Clinical Focus

Interprofessional Education: Application of Interprofessional Education Collaborative Core Competencies to School Settings

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Purpose: Changes in both health care and education systems have placed a greater emphasis on collaboration among professionals engaged with both systems who serve populations of school-age children presenting with neurological conditions, developmental disability, or health needs. Interprofessional education (IPE) has been recognized as an essential component of preprofessional education of health care professionals. The Interprofessional Education Collaborative core competencies often used by preprofessional health care programs can be adapted for preprofessional preparation of individuals working in the education system.

Conclusion: This IPE framework is described revealing similarities and differences between health care settings and education settings and then applied to the special education process for school-based professionals. Implications for incorporating IPE outcomes into preprofessional preparation programs for school personnel are discussed.

Fifty-two percent of American Speech-Language-Hearing Association (ASHA)–certified speech-language pathologists (SLPs) work in school settings (ASHA, 2017a). SLPs have integral roles in education and are essential members of school faculties (ASHA, 2010). They work across all levels and serve a range of disorders; provide unique contributions to the curriculum, highlighting the curriculum interrelationship across language processes; and provide culturally competent services (ASHA, 2010). Collaboration is a key area of responsibility that includes other school professionals, the community, families, and students themselves (ASHA, 2010), yet only 27% of SLPs report getting any formal schooling in interprofessional practice (ASHA, 2017b). Interprofessional collaborative practice (IPCP) and interprofessional education (IPE) are defined by the World Health Organization (WHO) as the practice of training students “to learn about, from and with each other to enable effective collaboration and improved health outcomes” (WHO, 2010, p. 7). ASHA identifies the significance of IPE and IPCP in their Envisioned Future: 2025 document (ASHA, 2017c). They embrace an inclusive definition of IPE/IPCP that includes schools and health care, despite the fact the WHO’s definition focuses solely on health care. The WHO’s definition is widely endorsed and adopted. Historically, IPE and IPCP were encouraged among health care providers and social workers in a response to reduce medical errors while also addressing soaring medical costs and improving patient outcomes (Berwick, Nolan, & Whittington, 2008; Reeves, Perrier, Goldman, Freeth, & Zwarenstein, 2013). Educators are also interested in improving student outcomes, but mechanisms such as the Interprofessional Education Collaborative (IPEC) core competencies that unite multiple disciplines working in schools around a shared framework are lacking. In the United States, the IPEC competencies have been widely adopted as key areas health care professionals use to develop essential and shared competencies across disciplines. These areas involve roles and responsibilities, interprofessional communication, teamwork, and values/ethics that have been further developed with multiple subcompetencies. This framework gives professionals a common language in which to begin collaborative work. Health care providers

Disclosures

Financial: Denise A. Ludwig has no relevant financial interests to disclose. Marie R. Kerins has no relevant financial interests to disclose.

Nonfinancial: Denise A. Ludwig has no relevant nonfinancial interests to disclose. Marie R. Kerins has no relevant nonfinancial interests to disclose.
have been involved in IPE/IPCP for decades (Thistlethwaite, 2016). The competencies can be adopted for school-based professionals. Since the time of the 2010 document on Roles and Responsibilities of School-Based SLPs, federal legislation has continued to boldly insist on collaborative practices among educators, particularly special educators. Best practice supporting the collaboration between education and health care professionals has suggested that professionals may not receive adequate training in teamwork processes, shared responsibility, or collaborative roles when working with school-age children (Hillier, Civetta, & Pridham, 2010).

U.S. federal law requires that special education be planned and implemented by an interdisciplinary team of professionals (Individuals with Disabilities Education Act of 2004 [IDEA], 2012). This involves 13% of all U.S. K–12 students who are involved in special education; the numbers are even greater when early intervening services and response to intervention programs are tallied (Snyder & Dillow, 2012). Newer legislation aimed at at-risk populations such as the Every Student Succeeds Act (ESSA, 2015) similarly requires collaboration for robust outcomes. Although the concept of collaboration among school-based professionals is supported by policy, practice within school settings remains inconsistent (Asprey & Nath, 2006).

Despite these facts, school-based educators largely receive their training in separate programs with minimal exposure to the scope of practice that the various professionals bring to a school setting (Dobbs-Oates & Wachter Morris, 2016). Although many educators are skilled at collaboration, there is a need for a universal framework so that all educators learn to solve problems together focusing on the students’ academic, health, and social needs. How and where collaboration occurs needs continued research, but to improve upon our current collaborations in school settings, turning to our colleagues’ successes and failures in health care settings is a promising path forward.

