

Addressing English Learner Teacher Shortage: Conceptualizing Collaborative Efforts Between K-12 Schools and Higher Education

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Abstract

With the rapid increase of English Learners (ELs) in K-12 schools, school districts are struggling to find ways to meet the needs for EL teachers. One approach to address the shortage is to build teacher capacity by collaborating with higher education institutions where English as a Second Language (ESL) teacher preparation programs are offered. However, such collaborations are expensive to local schools due to the credit hours that those programs require. In this article, comparing the contexts in the State of Michigan and the State of New York, we describe a partnership experience between a university in Michigan and its neighboring K-12 partner school districts. In 2016, the collaboration secured a five-year, 2.53 million, grant to support districts' efforts to address such teacher shortage. Using Richardson's (1994) crystallization method, we identified the unique features of three evolving stages of the school district's capacity-building process. We conceptualized these stages into a two-layered model, based on the partners' discourse patterns, role played, ownership, and information flow. We

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argue that the model can be used by other K-12 higher-education collaborations, particularly in the States like New York and Michigan. Specific recommendations are offered to maximize such collaborative efforts.

Keywords

English learners, K-12 higher education collaboration, capacity building, collaboration experience, professional network

The gap between the number of English Learners (ELs) in K-12 schools and English as a Second Language (ESL) endorsed teachers is widening due to the rapid increase of ELs in the United States. The National Clearinghouse for English Language Acquisition has reported that in the 2018-19 school year, around 10% of all students in K-12 public schools were ELs (OELA, 2021). The U.S. Department of Education has predicted that this trend will increase to 25% of students by 2025; by 2026, one in every four students in U.S. public schools will be EL students (Kanno & Cromley, 2013). This increase in ELs can be seen in many states, such as New York and Michigan. But the slowly changing teacher preparation programs are not operating at the speed needed to systematically meet the teaching and learning needs of these students in K-12 settings throughout the country. This gap leaves school districts seeking collaboration with higher education to alleviate their EL staffing shortages and struggles with professional development (PD) for EL teachers.

State Contexts

New York Context

New York State (NYS) has historically maintained a high percentage of ELs. For instance, in NYS the overall percent of ELs, who are also categorized as Multilingual Language Learners (MLLs), is between 9.1 and 10.4, with an average of 9.7 from 2013-17, with New York City having an even higher percent at 15.3 (Office of Bilingual Education and World Languages, 2021). In this paper, the term English Learners (ELs) refers to MLLs in NYS context. In NYS, ESL certified teachers are on the teacher shortage list (Teach.com, 2020). To meet the needs of ELs, “in 2015, the New York State Department of Education implemented new mandates outlining instruction, assessment, and educational protections for MLLs and their families” (NYSED, 2016). More critically, the U.S. Department of Education Office of Civil Rights (USDOE) and the U.S. Department of Justice Civil Rights Division (USDOJ) issued provisions in the Dear Colleague Letter (Lhamon & Gupta, 2015), which further required that EL services or programs “be educationally sound in theory and effective in practice” (Lhamon & Gupta, 2015, p. 12). With these provisions, New York schools face the challenge of meeting the MLLs’ needs and increasing teaching quality.

Michigan Context

Similar to NYS, in Michigan, K-12 schools have also experienced an increase in their EL population. Michigan schools saw more than a 10% increase each year from 2013 to 2017 (MI School Data, 2018). Some pockets in Michigan, for instance Kent County, experienced a 12.19% increase in 2013-2017 (MI School Data, 2018).

Also similar to NYS, Michigan adopted the *Every Student Succeeds Act* (ESSA) in December, 2015 (Keesler, 2016). Under ESEA Sec. 3113 (b)(6), the state requires that all school districts meet “state-designed long-term goals ..., including measurements of interim progress towards meeting such goals” and “meeting the challenging state academic standards” (Whiston, 2017, p. 75). Further, based on ESEA section 2101(d)(2)(J), it requires schools to be responsible for improving “the skills of teachers, principals, or other school leaders in order to enable them to identify students with specific learning needs, particularly children with disabilities, English learners, ... and provide instruction based on the needs of such students” (Whiston, 2017, p. 61).

Under the same provisions laid out in the Dear Colleague Letter (Lhamon & Gupta, 2015) issued by the USDOE and USDOJ, Michigan school districts adjusted staffing, reallocated resources, and redesigned their PD activities to offer targeted quality service to teachers, staff, and school administration to meet the mandates. Even with such adjustments, Michigan is still facing a challenge in hiring qualified EL teachers (Flanagan, 2015).

NYS and the State of Michigan have similarly high percentages of ELs, EL teacher shortages, and state requirements for the quantity and quality of EL services. This article unpacks a successful collaboration between four K-12 Michigan public schools and a Michigan IHE. The collaboration secured a \$2.5 million grant, which helped meet the project goal to increase the number of qualified K-12 EL teachers to address local districts’ teacher shortages.

In the article, we focus on answering the question, “What made the collaboration fruitful?” We use D’Amour et al.’s (2005) collaboration definition, which involves “collective action oriented toward a common goal, in a spirit of harmony and trust” (p. 116). To answer our question, we carefully identified the patterns of word use, the roles that partners played, the ownership partners assumed, and the flow of information to illustrate how and why the collaboration was successful. As a result, we conceptualized a model that might be useful to other K-12 and IHE collaborations. The purpose of the article is to share with other K-12 schools (especially educators in NYS, who might find this informational) the successful collaborative experience between Michigan K-12 schools and IHEs.

In the next section, we review the associated literature to highlight the need for research on K-12 and IHE collaborations. Then we analyze our collaboration experiences and the process of our model conceptualization. In the final section, we provide suggestions to others who are interested in and are conducting such K-12 and IHE collaboration.

