Lessons learned through interprofessional education: exploring collaboration with elementary education, special education and communication sciences and disorders pre-service professionals

Lisa M. Bowers
Department of Communication Disorders and Occupational Therapy, University of Arkansas Fayetteville, Fayetteville, Arkansas, USA, and
Heather D. Young and Renee Speight
Department of Curriculum and Instruction, University of Arkansas Fayetteville, Fayetteville, Arkansas, USA

Abstract

Purpose – Interprofessional practice (IPP) is one way to structure collaborations to more effectively meet the complex needs of students in educational settings. This article explores the lessons learned when one research team implemented interprofessional education (IPE) experiences in partnership with a public elementary school and pre-service professionals from elementary education, special education and communication science and disorders.

Design/methodology/approach – This reflective article explores the lived experiences of researchers and partners who completed an IPE experience within one professional development school’s site. Researcher anecdotes are included to support the viewpoints shared.

Findings – It was discovered that IPE experiences are essential to facilitate meaningful collaborations for pre-service professionals to learn with and from one another; however, this requires time, preparation and is most effective when teacher mentors and university professors lead with vulnerability and model flexibility. Investment in IPE is challenging but worth the effort when learning outcomes are realized.

Originality/value – Specific details regarding the structure of this experience are shared as well as future directional goals for programs hoping to implement IPE in their professional practice programs.

Keywords Interprofessional education, Interprofessional practice, Collaboration, Professional development schools, Pre-service education

Paper type Viewpoint

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NAPDS Essentials Related to this Work:

Essential 3: Professional Learning and Leading: A PDS is a context for continuous professional learning and leading for all participants, guided by need and a spirit and practice of inquiry.

Essential 4: Reflection and Innovation: A PDS makes a shared commitment to reflective practice, responsive innovation and generative knowledge.
When professionals understand and appreciate the expertise of their colleagues from different disciplines, they are more equipped to work toward the common goal of fostering students' academic success and well-being in the school setting. To strengthen pre-service professional readiness for collaboration to support the best holistic outcomes for students with effective and successful interprofessional practice (IPP), it is critical to provide pre-professionals opportunities to learn with and from each other (Wilson et al., 2016) during their training. While higher education accreditation requirements across programs sometimes act as barriers to interprofessional education (IPE) opportunities, preparation programs can develop innovative IPE experiences to equip and prepare pre-service professionals to engage in IPP. The experience described in this article was one research-team's attempt to provide a rich, collaborative learning opportunity for pre-service professionals in a way that would circumvent the various barriers in professional licensure programs.

Review of the literature
A brief review of the literature is presented to offer background context for the experience. Literature is shared on the history of IPP and why it is important for education, how IPP can enhance inclusive culture in the schools and the value (and challenges) of interdisciplinary collaboration in schools.

History of IPP
IPP was originally conceptualized in the 1970s and 80s for the healthcare field to meet the complex needs of patients more effectively (Oandasan & Reeves, 2005). Rather than addressing these needs through a fragmented system where each professional works in isolation, IPP is a framework developed to encourage cohesive practice where professionals provide an integrated response to the patient's needs (D'Amour & Oandasan, 2005). In more recent years, IPP has been introduced to the field of education (Dobbs-Oates & Wachter Morris, 2016). Young students arrive in schools with complex, yet often interrelated needs. IPP requires school professionals to coordinate their efforts and work collaboratively as a team to develop and implement a cohesive intervention plan to address individual student needs (Miolo & DeVore, 2016). The goal of IPP is to positively impact student outcomes by fostering a deep respect and understanding of different disciplines, and a sense of shared responsibility across professions for student success (Ehren, 2000).

IPP strengthens implementation of inclusive practices
Inclusive practices are strategies that support all students such as collaboration, scaffolded instruction and using assessment data to guide development of goals (McLeskey et al., 2022). The emphasis on inclusive practices is driven by the understanding that while students have different learning needs, they can all benefit from implementation of inclusive practices that support the needs of all students and also foster development of inclusive school cultures. However, gaps in school-based practitioner knowledge may create barriers to effective implementation of inclusive practices (Able et al., 2015). To address gaps in knowledge, it is recommended practitioners leverage the expertise of their colleagues through professional collaboration. Yet, collaboration is more than simply working together and requires development of critical competencies such as communication and group problem solving skills (Friend & Barron, 2022). In order to develop these skills, pre-service practitioners need opportunities for practice such as through fieldwork experiences (Ricci et al., 2017). Introducing pre-service professionals to effective collaboration practices in fieldwork enhances their readiness to engage in the interprofessional work necessary for
implementation of inclusive practices. Thus, the need for IPP is heightened as schools embrace inclusive practices to deliver instruction and supports to students.