In this clinical focus article, we will explore legislation and practices that require collaboration among educators with a focus on special education. We will also share a version of the four core competencies of the IPEC (2011, 2016) to include both school-based educators and health care professionals. Finally, tenets supporting application of the IPEC core competencies to the Individualized Education Program (IEP) as collaborative best practice will be presented. Implications and future directions will be discussed.

**Background**

The IDEA has been the universal guiding legislation for special education under which SLPs work (IDEA, 2012). IDEA provides for multidisciplinary assessment for children aged 3–21 years, requiring school-based professionals to collaborate, and also includes input from health care professionals for determination of disability. This broadens the need for interprofessional collaboration within schools. With the passage of the ESSA, states have the flexibility to determine accountability and evaluation systems and are expected to plan with a deliberate focus on multidisciplinary services (ESSA, 2015; Waters, 2017). ESSA offers the flexibility needed for states to identify how personnel preparation programs can best prepare special educators for the workforce. ASHA has advocated for the replacement of the pupil service personnel term with specialized instructional support personnel for describing the types of services provided by SLPs. ESSA includes funding for states that can be used for meeting time for teachers and other education professionals, including SLPs, to plan comprehensive literacy instruction. This provides opportunities for interprofessional collaboration. ESSA also provides funding for professional development to include activities that are “sustained, intensive, collaborative, job-embedded, data-driven, and classroom-focused,” providing further opportunity to advocate for collaborative practices (Snyder, 2016, p. 26). States must meaningfully consult and engage with stakeholders in the design and implementation of accountability and support systems/structures (ASHA, 2017d). The implementation of IPE within personnel preparation programs provides direct alignment with the intent of the ESSA.

National associations, accrediting bodies, teacher preparation programs, and preprofessional programs for ancillary service personnel, including SLPs, have recently included discussions focusing on teaming, collaboration, and interprofessional practice. The Council for Exceptional Children (CEC), a professional association for special education educators, partners with the Council for the Accreditation of Educator Preparation (CAEP), a national educator preparation program accreditor, to recognize and identify essential teacher preparation needs (CEC, 2015). Although currently under another revision, the most recent CEC Professional Preparation Standards include a focus on interagency collaboration with stakeholders and teaming. In addition, the Division for Early Childhood of the CEC provides guidance regarding recommended practices to support teaming and collaboration by defining these as “practices that promote and sustain collaborative adult partnerships, relationships, and ongoing interactions to ensure that programs and services achieve desired child and family outcomes and goals” (Division for Early Childhood of the CEC, 2016, p. 29). CAEP supports higher education preparation through evidence-based accreditation, and recognizes the best practice of collaborative activities by including a standard supporting “leading and/or participating” in collaboration with the 2016 CAEP Standards for Advanced Programs (CAEP, 2016). While there is a heightened awareness of the essential role of collaboration, teaming, and interprofessionalism in school settings, there is not a universal IPE training framework.

**Collaboration as Best Practice**

Embracing IPE as a shared vision for both health care and education settings is essential for establishing service
delivery tenets that improve patient/student care/outcomes. Collaborative engagement among professionals from education and health care agencies is required for meeting mandated education policies and best practices to ensure a holistic patient/student-focused approach. Through adaptation of the IPEC competencies (see Table 1), a structured and intentional curriculum can be developed so that a shared language can be used among school-based professionals and health care professionals.

The context in which we apply these competencies within school and health care settings has different structural expectations due to differing accountability hierarchies. SLPs work within the special education services of schools and are subject to meeting compliance requirements of federal, state, and local education policies and practices. School-based personnel have been integrating many of these competencies within the construct of best practice for teaching and learning yet are not accountable by discipline-specific standards or an intentional framework such as the one identified by IPEC. By aligning the IPEC core competencies between school-based and health care professionals, we seek to bridge best practice for multisystem collaboration between the two systems in which SLPs work. When applied to both health care and school-based professionals, the understanding of the scope of practice of other disciplines is critical for situations in which shared decision making occurs. Only 65% of SLPs working in schools report experience discussing professional similarities and differences, whereas 75% of SLPs working in health care settings do engage in these discussions (ASHA, 2017b). An instructional and intentional curriculum such as the IPEC competencies can improve these statistics through educating professionals at the preprofessional level.

**Individual Education Program Collaboration**

ASHA has advanced the definition of *interprofessional collaborative practice* as “when two or more individuals from different fields work together to provide comprehensive, integrated services in a health care environment or school setting” (American Speech-Language-Hearing Association, n.d.). An example of this practice is the collaborative development and implementation of a treatment plan. The collaborative process central to student-focused special education services is the IEP and is universal to special education for all school-based professionals. SLPs may serve several roles within the IEP process including primary service provider, collaborative service provider, consultant service provider, monitor, facilitator, or compliance representative.