Literature Review

One-Way or Two-Way Communications

Grunig and Grunig (2008) describe one-way communication as a monologue with the purpose of disseminating information. One-way communication does not require any return messages from the receiver, for instance, a person giving directions through a memo. It does not allow the sender to verify whether the receiver understood the message correctly and fully. This article uses one-way communication in reference to conversations showing the pattern of one question and one response between one school district and the IHE faculty. Conversely, two-way communication is a dialogue through which the involved parties exchange information (Grunig & Grunig, 2008). With two-way communication, the information-sending parties both give information to and seek input from the receivers. Such information exchange happens in various styles/channels. For example, school

administrators ask for feedback from the staff and staff share their views with the administrators. In this article, we use two-way communication to refer to conversations generated among project partners and between members of each partner institution. The definitions of one-way and two-way communication highlight the different communication actions in the process and the possible results of these actions. This article demonstrates the significant role that two-way communication plays in collaborations between K-12 schools and IHEs.

K-12 School and Higher Education Collaboration

K-12 school and IHE collaborative efforts have been documented extensively in the literature. This includes literature that examines (a) the types of and goals of the collaborations between K-12 schools and IHEs (see, e.g., McCray et al., 2011); (b) relationship building/responsibilities (see, e.g., Butcher et al., 2011; Gosselin et al., 2003; Parsons et al., 2019); and (c) contextualized support (see, e.g., Hartman, 2018; Parsons et al., 2019). There is also rich literature regarding collaborations on (a) increasing the number of certified teachers to meet the local K-12 school needs through both traditional and alternative routes (see, e.g., Clark-Gareca & Fontana, 2018; McCray et al., 2011; Rosenberg & Sindelar, 2005); and (b) PD activities where K-12 schools invite faculty members from IHEs to provide speeches, workshops, feedback on classroom teaching practices, curriculum updates, and other activities to foster teachers' and school administrators' continued growth (see, e.g., Elton-Chalcraft et al., 2020; Hartman, 2018; Napolitan et al., 2019; Smith et al., 2016).

The literature also documents the features and effectiveness of successful K-12 and IHE collaborations. For instance, McCray et al. (2011) compared and synthesized special education pre-service teacher preparation literature on Professional Development Schools (PDSs) and Alternative Route to Certification (ARC) programs regarding the elements that make K-12 and IHE partnerships successful. They examined the primary goal, time frame, emphasis, PD, and core dimensions of such collaborations. McCray et al. (2011) analyzed the characteristics of successful partnerships and argued that the roles of the university faculty, school-level mentors, and school administrators needed to be redefined in such collaborations. They concluded that the K-12 and IHE collaborations addressed teacher shortage, PD needs, practice improvement, and increased learning outcomes. But they warned that such partnerships needed resources, e.g., funding, and contextual support to sustain the partner relationships. But the literature did not discuss the structural features of such collaborations associated with the informational flow within the structures.

Within this literature, there are fewer articles about K-12 students from diverse backgrounds than there are about the above-mentioned categories, and the literature is overwhelmingly focused on increasing the number of qualified teachers to teach ELs in K-12 settings. Heimbecker et al. (2002) described a collaboration between Northern Arizona University (NAU) and the Kayenta Unified School District (KUSD). Within this partnership, the NAU teacher preparation program arranged their pre-service teachers to take courses on site for three semesters to prepare their students to meet the specific needs of Navajo students. The pre-service teachers were housed in Navajo community apartments organized by the KUSD for cultural immersion. Local KUSD members served as guest lecturers and participated in interviews and committee work. The article described the unique collaboration, yet it did not explain the structure of the partnership or each partner's role.

Clark-Gareca and Fontana (2018) focused on the unique benefits that each collaborative partner gained from the effective collaboration between the SUNY New Paltz's Teaching English to Speakers of

Other Languages (TESOL) program and the Pawling Central School District (PCSD) in 2017-18. Through this collaboration, the PCSD had 11 teachers endorsed to serve ELs' needs in order to meet the new teacher certification requirements in New York. The article described in detail how the TESOL program was designed and modified to offer courses with consideration of the needs of the PCSD in-service teachers, such as offering hybrid cohort courses, on-site course offerings, and flexible scheduling. But Clark-Gareca and Fontana's analyses of the partnership presented a one-way flow of information.

Fiore and Cooper (2019) described a collaboration between a middle school teacher and an assistant professor designed to help middle school refugee girls use the Makerspace movement to access science, technology, and engineering experiences both inside and outside school. Makerspace is technology-integrated inquiry-based learning designed to move students beyond consumption to creation (Fourie & Meyer, 2015). This collaboration provided opportunities for both the pre-service teachers and the middle school students to work with kindergarten and first-grade children. The project supported participating ELs and bridged the school science curriculum and home/community interests. Further, the participants benefited from visiting each other's schools, which provided opportunities for ELs to "visualize how they could fit in on a college campus" (Fiore & Cooper, 2019, p. 32). This is an example of a successful K-12 and IHE collaboration. But the article only provided a snapshot of an individual collaboration, demonstrating the need for a systemic structure to reach more students and teachers. In addition, the project did not report any curricular changes at the IHE level.

Even less literature focused on the importance of superintendent/school leadership and the university engaging in substantive conversations to systematize the effort (Parsons et al., 2019; Raphael et al., 2014). Parsons et al. (2019), using the design-based research (DBR) approach, studied the processes of an ongoing IHE and K-12 partnered literacy PD project that was designed to meet the needs of an urban charter school low-income minority students' needs. Parsons et al. (2019) argue that school leadership plays critical roles in such collaborations since they run schools and monitor the policy implementations, create procedures to foster school culture, allocate school resources and support the school's functioning as a whole. Hargreaves (2013) made the same argument. The study demonstrated the importance of both teachers' and school administrators' participations in such collaborations. More importantly, the study argued that strong leadership involvement at the school sites is needed to have a successful PD effort.

This paper contributes to the literature by emphasizing the importance of the structure of personnel involvement within K-12 and IHE collaborations and unpacking the impact of information flow between and among participants. The paper also wants to draw readers' attention to the critical role that superintendent/school leadership and the university faculty play in systematizing the collaborative effort (Parsons et al., 2019; Raphael et al., 2014). In the following sections, we examine the context, history, and specific collaboration in which we engaged to illuminate that a two-way flow of information is a key factor in ensuring a successful K-12 and IHE collaboration.