Interprofessional education in schools
According to the World Health Organization, IPE occurs “when two or more professionals learn about, from, and with each other to foster effective collaboration and improve outcomes and quality of care” (WHO, 2010, p. 7). Distinct from other interdisciplinary learning opportunities where students learn from a professional in a discipline related to their field, IPE occurs when students from various disciplines are in classes together that optimally are co-taught by experts from each represented field. Thus, students observe and engage in collaboration occurring with professionals and leave the learning experience with a deeper understanding and respect for each profession. IPE is critical to the advancement of IPP, where professions have an understanding of and appreciation for multiple professionals who collaborate together to achieve the best holistic outcome for the student.

As an interdisciplinary research team focused on IPP in the educational settings, we understand the value of collaboration in the school environment, not just among classroom teachers, but across all educational stakeholders seeking to foster positive outcomes for K-12 learners (e.g. National Association for Professional Development Schools, 2021). Yet, challenges persist in school contexts that may interfere with effective collaboration. A recent study found one of the many consequences of the COVID-19 pandemic was the fracturing of collaboration in the schools (Bowers et al., 2022). Steps to promote the safety and health of students and personnel (e.g. social distancing) led school professionals to work in isolation creating challenges not only to effective collaboration but also to preparing pre-service professionals for the field. This reflective article explores the lived experiences of researchers and partners who completed an IPE experience within one professional development school’s (PDS’s) site. Researcher anecdotes are included to support the viewpoints shared.

Context of the interprofessional education experience
While preparation programs successfully develop course work and practicum/internship experiences to prepare pre-professionals to practice in their specific field of study (e.g. elementary education, speech-language pathology), they often face barriers to arranging IPE experiences. Thus, to ensure that pre-professionals meet all of the standards required by their profession’s accrediting body, professional programs often require students to set a series of courses that are within their program taught by faculty and/or lecturers associated with their field. There is typically little overlap or room in a program of study for students to take courses with students in related fields. For example, elementary education, special education (SPED) and communication sciences and disorders all have standards related to literacy, so all programs require a course designed to meet the discipline specific standards of the field for literacy and provide appropriate field-based experiences. There may be discussion in class on the need to collaborate with related professionals in the school setting, yet there are typically no structured opportunities to engage with pre-professionals in those related fields. To encourage and prepare pre-service professionals for collaboration in the school setting, we designed an experience aligned with IPE principles for pre-service elementary and SPED teachers along with undergraduate students in speech-language pathology (SLP) to work together to assess and instruct elementary age children in a public-school setting.
Prior to the implementation of this IPE experience, the three programs involved in this inquiry used traditional preparation approaches such as those described above. Pre-service professionals in each program complete methods courses introducing critical concepts of content and pedagogy as well as engage in school-based practicum experiences. Further, the programs support pre-service professionals in building knowledge of other disciplines and their roles in education. However, pre-service professionals across programs had limited opportunities to collaborate with each other in provision of instructional experiences to foster positive outcomes for K-12 learners. Any experiences would have been purely organic (e.g. pre-service professionals assigned to the same school).

Setting and IPE experience participants
For this IPE practicum experience, the research university partnered with one public elementary school within a school district in close proximity to the university. This elementary school educates approximately 280 children in kindergarten through fourth grade. At the time of the partnership, there was 100% participation in the program from the 12 full time general education teachers at the school. In addition, the school’s administrators, student support specialist (SSS) (i.e. full-time teacher who leads professional learning communities, collected all progress-monitoring data and assigned students in need to tier 2 small group instruction) and the school’s full-time speech-language pathologist served as liaisons for the program which involved pre-service professionals from elementary education (N = 31), special education (N = 18) and SLP (N = 25).