In fact, SLPs report that their primary role in the schools is “multiple roles and related services” (ASHA, 2017b). Each of these roles provides opportunities to utilize interprofessional competencies. School-based services are guided by the IEP plan based on the assumption that student-centered services must be provided by a variety or group of professionals, including health care professionals. To this end, team members need to share and exchange information within several contexts, including present level of performance, prognosis for performance change, intensity of service dosage, least restrictive setting, free and appropriate public education, and access to and participation in the general education curriculum.

**Clinical Scenario**

A clinical scenario highlights the interconnectedness of health care and education professionals and the importance of use of IPE/IPCP. Joseph, age 5 years 8 months, has been diagnosed with a neurological condition and resultant cognitive, motor, communication, and sensory disorder. He attends school and is placed in a self-contained classroom with other children his age. A health care plan and an IEP have been developed with eligibility under IDEA as “intellectual disability.” He currently communicates using gestures or one-word utterances and can follow simple one-step commands. He uses a wheelchair for mobility. Joseph presents with chronic health needs due to poor lung function and mild difficulty swallowing. He receives school services from a physical therapist, an occupational therapist, an SLP, and a special education teacher. Joseph’s parents are active in his care and assist at school on a regular basis. Joseph receives services from several physicians including a pulmonologist, a hospital-based SLP, and a clinical social worker.

Professionals from multiple systems address Joseph’s needs through different lenses. Health care professionals seek to address medical, nutritional, pharmacological, and other health needs, whereas school-based professionals address academic, communication, and social needs within the construct of access to and participation in the curriculum. The intersection of Joseph’s services is how his learning needs impact his health needs and how his health needs impact his learning needs.

Understanding the roles and responsibilities of others involved in decision making is critical to effectively implement coordinated service delivery. Environmental variables such as the physical setting, materials, intervention dosage, and pacing, as well as cognitive variables such as wakefulness, attention, responsivity, and retention of information, will impact student participation in the learning process. Neurological deficit likely implies long-term health and education needs, requiring coordinated care to apply appropriate accommodations to service delivery. The role of the parent is also highlighted for children with medical needs in school settings as the number of professionals working with the child increases dramatically. Thus, the IPEC core competencies frame the interdependent relationships among

### Table 1. Interprofessional education core competencies for interprofessional collaborative practice.

| Domain 1: Values/ethics for interprofessional practice |
| Domain 2: Roles/responsibilities |
| Domain 3: Interprofessional communication |
| Domain 4: Teams and teamwork—interdisciplinary vs. interprofessional |
professionals working with the student and parent(s). In Joseph’s case, there is an established neurological condition, so ensuring clear communication of who is providing treatment is critical. Hospital-based services need to be the priority at times when Joseph’s condition changes, yet school-based services continue. This shared understanding of the roles of “who” is working with and supporting Joseph leads to person-centered care.

Within schools, models of multidisciplinary roles where multiple disciplines provide services in separate ways have transformed into interdisciplinary services focused on individual team members extending and expanding their professional roles and where members of the team could support each other’s roles. A multiple-discipline approach as best practice has existed for almost 40 years in the education literature. Three essential characteristics of a multiple-discipline approach are a “joint team approach” where a group of professionals perform various aspects of service delivery together, a “staff development approach” where professionals recognize and accept the unique skills of other group members, and “a role release approach” where some roles and responsibilities are shared and accepted by more than one team member (Lyon & Lyon, 1980). Although these approaches are not new to the field of education, the collaborative and shared aspects of these roles provide direct support to terminology of IPCP used in the health care disciplines. These practices of shared responsibility and assuming responsibility have also been referred to as multiskilling and have received guidance from the TriAlliance of Health and Rehabilitation Professionals (American Occupational Therapy Association, 2014). This construct of multiskilling has been in use for over 20 years and is now receiving attention within health care as a strategy for impacting cost reduction and staffing levels (Brown, 2017). This construct may result in SLPs being asked to perform activities that are not prescribed in ASHA scope of practice, requiring specific training for competency (Brown, 2017).

Other terminologies used to define specific collaborative practices include role release and role extension. Role release ranges from sharing information to training performance competencies and requires clear communication and expectations. There are several types of role release and role extension that can occur within a school team including team-centered support, specific interprofessional collaborative sharing of roles for student-centered performance, and general role release among all members of the school team to provide additional practice in selected targets (Lyon & Lyon, 1980). Although these types of collaborative activities may occur sporadically within pockets of education settings, there is not a universal mechanism for providing preprofessional training specific to demonstrated interprofessional competencies.