Methods

The paper uses a qualitative inquiry, specifically a descriptive method. We use the qualitative method because it is focused on details and on the depth of the representation of the data. Since the purpose of the article is to understand and clarify our collaborative experiences, we use a descriptive method (Sousa, 2014) to achieve this goal. The descriptive method can provide rich and thorough descriptions of the context and process in order to assist readers to "visualize" our process, therefore, to implement

the model. Descriptive method is exploratory, interpretative, and comprehensive (Rennie et al., 2002). Different from an ethnographic study, which relies on observations of participants' interactions "to discover patterns and their meanings" (Tuckman & Harper, 2012, p. 388), our descriptions are focused on the context and conversations at the meetings and the occasions when other written or oral conversations occurred. Focusing on the context differentiated our method from discourse analysis, which targets on the understanding of the social world through analyzing particular ways of talking (Jorgensen & Phillips, 2002). Our conceptualized model was generated from an inductive process (Hill et al., 1997) based on the above explained foundations. In what follows, we provide the overall context for the collaboration, the context of the participating school districts and IHE, and the collaboration history. The detailed descriptions of these contexts have the potential to help our audience imagine, think about, and modify our experience for their own context.

The Context for Collaboration

To address EL teacher shortage and meet the state guidelines for EL instruction in Michigan, some K-12 school districts approached nearby IHEs that offer state-approved ESL endorsement courses about cohort opportunities. Because some school districts cannot afford the IHE courses, they hire EL experts, consultants, or higher education faculty to redesign their professional learning activities for teachers who need the knowledge and skills of teaching ELs. Problematically, no matter how the school districts pursue teacher preparation, the expenses of such activities create new burdens for those that do not have the financial resources to support such innovative actions to address the EL teacher shortage and meet the new policy guidelines.

With a problem-solving approach in mind, several K-12 school district leaders reached out to a Michigan IHE with whom they had a partnership; they had been inviting faculty members to attend their school events and sending their teachers to take courses to renew teaching licenses. The IHE placed pre-service education students in these schools for field hours, capstone projects, and student teaching to learn from real classroom experiences. Several faculty members had also launched research projects in some of the classrooms in these school districts. Thus, the foundation for collaboration had been laid. Eventually, four K-12 school district leaders and one faculty member from the IHE determined it was necessary to apply for a federal grant to produce more ESL endorsed teachers to meet the K-12 school districts' needs and to strengthen the ESL program at the IHE.

The Context of Public-School Districts. The K-12/IHE collaboration was composed of four Michigan urban public school central office leaders, including one superintendent (the second author), one Executive Director of School Leader Team (the third author), two associate superintendents (the fourth and the fifth authors), and the faculty member (the first author). No teachers were directly involved in the grant writing process. All the K-12 school districts are adjacent to each other, with the IHE at the center. The participating schools share some similarities: a high percentage of ELs with a wide variety of non-English languages spoken at ELs' homes; experiencing a rapid increase of ELs in the school districts; struggling to get any substantial or meaningful EL parental involvement; and being challenged by finding qualified ESL teachers. More critically, all the school districts have ELs with either little or no formal schooling in addition to their lack of English language proficiency. As a result, all the school districts struggled with not having enough ESL support to provide effective service to ELs in all content

areas. Tragically, their ELs also lacked needed support in English language acquisition support. In the following, the school districts and the participants were summarized in a table.

Table 1
Participating School District Information (2015-16 Academic Year)

| | K-12 District 1 | K-12 District 2 | K-12 District 3 | K-12 District 4 |
|---------------------------------------|--------------------|--------------------|--------------------------|--------------------------|
| Total student population | 4,300 | 17,000 | 9,000 | 1,958 |
| Total EL population | 975 | 4,375 | 1,900 | 902 |
| Number of different languages spoken | 23 | 61 | 70+ | 10+ |
| Number of staff working with ELs | 10 | 112 | 33 | 12 |
| Collaborator from the school district | Superintendent | Executive Director | Associate Superintendent | Associate Superintendent |

Note: Executive Director refers to the *Executive Director of the School District Leadership Team*

The table illuminates the needs of these school districts for qualified ESL teachers to serve their ELs and to meet the state guidelines. Meanwhile, the school districts are urban schools that experienced limited budgets to pay for their in-service teachers' endorsement courses. As top school district leaders, the grant writing participants wished to seek out financial support from an external grant to help them with solving the problem.

The Context of the IHE College of Education. The IHE College of Education (COE) involved in this project is one of Michigan's prominent teacher preparation programs (TPPs) and is highly ranked among all Michigan TPPs, based on the state Department of Education (DOE) criteria. The college's TPPs, following theory-based practice, have had close partnerships with local private and public schools, providing teacher candidates with extensive field experiences in various school settings and supporting existing local induction programs for newly placed TPP internship teachers and graduates. Students had to have a minimum GPA of 3.0 to be admitted into the program. The program emphasizes meeting the Interstate Teacher Assessment and Support Consortium (InTASC) standards and the Michigan DOE standards, which also emphasize clinical experiences. Beginning in their first course, students are in the field working beside their teacher mentors. The teacher preparation program developed close partnerships with its nearby K-12 schools, particularly, in ESL teacher preparation and professional development.

Historical Context of the Collaboration. The K-12 school districts and the IHE's COE have had a long history of collaboration at various levels, including pre-service teacher field placements in these schools and school in-service teachers taking courses at the IHE. The TPP had revised its courses to reflect the needs of the school districts. For instance, with the student population became more diverse, the program revised its curriculum to introduce the changed student demographics, learning needs, and associated teaching strategies to make learning meaningful to the participants.

In 2012, two school districts started to request specific services from the COE for their teacher PD needs. Being confronted with an EL teacher shortage, the school districts formed cohorts and requested professors from the COE to offer on-site ESL courses to support their teacher participation. The partners met to share their own school district's needs and the program(s) they would like to build. They provided information to synthesize what was needed, integrate the school districts' needs with the TPPs' missions and expectations, and meet Higher Learning Commission regulations and the specific teacher preparation standards for an ESL endorsement by the state DOE.