Structure of the collaboration
The IPE experience described here was the first attempt for professional preparation programs at this university to involve candidates from multiple disciplines in field experiences. Due to COVID restrictions, the fall practicum experience occurred in the general education classroom setting during school hours. Pre-service elementary education teachers and pre-service SLP students were assigned a small group within a classroom. Pre-service students would prepare lessons and work with the elementary students weekly on literacy goals provided by the school’s SSS and the classroom teacher. As often as schedules would allow (approximately 3 times a month), students from the different disciplines would be in the classrooms at the same time. All instructional materials were in a shared file, so pre-service students were able to see what sessions looked like that they were not able to attend. Figure 1 illustrates the roles the pre-professionals took on during the two semesters, as well as the structure of their gradual increase in shared responsibilities.

During the spring semester, pre-service SPED students and pre-service SLP students facilitated small group instruction during an afterschool program focusing on math and literacy skills. Pre-service SPED students met in the elementary school for class, which included observations in the classrooms and supporting instruction during the school day. Students in SLP volunteered to participate in the program as a service-learning project, and thus, did not meet as a part of a required course (Veyvoda & Van Cleave, 2019). The SLP students met their supervisor once per week to discuss the previous week and plan for the next week. The instructors chose a theme for each week (e.g. plants, magic) for students to use to plan afterschool lessons for continuity. Pre-service SPED students planned activities related to math and SLP students planned activities related to literacy.

Pre-professionals engaged in this experience were enrolled in a shared asynchronous course where announcements and materials were distributed. This shared online platform allowed the instructors to communicate with students across disciplines to share expertise and relevant anecdotes. Using the asynchronous course online platform, students from the
different disciplines engaged in asynchronous discussion with each other through online platforms (e.g. VoiceThread) during the programming. They were asked to discuss student needs, students’ responses and reflect on their experiences in this shared space.

**Data analysis**

During the year-long IPE experience, information was collected across the three disciplines. Examples include meetings with faculty team members, classroom discussions with students, reflection assignments completed by students, asynchronous posts and conversations with stakeholders (e.g. university professors, school personnel). Collectively, this body of information guided the development of themes which we have titled *lessons learned*. 

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**Figure 1.** Pre-professionals roles and gradual increase of responsibility

**Note(s):** “Candidate” above refers to pre-professionals in elementary education, special education, and speech-language pathology

**Source(s):** Authors’ own work
Reflection: lessons learned from a year-long IPE experience

From this year-long experience, we gained important insight to shape our future work preparing pre-service professionals for their collaborative roles in school contexts.

Lesson 1: **Everything involving IPE takes more time and preparation.** It is hard to define the current state we are in: post pandemic? Back to normal? Still in a pandemic? Currently, there is a sustained level of stress and heightened awareness surrounding how to keep individuals safe in the school setting while continuing to provide high quality and accessible instruction. We begin from the reality that quality collaborations take time and preparation and know they will also require intentionality. Despite where we are now in this current/post pandemic state, it is important to realize that we are out of practice when it comes to meaningful collaboration. Sure, we talk about our students in professional learning community (PLC) meetings or as we pass each other in the school halls, but taking the time to sit together, pour through the data and design instructional and therapy opportunities that will move our students forward takes time (Young & Bowers, 2018). We must also remember that pre-service professionals who were educated during the height of the pandemic had almost no opportunities to observe or engage in intentional collaborations. As such, modeling collaboration and IPP are important. Despite the known time and preparation they take, it is essential to the pre-service professional’s understanding as we move back closer to a true collaborative model.

Lesson 2: **We are modeling and teaching flexibility.** Pre-pandemic, as professors and clinical supervisors, we put a lot of value on demonstrating preparedness for class, instruction and intervention. Through working in the schools on an interdisciplinary team, we learned the intrinsic value of modeling and talking through flexibility. It was something the students highly valued and commented on – talking through the changes. There is a level of control that comes with being the only instructor of record supervising and teaching students from one specific discipline. Due to the dynamic nature of IPE/IPP, it is necessary to be ready to implement programmatic changes or shift priorities the day-of when warranted. Instructors and supervisors can lean into what can be perceived as a lack of “control” in an IPE experience. As co-instructors with mixed groups of students, it was surprising that our willingness to show our vulnerability of not knowing, failing and then having to pivot midstream was considered by the students to be a strength, not a weakness, of the practicum experience and has enhanced our mentoring skill set (Zeichner, 2002).

