Interprofessional Education at Seton Hall University
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Abstract

Over the last 3 years, The School of Health and Medical Sciences (SHMS) at Seton Hall University has embarked on implementing an Interprofessional Education (IPE) framework to educate students in 5 of its professional graduate health science programs. The goals of this framework are to (1) educate faculty, students, practitioners, and staff on the value of interprofessional education and (2) create student clinical experiential learning opportunities that foster development of core competencies necessary to become effective, collaborative members of interprofessional teams. A Structured Immersion Approach (SIA) was adopted to implement 4 core IPE experiences for all students in the health sciences program. As 1 of the 5 health science programs in SHMS, the Master of Science in Speech-Language Pathology (MS-SLP) program has actively supported the schoolwide IPE initiatives by adding IPE-related content to its didactic courses, clinical experiential training opportunities, and community service activities. Schoolwide and program-specific IPE experiences are outlined with an emphasis on the sequencing of these experiences for MS-SLP students.

Interprofessional Education (IPE) is a framework whereby “two or more professions learn with, from and about each other to improve collaboration and the quality of care” (Centre for the Advancement of Interprofessional Education, 2002, “Defining IPE”). In the health science domain, IPE has been part of the discourse on academic and clinical training for over 30 years (Reeves, Tassone, Parker, Wagner, & Simmons, 2012). However, over the last decade, a significant increase in the adoption of IPE practices across university programs and health care institutions have been documented (Reeves et al., 2012). This article provides a brief overview about IPE and outlines the path adopted by the faculty and administration in the School of Health and Medical Sciences (SHMS) at Seton Hall University (SHU) to implement a schoolwide IPE strategic initiative. Finally, curricular and programmatic additions/adjustments made to the Master of Science in Speech-Language Pathology (MS-SLP) program as it embraced the school-wide IPE initiative are outlined, as well as the sequence of the IPE experiences offered to MS-SLP students.
IPE: Overview and Models for Implementation

A discussion about preparing future health science professionals in an IPE format requires all stakeholders to have a good understanding of Interprofessional Collaborative Practice (IPP). IPP consists of working collectively on an interdisciplinary team of health practitioners wherein members of the team value each other’s skills and knowledge, develop consistent thinking across disciplines, and strive for collective decision-making. The goal of IPP is the provision of the highest quality patient-centric care to clients, their families, and the community (Newton, Wood, & Nasmith, 2012). Research and clinical findings consistently show that IPP promotes improved outcomes for individuals with chronic disorders and diseases, ensures accurate use of clinician resources, increases client satisfaction, strengthens relationships and trust among members of the interdisciplinary team, and reinforces the commitment to the common goal of IPP (Reeves et al., 2012; WHO, 2010).

Successful IPP requires developing and implementing essential academic and clinical groundwork through the provision of an IPE environment (Clark, 2009; Thistlethwaite & Nisbet, 2007; WHO, 2010). The knowledge and skill sets of IPP require a shift in educational orientation from a unidisciplinary model to an interdisciplinary (IPE) model in which students gain knowledge of and appreciation for the roles and responsibilities of professionals from different disciplines. These experiences help prepare future SLPs to become integral members of IPP health care teams.

IPE involves the art and science of educating faculty and students on the principles of this integrated and collaborative framework. It encourages educators to innovate and expand academic curriculum and clinical experiences whereby students gain contextual knowledge and skills in IPP. Further, it provides students with a common set of knowledge and skills that facilitate better communication among professionals. Therefore, it is important for institutions of higher education to work together with community hospitals, rehabilitation facilities, clinics, and educational settings to advocate for IPE and reinforce the use of IPP (WHO, 2010).

IPE can be introduced at the undergraduate or graduate level, at the post-licensure level, as well as in clinical practice and community settings (Barr, 1998; Clark, 2009; Reeves, Goldman, Burton, & Sawatzky-Girling, 2010; Thistlethwaite & Moran, 2010). IPE can take different pedagogical forms, such as seminar-based discussion, observing service delivery by an interprofessional team, problem-based learning, simulation-based learning, clinical internship placement in an interprofessional team, and e-learning. The goals of IPE involve: (1) enhancing the learner’s understanding of the scope of practice of other disciplines; (2) gaining the relational, communication, critical thinking, self-reflective, and decision-making abilities necessary to effectively collaborate on a diverse team of professionals; and (3) solving problems while promoting patient-centered care.