In December 2015, a National Professional Development grant was announced by the Office of Second Language Acquisition under the U.S. Department of Education. The grant ultimately brought the partners tightly together and provided an opportunity for their relationship to evolve into a true collaboration. Originally, the grant team had nine different school districts. However, three school district leaders never participated in any of the meetings while two showed up once. All five school leaders explained either via email, phone, or at the first meeting that they trusted our work. For the purpose of this study, only the four districts that were actively engaged in all of the meetings throughout the grant proposal development process were included.

Data

Our collaboration involved several data sets, including meeting notes and minutes, the pre-grant survey, conversations collected during meeting breaks, IHE faculty reflections, school reports, emails, and phone call notes. Meeting minutes and the pre-grant survey were the primary data used. The team also met during the grant writing process to brainstorm the design of the grant program. In total, we had six formal meeting notes with meeting minutes from the collaboration team. They formally documented our actions, agendas, and important words from our meetings. At each meeting, the IHE program secretary took notes, producing rich meeting minutes for analysis.

The data also came from one pre-grant oral survey with ten questions reported by the K-12 partners, their ESL teachers, and EL supporting staff. The survey included questions regarding the need for more teachers to be ESL endorsed, their struggles with educating ELs, their understanding of how to teach and support ELs in the school districts, their connections with their ELs' families, their knowledge of their ELs' needs, and effective strategies for teaching ELs. The pre-grant survey provided new information and information that overlapped with the meeting minutes, because some of the survey results were discussed at the meetings. The survey provided valuable information for the team to describe the need and context for the grant in the proposal as well as the opportunity for the analysis of word usages.

The data also included school reports, emails, and phone call notes where schools shared about their EL population, academic achievement, academic gaps, and EL staffing. These data, accompanying the survey report, helped us better understand the context of the school, the content and why certain words were used. More important, from these data we learned senders and receivers of the information. Further, data were also collected on the team's phone calls and emails to ask questions and/or gather additional information to support the grant writing. More importantly, hallway and break conversations about school context, thoughts, and commitment to the grant were also noted and analyzed based on the content and word usage. Outside the collaboration team, documents, phone calls, emails, reports, and any other conversations from school district personnel designated for specific tasks associated with the collaboration were collected and examined for the purpose of this study.

Data Analysis

To identify the structural characteristics of the collaboration development, we used Richardson's (1994) validity metaphor of crystallization to determine the interplay between the data sources to map the themes and ideas in a complex way and, therefore, to uncover the themes and patterns. Following the guidelines of the crystallization metaphor, we conducted preliminary data analysis, unifying codes process, and final coding analysis (Marshall & Rossman, 2006), as well as a last check of the most clustered codes to ensure that the critical development of the collaborative relationship was represented. Critical development refers to changes demonstrated in our collaborative efforts, for instance, the change of use languages.

The initial analysis involved a review and initial coding of the record of data collected (Richardson, 1994) for emergent thematic clusters (*the use of pronouns*, e.g., "I, we, us"; *taking initiative*, e.g., "tell me," "we can ...," "you may want to try ...," *showing authority within school*, e.g., "I will tell my ... to get it to you," etc. After this process, we looked through the codes and collaboratively discussed and agreed on the commonly used code categories. To make the data meaningful and manageable, we identified *the frequently used phrases or sentences* (e.g., shared the information with) and *the actions presented by the words* (e.g., will bring the materials to the meeting). We summarized the phrases or sentences into individual categories and relabeled them with the agreed-upon categories (Saldaña, 2009). We then grouped the relatively low-frequency words and phrases that had similar meanings or connotations to form new categories (e.g., we grouped "shared the information," "told my people," "explain to my building principals," etc., as "information sharing"). From the categories, we identified the patterns of word usage and the clear change of word usages. As a result, we determined that the principal components include "*stage specific words*," "*roles participant played*," "*collaboration ownership*," and "*directions of information flow*."

The stage specific words refers to certain terms used at certain stages as the collaboration evolved. *The roles participants played* refers to the degree to which the participants participated in the discussions and actively contributed to the evolution. The *collaboration ownership* refers to which participants took ownership over the grant writing process. *The directions of information flow* refers to whether the information flows one-way or two ways. These words signaled new progress for us when we analyzed the data. In what follows, specific repeating words represent the evolving stages.

Conceptualization of Our K-12 and IHE Collaboration Evolution

Based on the data analysis, three distinct stages evolved from our collaboration. These stages include (1) the IHE being seen as a panacea, based on how such collaborations have traditionally been viewed; (2) the K-12 school district taking an active role in the partnership; and (3) the K-12 school district taking ownership and forming a two-layered collaborative structure. Stage 3 represented the model that the group established through their experiences and reflections on the collaboration. We want to share our experiences and conceptualize them for those who conduct K-12 and IHE collaborations, and who may benefit from our efforts. We also want to explain how the evolution of the partnership was generated by the K-12 partners and the IHE faculty who were involved in the collaboration. The changes illustrated across the stages further show that any partners in such collaborations can actively contribute to such efforts.

Stage 1: The Institution of Higher Education Being Seen as a Panacea (Grant announcement in December 2015 through our third meeting on Jan. 20, 2016).

At the beginning of our collaboration, the four K-12 partners looked to the IHE to tell them how to address their ESL teacher shortage. The IHE was viewed as a panacea, providing solutions to problems and difficulties, rather than a partner. This pattern is richly documented by literature (e.g., Elton-Chalcraft et al., 2020; Hartman, 2018; Napolitan et al., 2019) when IHE faculty members are invited to provide speeches, workshops, feedback, etc. to contribute to K-12 staff's growth. In our study, the IHE's role as a problem-solver was demonstrated through the words that the K-12 partners used, the roles they played, their ownership over the task, and how they channeled the information flow at and beyond the meetings.