Lesson 3: **IPE is challenging to schedule but worth the effort.** Overall, systematic limitations in higher education and the different requirements for accreditation for the three professions provided challenges to scheduling and implementing an interdisciplinary practicum experience for pre-service students. One barrier is that the coursework required for accreditation to meet all the standards in the elementary education and special education programs leaves no opportunities for electives. Thus, for students from different disciplines to take IPE courses, there needs to be institutional support for additional course offerings so that students could take an IPE course within their curriculum. Institutional support is also beneficial for continuing education and training for the instructors from all disciplines as they construct the IPE coursework and experiential learning opportunities.

Lesson 4: **Teachers, administrators and related professionals were invested in the IPE experience.** This undertaking – using one school as the PDS/practicum site for students from elementary education, SPED and SLP – was an enormous undertaking. However, everyone recognized the value of the goal – to provide opportunities for students to learn with and from each other so when they eventually work at a school, collaboration will be the norm rather than the exception. Thus, school administrators, teachers and staff were all willing to support the efforts and stay engaged in the process because they knew our students would be more prepared to engage in IPP once they were employed as their future colleagues.
Lesson 5: **Steps towards the goal are also measures to success.** The core competencies for interprofessional collaborative practice framework for IPE describe the learning continuum as moving from exposure to immersion to competence ([Interprofessional Education Collaborative, 2016](#)). Each step along the continuum increases expectations of knowledge, skills, attitudes and behaviors related to interprofessional collaborations. **Figure 2** illustrates the expectations as one moves along the IPE continuum ([Interprofessional Education Collaborative, 2016](#)).

Due to changes in the set up and delivery of our programs, students in different cohorts experienced different levels on the learning continuum. For example, after-school programming was not allowed by the school district (as originally proposed) due to COVID-19 restrictions in the Fall practicum. Therefore, pre-service professionals were in the classroom setting with students and teachers working in small groups. Due to the limitations surrounding COVID, the pre-service professionals for the Fall were exposed to IPE, whereas the increased immersion experience in the after-school Spring practicum led to more complex collaboration and development of the pre-service professionals. While the experiences differed ([Davis & Fantozzi, 2016](#)), it can be noted that the learning reflections for all pre-service professionals showed increasingly sophisticated appreciation for IPP.

**Future directions**

Similar to PDS, interprofessional education (IPE) as a construct is guided by principles and seeks to be mutually beneficial to all participants ([McIntyre et al., 2018](#)). Much time and effort went into creating meaningful learning experiences for the pre-service professionals in these practicums. Both the school and the university were committed to developing the knowledge and practice of the pre-service professionals through meaningful collaborations ([NAPDS, 2021](#)). Value was seen in building natural collaborations. The school partners were highly invested in the outcomes because they were growing future colleagues that would arrive in their new careers with an understanding of effective collaboration. Moving toward practicums and curricula experiences that train both general and special education professionals in the same spaces may promote increased cultural responsiveness, representation and discussion of communication differences that are of the upmost importance to all professionals in the schools ([Maddamsetti, 2018](#)).

While we realize that this experience was just the beginning, we are energized by the excitement from both our university students and the public-school partners. As schools continue moving back to “normal”, we hope that these interdisciplinary collaborations will

![Figure 2. IPE continuum of learning](image-url)
become more commonplace. We plan to take these lessons learned and develop a sustainable partnership where pre-service professionals from multiple disciplines can engage in meaningful learning together and grow as professionals capable of sharing goals and celebrating each other’s learning (NAPDS, 2021). One practical way our institution has supported this goal has been to bring faculty from multiple disciplines together in an effort to create IPE experiences across multiple settings in both the education and health care professions. As an education and health-related interdisciplinary team, these faculty learn from and support the learning related to the professionals in their disciplines. Because of the shared interest in IPE/IPP, these faculty can encourage each other and create opportunities for students to work together in professional settings where stake-holder relationships have already been established. Seminar courses are currently being developed that include shared discussion as well as practicums where pre-professionals from multiple disciplines can collaborate to develop goals and work with school-aged students to meet those goals. In these instances, conversations with university administration, valued collaboration and creative thinking have allowed faculty to overcome challenges and build IPE experiences. Overall, our goal with this work is not to create experts of IPE, but to provide experts the tools, training and opportunities to facilitate interprofessional learning experiences.

References


Further reading


Corresponding author

Heather D. Young can be contacted at: hkindall@uark.edu

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