The implementation of an IPE framework is a complex undertaking and requires adequate consideration of several factors. Although not all-inclusive, the following need to be considered to ensure successful implementation: financial resources, personnel, space, learning techniques to be utilized, oversight and expected outcomes, support from the stakeholders at the educational institution (i.e., faculty, administration, and staff), training of faculty and staff, curricular sequence, and schedules. There are several benefits to implementing an IPE framework for educating health care professionals. These include (1) improved perceptions and attitudes over time about collaborative practice, (2) recognizing the importance of working with other professions to gain a comprehensive picture of the client’s needs, and (3) increased awareness and appreciation of the roles and responsibilities of other health care professionals on the team (Margalit et al., 2009; Nisbet, Hendry, Rolls, & Field, 2008; Reeves et al., 2010; Thistlethwaite & Moran, 2010).
The School of Health and Medical Sciences (SHMS) is one of eight schools and colleges at Seton Hall University. SHMS offers five professional graduate programs (Athletic Training, Occupational Therapy, Physician Assistant, Physical Therapy, and Speech-Language Pathology), a Masters in Health Administration, a post-professional Doctor of Philosophy program in Health Sciences, and a number of medical residency and fellowship programs. The School has more than 40 full-time faculty members in its Division of Health Sciences and close to 400 students across the professional graduate programs. The school maintains more than 400 clinical affiliation contracts with educational and health care partners in the state and beyond.

As outlined earlier, the need to train health care professionals in an IPE framework with the goal of achieving better quality of care is an integral part of the changing health care delivery landscape. Therefore, the need to explore the construct of IPE was deemed necessary by the School’s administration and faculty. The first step for this strategic initiative was the formation of a Task Force on Interprofessional Education in the Health Sciences to educate the faculty about IPE, discuss different models of implementation, and propose a model and activities well-suited for SHMS. The Task Force was comprised of 10 faculty members from all of the health sciences programs who volunteered to spearhead the initiative.

The model adopted by SHMS in implementing IPE across the professional programs will be outlined in the following sections with special emphasis on the sequence of IPE-related activities for students in the MS-SLP program. For the purposes of clarity, the IPE activities and experiences are organized into two prongs: (1) School-wide and (2) Program-wide (didactic, clinical, and community-based volunteer activities for students).

**School-Wide Activities**

The IPE Task Force set out to educate themselves first about IPE and IPP, including the different models, available evidence, and other related aspects to the process. After much discussion, a 5-year strategic plan was developed for the implementation of IPE at the School level. The goals of the SHMS IPE program were to (1) foster a community of faculty, students, practitioners, and staff that value interprofessional evidenced-based educational experiences within the academy and (2) create experiential learning opportunities for students that foster the development of quantitative and qualitative skills necessary for effective collaboration among health care providers and to ensure the highest quality in patient-centered care. As part of the strategic plan, the Task Force also reviewed a variety of roadblocks commonly encountered by other universities and organizations while implementing a “system-wide” IPE program. Specific attention was allocated to support faculty education of IPE as well as continual engagement of administrative resources to manage the IPE events. Two retreats were specifically arranged to encourage faculty engagement in the process along with pre- and post-surveys used as outcome measures. Student liaisons from each department were also included in Task Force meetings and discussions.

A Structured Immersion Approach (SIA) was adopted to infuse IPE at the school level. Table 1 outlines the list of core IPE-related activities developed by the Task Force, a brief description of the activity and its objective, as well as the semester during which the MS-SLP students typically participate in the activities. Students from the School’s five professional programs are required to attend these annual events. These events are coordinated by members of the Task Force. Considering the logistics of organizing these events, a specific student cohort (approximately 30 students from each of the five professional programs) attends these core experiences. Depending on the experience, students are divided in small groups (approximately 10 to 15 students per group) with representation from all professional programs.
In addition, several volunteer activities also have been organized during the 2013–2014 academic year. Student groups from each of the professional programs participated in:

1. Seton Hall University’s Relay for Life event: Five of the professional programs coordinated activities that focused on interaction with other health care providers. Some activities included setting a photo booth, organizing undergraduate buddy walks, and other related activities.