Stage Specific Words. At the initial grant meetings, certain words marked the characteristics of the beginning stage of such collaboration. For instance, the K-12 partners told the university faculty, "Please tell us what we can do to help." "We are in. How can we help?" "You have my words. We will do whatever it takes." (Grant Team, 2015a). These statements or questions were given directly and individually from the K-12 partners to the IHE faculty. These types of questions expressed the expectation that the IHE faculty just give directions, which initiated a one-way information flow from the IHE to the K-12 participants. The meeting centered on IHE faculty, with the school administrators taking notes. The one-way flow of information indicates that the K-12 partners viewed the university as a problem solver and the meeting as an opportunity to seek assistance.

Roles Participants Played. Based on the questions, it was clear that each K-12 leader-partner represented only their own school district. For instance, when the IHE faculty asked the partners about their ELs' demographic, achievement, and staffing information, the K-12 partners either answered right away, mentioned that they made notes, or said they would go back to ask their school building administrators and their EL coordinators. And when asked what they had and what they needed for a "need search," each of the leader-partners reported their own needs for EL teacher professional development, resources, and EL family engagement (Grant Team, 2016a). Throughout the process, they did not share further information with their peers. Nor did they exchange any information with their meeting partners. The information flowed from the K-12 participants to the IHE directly without conferring with any other partners. The participations were individualized, and the thoughts and information were not mingled.

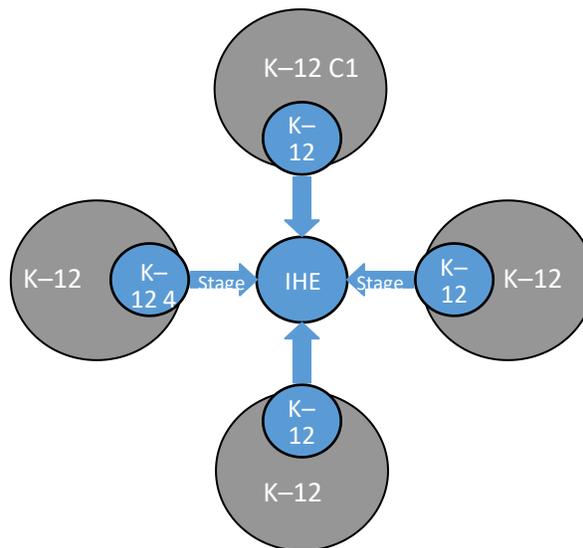
Collaboration Ownership. At this stage, the K-12 partners were so eager to share their situation and needs with the university partner that they did not show interest in listening to other local school partners (Grant Team, 2015a). With this pattern of information flow, and the role each partner played, the K-12 partners did not take any ownership in this collaborative effort. Instead, they focused on having their school problems solved by the university.

Directions of Information Flow. This stage represented a traditional format of collaboration between a local school and a university, where the university plays the role of omniscient, omnipotent authority as described by Clark-Gareca and Fontana (2018), capable of addressing the Michigan school districts' ESL teacher shortage and ensuring the schools meet the state requirements. As illustrated above, the

information flow was one-way—straight from the K-12 school districts to the IHE faculty (Grunig & Grunig, 2008). Figure 1 demonstrates this flow (the local partner school districts are labeled as K-12 1, 2, etc.). At this stage, each school district asked for help from the IHE, which set the IHE at the center (see, e.g., Elton-Chalcraft et al., 2020; Hartman, 2018; Napolitan et al., 2019; Smith et al., 2016). The school districts were located in their larger school community and labeled as K-12 C1, C2, etc. But they were not engaging their communities. They explained their specific school district situation and the need for more EL teachers to meet the state guidelines and to support their ELs' learning. They also articulated their challenges resulting from a lack of financial support.

Figure 1

Stage 1: The Institution of Higher Education Being Seen as a Panacea



Note: K-12 refers to the school district. C is the abbreviation for community. K-12 C means the school community.

Stage 2: The K-12 School District Taking an Active Role in the Partnership (Jan. 20, 2016 through Feb. 17, 2016 meeting)

Stage Specific Words. Compared with the previous stage when the K-12 partners initiated one-way information flow such as “Tell me what I can do?” the school district leaders now took more active roles in the discussions. New language appeared in the discussions and meeting notes. For instance, one of the partners shared with the group, “We had this issue with our ELs, ...,” “We are currently doing ... I would like to know if it makes sense to you” (Grant Team, 2016b). The K-12 partners sought feedback from the IHE faculty. After the faculty answered, the school partner commented on it, saying things like, “Oh, that was a great idea. We can try that.” At this stage, although the K-12 partners openly shared with everyone in the group, their focus was still on taking advice from the IHE faculty as described in literature (Elton-Chalcraft et al., 2020; Hartman, 2018; Napolitan et al., 2019). For instance, after they shared their school district information with the group, they turned to the faculty and asked, “But I want to know, how can we modify it to fit our situation?” (Grant Team, 2016c). The information they shared

provided details to the IHE faculty to understand the EL situations of each school district. It gave the IHE faculty opportunities to think through what the partner schools needed and how to focus these needs to inform the design of the grant project (Grant Team, 2016d).

