaction with this person.

2. I interact with this person frequently.
3. Maintaining our work-related relationship is important to me.
4. This person and I have similar work-related goals.
5. This person works very well with me.
6. Our interaction is characterized by high-quality communication.
7. I have interacted for a long time with this person for work-related purposes.
8. This person tries to help me with I have a work-related problem.

Personal Relationship
1. We talk about our lives and our families.
2. I know this person very well.
3. This person is a good friend.
4. Maintaining our personal relationship is important to me.

Social Capital
1. I can ask this person to introduce me to someone he or she knows.
2. Our willingness to do favors for each other is an important aspect of our relationship.
3. I can access resources from this person if he or she has something I need.
4. I expect this person will return my favors.
5. We belong to a similar group, association or organization (social or professional).
6. Our connections to the same people represent an important aspect of our relationship.
7. We know many of the same people.
   ELL SUPPORT

ELL SUPPORT

G1 The type of support I need most in relation to my work with ELLs is: (short answer). . .

G2 Please rank order your needs in working with ELLs. Click to drag.
_____ Policy & Procedure Support
_____ Instructional Strategy Support
_____ Moral & Emotional Support
_____ ELL Student Data and Information

G3 And FINALLY, is there anything else you would like to share regarding the support you need and/or receive in your work with ELLs?

End   Thanks so much for participating!

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