In the case of Joseph, application of the IPEC core competencies can be used as a framework for implementing the envisioned, articulated collaborative elements of the IEP and the health care plan. A shared vision among all care providers requires clear communication of both health care and education goals. Application of collaborative interventions often results in sharing specialized training among service providers (role release) between education and health care settings.

Inclusion of parents as members of Joseph’s team is essential not only in the medical settings but in the school setting as well. Whereas services are most often provided by individual providers in the medical setting, services in the school setting are focused on participation, engagement, and learning, and school personnel are likely to work with Joseph at the same time. This sets the stage for clear expectations, good communication, and demonstrated teamwork.

**Application of IPEC Core Competencies**

Table 2 demonstrates the adaptability of the IPEC core competencies adjusting the language because of inherent differences between settings.

**Implications and Future Directions**

Clearly, IPE and IPCP are movements supported by ASHA (i.e., *Envisioned Future: 2025*) across both health care and school settings, with deeper roots in health care. The time is right with federal and state education policy now promoting more interprofessional collaboration to increase attention to IPE and IPCP in school settings (ESSA, 2015). As states generate plans and adopt practices that encourage IPCP, models can be shared. Greater advocacy across accrediting bodies is crucial, such as the standards from the CAEP and the CEC that promote collaboration in teacher and school personnel preparation programs. Ensuring opportunities for preprofessional students to engage in and practice the IPE core competencies identified by IPEC with language adjusted for educators will provide the knowledge and skills needed. It is important that those who are modeling IPE and IPCP within health care professions also work in schools to extend their expertise to include school contexts. Students presenting with neurological impairments present a strong reason for interprofessional collaboration as both health care plans and individual education programs are labor intensive and require effective collaboration and communication across contexts. One cannot assume that IPE experiences within health care IPCP settings will generalize to school settings. Without knowledge, mentoring, and practice working in collaborative teams, pursuing student learning objectives may be counterproductive as overlapping areas are not well understood with the results impeding student progress instead of strengthening them. Gaining an understanding of one another’s scope of practice in a variety of professional contexts through intentional IPE programming can pave the way so that methods of multiskilling, role expansion, and role extension can flexibly adapt to the goals and outcomes developed for the student’s academic success.
Work with individuals of other professions to maintain a climate of mutual respect and shared values. [Values/ethics]

- Person-focused care
- Promote health and health equity
- Embrace cultural diversity
- Respect unique cultures

Use the knowledge of one’s own role and those of other professions to appropriately assess and address the health care needs of patients and to promote and advance the health of populations. [Roles/responsibilities]

- Communicate own role and responsibilities
- Enable interdependent relationships with other professions within and outside the health system
- Engage in continuous professional and interprofessional development

Communicate with patients, families, communities, and professionals in health and other fields in a responsive and responsible manner that supports a team approach to the promotion and maintenance of health and the prevention and treatment of disease. [Interprofessional communication]

- Choose effective communication tools and information systems
- Communicate information in an understandable form

Apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan, deliver, and evaluate patient/population-centered care and population health programs and policies that are safe, timely, efficient, effective, and equitable. [Teams and teamwork]

- Engage health and other professionals in shared patient-centered and population-focused problem solving
- Share accountability with other professions

Work with individuals of other health care and education-based professions to maintain a climate of mutual respect and shared values. [Schools]

- Student-focused service delivery plan (IEP)
- Include health care professionals in the development of IEP
- Promote equity in access to and participation in the general education curriculum
- Ensure equal access to and implementation of health care and education plans
- Embrace cultural diversity
- Respect unique cultures

Use the knowledge of one’s own role and those of other health care and education-based professions to appropriately assess and address the education and health care needs of individuals and to promote and advance access to curriculum in the least restrictive environment. [Roles/responsibilities]

- Communicate own role and responsibilities
- Enable interdependent relationships with other professions within and outside the education and health care systems
- Ensure parental participation
- Engage in multiskilling, role release, and role extension as needed
- Engage in continuous professional and interprofessional development

Communicate with parents/guardians, students, school, and health professions in a responsive and responsible manner that supports a team approach to the development of the IEP. [Interprofessional communication]

- Choose effective communication tools and information systems for rigorous implementation of the IEP and health care plan
- Communicate information to parents and other professionals in an understandable form

Apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan, deliver, and evaluate student population-centered education programs and policies that include prevention and preservation practices. [Teams and teamwork]

- Engage parents/guardians and other professionals in shared student-centered and population-focused problem solving
- Share accountability for student achievement and wellness with other professionals
- Ensure understanding of team function

Note: IEP = Individualized Education Program.

### References