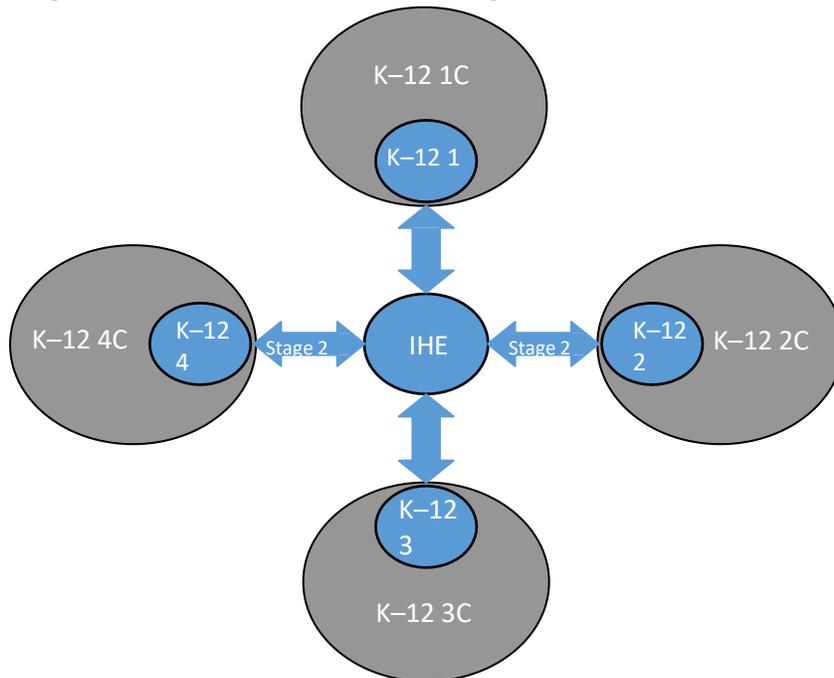
Roles Participants Played. At this stage, the K-12 partners played a more active role than the previous stage. They brought information from their schools and news back to their school administrators and EL staff. This is also the stage where the IHE faculty obtained feedback from the K-12 partners and was able to tailor the university ESL curriculum to meet the needs of the partner schools. For instance, the faculty compared the ESL teacher preparation program with the expectations and information that each partner shared and discussed with the school partners to elaborate on what the schools needed in detail (Grant Team, 2016e).

Collaboration Ownership. However, at this stage, each school leader still mainly focused on their own school districts' needs and made changes for their own ELs. The collaboration ownership belonged to the individual K-12 partners and the IHE faculty, respectively. Based on the conversations, the K-12 partners individually added resources to support their school principals and their EL staff. One school leader said, "Now I have a better understanding of the situation, and I can hire an EL consultant to support our EL staff members" (Grant Team, 2016e). These two-way conversations provided the IHE faculty with information to revise the ESL courses to make them more accessible to full-time teachers. For instance, knowing about the arrival of more African refugees, the faculty modified the curriculum to specifically include EL theories and strategies appropriate to students from a refugee background (Grant Team, 2016e). Later, the faculty also revised some of the program assignments to make the courses more relevant to the school districts' needs. Meanwhile, the faculty was able to make changes in pre-service and in-service teacher field placements (Grant Team, 2017a). Clark-Gareca and Fontana (2018) documented similar course revisions during their collaborative work between the SUNY and the Pawling Central School District.

Directions of Information Flow. At this stage, the information started to go back and forth between each K-12 school leader and the IHE faculty. But not much information was exchange among K-12 leaders. For instance, the K-12 partners reported what they shared with their staff and what their staff shared/suggested to them regarding the design of the proposed grant project (Grant Team, 2016f). One school leader reported, "I brought the plan back and a group of us brainstormed the ups and downs on it. We came up with some suggestions for you to think about" (Grant Team, 2016f). Another leader said, "I took the plan back and asked to share it with EL staff. They told me that it sounds good, but they would like to see more instruction from a refugee background. We have many of these students and our EL staff are struggling" (Grant Team, 2016f). This language indicated that the K-12 partners played an active role and enacted the two-way information flow (Grunig & Grunig, 2008) from the meeting to their school district and from the school district back to the meeting. More importantly, they reported that they started to implement some of the discussed strategies, materials, and solutions in their school district (Grant Team, 2016g). While the IHE still had that omniscient aura with the K-12 partners, the school districts started to understand their power for change as agents in this process. This is where the meaningful two-way collaborative flow of information started to form (see Figure 2).

Figure 2

Stage 2: The K-12 School District Taking an Active Role in the Partnership



Note: K-12 refers to the school district. C is the abbreviation for community. K-12 C refers to the school community.

Stage 3: The K-12 School District Taking Ownership and Forming a Two-Layered Collaborative Structure (Feb. 17, 2016 through grant submission at the end of Feb. 2016, and beyond)

Stage Specific Words. Compared with the previous stages, the K-12 partners shared their own school district's information, thoughts, and plan, and they shared with and took information from other partners. For instance, one leader said, "Your teacher did that? I think I can get our teachers to do that for our ELs as well" (Grant Team, 2016h). The group's integrated approach was represented by their extended dialogues about community engagement in their discussions. For instance, the group discussed their plan to engage EL parents based on their building principals' and EL staff's input (Grant Team, 2016h). At the end of the discussion, one school leader commented, "Our parents will like that." Another leader ensured that their PTO would be engaged in working with the EL parental involvement (Grant Team, 2016i). Based on the dialogues that the K-12 partners conducted, the two-way information flowed through multiple channels between and among the K-12 partners, between the K-12 partners and the IHE faculty, and between and among each K-12 partner and the staff within their district.

Roles Participants Played. At this stage, every partner actively brought in information from their communities and our discussions to their immediate communities. "Participants shared with their building principals and EL staff about the thought of organizing a Community Event once a year into

the grant design. The building principals and EL staff suggested ways doing it” (Grant Team, 2016h). The K-12 partners actively contributed to the collaborative work. This was also the stage where the influence of the core group reached out to their school communities, respectively. They also planned to engage the broader school community, particularly the parents of ELs. For instance, some school districts had organized collaborations between parents and teachers. One K-12 leader reported that his EL staff would like to do home visits to learn about their ELs, and another leader said that her PTO was working with the principal to hold a Newcomer Cultural Event with their ELs’ families (Grant Team, 2016i). The IHE faculty made notes regarding how to use these opportunities in future ESL teacher education. As a side effect, through this stage, K-12 partners developed deeper and closer relationships with one another and within their school communities. More critically, they talked about how some of their EL parents started to be involved in the schools (Grant Team, 2016j).

Collaboration Ownership. At this stage, both the IHE faculty and the K-12 partners demonstrated ownership over the project, the collaboration, and the changes. For instance, “resources are shared among the districts” (Grant Team, 2016i). To help each other, they went beyond the second stage. In Stage 3, they shared their resources and experiences of how they supported their own ELs/families with other school partners directly. One K-12 partner said,

At our newcomer center, we organize a parental engagement event each Fall. At the event, we hire interpreters in various languages and offer food. We also set up some games. When parents come, we let them know about our school and school resources while they are eating. The interpreters translate and explain to them. After, they play games with their kids and school staff. (Grant Team, 2016i)

Another partner said, “Whaa, it was such a great way to engage parents. I will share it with our staff. Probably, we can do something like that or similar” (Grant Team, 2016i). It was also becoming clear that the expertise of ESL teachers spread to other classrooms in their districts, particularly in special education, as the participants commented, “EL strategies are good strategies across the board” (Grant Team, 2016g). In a later meeting after the group received the grant, the group members also proposed plans to make the overall growth of the model more intentional and purposeful to teachers. For instance, one school leader’s proposal to have their ESL teachers observe ESL teaching in other school districts was echoed by the other leaders (Grant Team, 2016i). Building on their collaboration, the team developed a presentation for a conference related to their understanding of EL education and their group work.

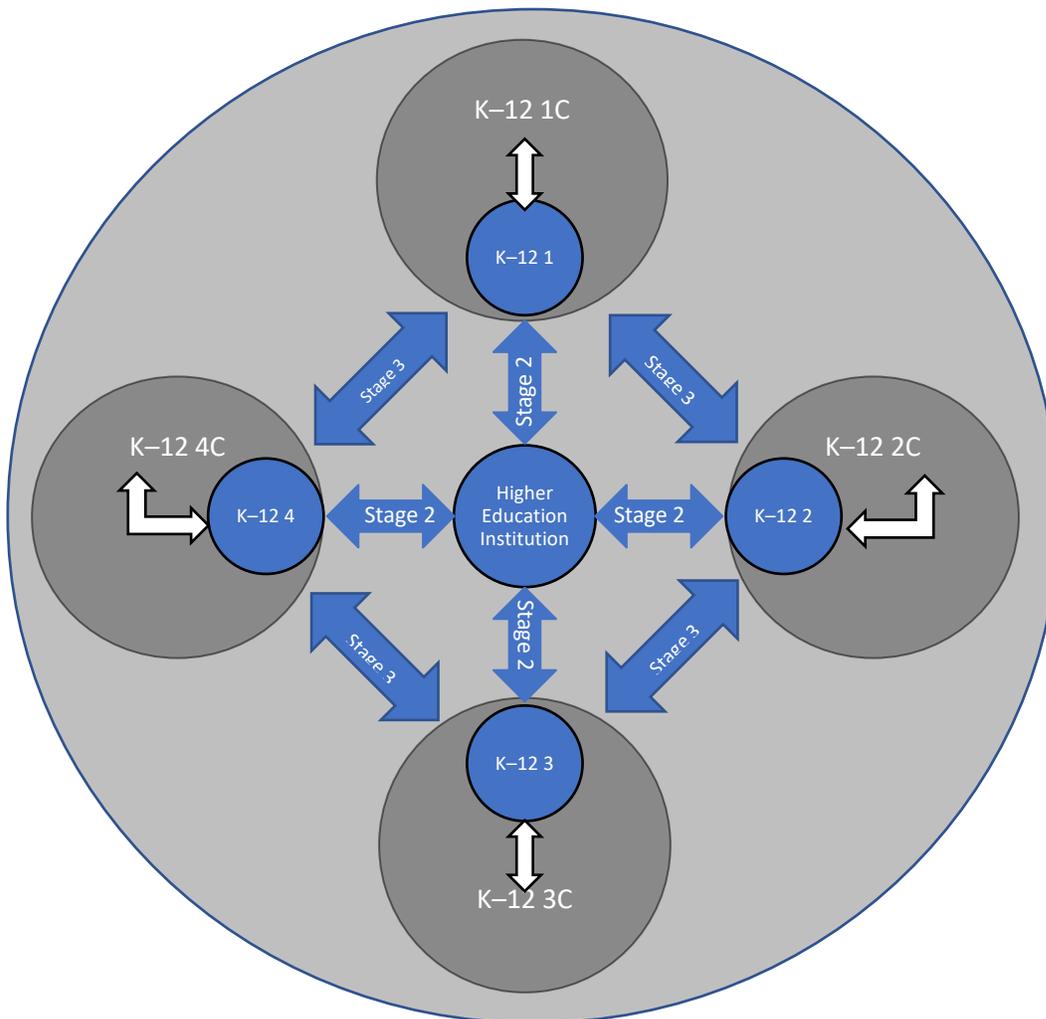
Directions of Information Flow. At this stage, as shown in Figure 3, the information transfers now demonstrated complex, multiple two-way flows (Grunig & Grunig, 2008): from the K-12 districts to the IHE and back, among the K-12 districts, and between the schools and their associated communities. At this stage, the school partners started to discuss issues and problem solve across the school districts. School leaders brought in information from the input or comments of parents or community members. One school leader emailed the IHE faculty, saying that one of her teachers asked what the course offerings would look like if they got the grant (Grant Team, 2016k). This email exemplifies the teachers’ active involvement.

Further, our meeting discussions were shared with the school administrators, EL staff, other teachers, parents, and community members. For instance, one K-12 partner said, “We let the parents know about the increased opportunities for them to get involved in our schools” (Grant Team,

2/10/2016j). K-12 partners even commented on the other districts' issues, which was a significant positive change compared with previous communication patterns. The one-way information flow (Grunig & Grunig, 2008) at Stage 1 now became multi-channeled two-way information exchanges.

Figure 3

Stage 3: The K-12 School District Taking Ownership and Forming a Two-Layered Collaborative Structure



Note: K-12 refers to the school district. C is the abbreviation for community. K-12 C means the school community.

Stage 3 assisted the group to maintain our collaborative partnership. All the districts influenced one another and moved through these stages together due to the close partner relationships among the districts. After two months' intensive work, we submitted the grant. But we continued to work together to conceptualize what we constructed, hoping our experience would shed light on developments in the field of EL education and provide lessons to other school districts in Michigan and beyond. We generated a two-layered model from this process, including a collaboration between IHEs and local schools and a deeper level of top-down structured cooperation among stakeholders within local school

districts, which also involved community participation. We believe that understanding the two-layered collaboration structure can benefit any collaboration between a school district and an IHE, especially for schools with a high percentage of EL population (see Figure 3).

Tangible Results of the Collaboration

The collaboration between K-12 districts and IHEs can only continue and expand if each partner can see the benefits from such a relationship (Clark-Gareca & Fontana, 2018). In our case, our model produced 120 ESL endorsed teachers in the past five years, which is more than any traditional IHE ESL program could do. This aligned with the successful K-12 and IHE collaboration on addressing teacher shortage (Heimbecker et al., 2002; McCray et al., 2011). On the school district side, the model helped them meet state guidelines and addressed their ESL teacher shortages. From this perspective, it has the same results as described by Clark-Gareca and Fontana (2018) on increasing the number of certified teachers. Further, the model brought in a \$2.53 million grant. This amount helped the school districts to alleviate their limited budget. More significantly, the success of this project demonstrated its worth and led to the districts making an investment of their internal resources to this end. On the university side, the grant money brought in millions of dollars of tuition money, which supported university development. Thus, the participants and the authors claim this collaboration is “fruitful” for their school districts and the IHE.

In addition, the model built paths for school districts to share resources and responsibilities within and among themselves. Such a support system is significant for each school district’s long-term collaboration and development (Parsons et al., 2019). The model also guided administrative efforts to provide contextualized assistance to K-12 EL teachers, EL staff members, and administrators (Parsons et al., 2019). Further, the collaboration created more ideas, strategies, and opportunities for each school district to welcome their EL families and wider community to be involved in schools. To respond to the school district’s interests in engaging their families and community members, we built a community engagement section into the grant design to ensure the efforts are supported by the grant money. Therefore, the model also drew in community efforts to build relationships among teachers, EL students, and their parents.

From the university’s perspective, the IHE faculty was able to redesign the university’s ESL teacher preparation program to better meet the needs of the schools and support them to better meet the needs of their ELs’. The modified program benefited the IHE students in the ESL teacher preparation program, given that they were now more prepared for the local school district’s ELs’ learning needs. The model also guided district administrative efforts to provide contextualized support to the university’s ESL program. Considering the similar percentage of ELs in the State of New York as well as other parts of the country, our collaboration experience in Michigan might offer insight for additional K-12 schools and IHEs collaborative efforts.

Recommendations to NYS and All Other K-12-IHE Partnerships

Although the experiences reported are specific to Michigan, the model we generated can be applied to other states, like NYS, that also face an ESL teacher shortage. When we reflect on our collaboration journey, we recommend that within such collaborations, K-12 districts and IHEs pay close attention to their two-way information flow at multiple levels (Grunig & Grunig, 2008). As our illustrations

demonstrate, particularly in Figure 3, when each school district reached out to their bigger school community, the K-12 partners could bring in more information, ideas, and resources to share. Our findings mirror what Raphael et al. (2014) stated: to ensure such information flow, parties can intentionally design and foster transparency and broad involvement of various levels of engagement in the effort.

Second, we urge all collaborative parties to be mindful of their choice of words during conversations. We recognize that at the various developmental levels, our partners used different words in the participation process. These choices of words, the tone of the words, the context, and the source of the words helped participants understand the trajectory they needed to embrace to ensure a successful partnership. Therefore, at the early stage of such collaborations, word choice and tone can be highlighted and discussed to build a collaborative culture, encouraging parties to move forward in the relationship building with a fully integrated partnership in mind.

Third, we suggest that future K-12 and IHE collaborations from the very beginning build a structure in which each party feels comfortable to share information, assist in design, support planning, and collect feedback from a broader audience. We noticed the importance of the roles and the change in roles that each party experienced during the process. We all knew deep in our hearts that our grant project would not be successful if we did not have the school administration, EL staff, parents, and community members' input. As Fiore and Cooper (2019) stated, actively engaging all parties ensured the success of this type of relationship.

Fourth, we want to emphasize the crucial role of ownership in our model. Our collaboration would not be successful without each partner taking an ownership of the project. The sense of ownership fostered K-12 partners reaching out to their community and bringing in critical information for the design of the grant project, and school districts shared their resources with other school districts. The IHE faculty took ownership of revising the ESL curriculum and guiding the K-12 partners in understanding the grant project. The role of ownership was also emphasized by Hargreaves (2013) and Parsons et al. (2019).

Last, we recommend a strong school district leadership participation structure (Hargreaves, 2013). From our experience, the strong support from our K-12 school districts' leaders was vital for the information exchange to happen efficiently and effectively. Based on their roles within their districts, these leaders had the authority to stimulate engagement at the district level, therefore, collect needed information to support the grant writing. With experience and input from various sources, the group found that having top-level decision-makers at the table and a top-down power structure at the school districts was a highly effective way to implement collective change.

Our conceptualized model may not work for every project exactly as what it did for us, but our model and our reflections throughout the process might help similar collaboration efforts maximize their ability to reach their collaborative goals. Although our project was limited by no teacher participants, as educators, we hope to see more such collaborations happen for teacher capacity building, school leadership development, curricular development, assessment analysis, and professional growth and for improving students' school achievements (Ghamrawi, 2011). Particularly, we hope to see more integrations of teachers' voices in such collaboration.

From our experience, we suggest that future collaborations focus on how information flows within the project, between or among various partners, and how that impacts the results of such collaborations. Based on our model, we also wonder, if K-12 school and IHE collaborations were structured to start from our Stage 3, how might that impact their results? Could starting from Stage 3 create more effective and expeditious results? New research agendas, particularly in the contexts similar

to that faced by Michigan and NYS, should be set to explore further the effects of various levels of information flow which might ensure the success of such collaborations.

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