2. A disaster preparedness event: Three “classes” on disaster preparedness to get ready for a disaster simulation activity. During the activity, the more experienced students participated as first responders, while those with less experience participated as the victims/patients.

3. A community Blackboard™ site for students and faculty to interact: Student-run Blackboard site that provides a common platform for faculty and students to post details about IPE and other related topics.


Table 1. Description of the School-Wide Core IPE Experiences and the Semester During Which Students in the MS-SLP Cohort Participate in the Experience

<table>
<thead>
<tr>
<th>Core IPE Experience</th>
<th>Program Semester</th>
<th>Description/Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Student Orientation</td>
<td>1st Fall</td>
<td>Students screen a commercially produced video representing a health sciences clinical domain. Objective: Create a foundational awareness of the School’s perspective on IPE</td>
</tr>
<tr>
<td>SHMS Interprofessional Perspectives Speaker Series(IPSS)</td>
<td>1st Fall</td>
<td>Students attend the Interprofessional Perspectives Speaker Series (the Interprofessional Perspectives Speaker for 2013 was a Rutgers University student athlete, who suffered a spinal cord injury during a University football game) Objective: Motivate and assist students in seeing themselves as part of a global community addressing today’s health are issues</td>
</tr>
<tr>
<td>Town Hall Discussion (THD)</td>
<td>1st Spring</td>
<td>Students across different professional backgrounds attend this event and are divided into small interdisciplinary groups; each group is presented with a health-care related topic and the student group is required to reflect on the topic and its influence on their future work environment Objective: Provide students with an opportunity to explore today’s healthcare environment and its potential impact on patient-centered care</td>
</tr>
<tr>
<td>Interprofessional Education Symposium (IES)</td>
<td>2nd Spring</td>
<td>Students across different professional backgrounds attend this event and are divided into small interdisciplinary groups; each group is required to watch a video case and develop an evidence-based plan of care for the client in the video. The video is developed and unfolded by a Master Clinician from one of our School’s clinical partners, which provides the necessary feedback for the groups’ plans. Objective: Provide students with an opportunity to critically analyze a video case and collaborate with students from other disciplines to develop a plan of care for the client.</td>
</tr>
</tbody>
</table>
Program-Wide Activities

The Department of Speech-Language Pathology offers a 65-credit full-time, five-semester MS program in Speech-Language Pathology. Annual enrollment approximates 40–45 students and is organized as a cohort model program. As outlined in Table 1, students in the program are able to experience the array of School-wide IPE experiences at different times during the program. New content and adjustments to the programmatic sequence have been made to facilitate the translation and integration of IPE and IPP constructs experienced during the Schoolwide IPE activities. The activities include didactic content pertaining to IPP and the nature of collaborative practice, observation activities at different clinical sites, and opportunities to gain hands-on IPP experience in a clinical environment. These activities collectively support the SIA adopted by the SHMS IPE model.

The aim of the didactic portion of the programwide activities is to expose graduate students to the roles and responsibilities of different professionals as it pertains to the work of speech-language pathologists. This aim is accomplished by adjusting the course sequence and adding content to courses in Traumatic Brain Injury, Early Intervention, Augmentative and Alternative Communication, Research Methods, Audiology for Speech-Language Pathologists, Craniofacial Anomalies, and Clinical Seminars. In addition to didactic-based content, students are provided with a variety of clinical education opportunities that included the observation of IPP “in action.” Particularly, students participate in Experiential Training Opportunities (ETO), in which they visit clinical facilities for short periods of time (each ETO can last between 2 to 4 hours). During these visits, the students are required to obtain a specific number of skills while shadowing a clinician or conducting activities under supervision for the duration of the activity. For example, students rotate through an outpatient hospital wherein each student group completes a chart review, a bedside evaluation, supports in the execution of a Modified Barium Swallowing Study, and the analysis of the evaluation.

Table 2 briefly details the clinical activities experienced by the MS-SLP students during the program, along with information on the semester during which these experiences are offered. The program also provides another clinical opportunity through its affiliation to the PG Chambers School, which is not listed in Table 2. The PG Chambers school is an off-campus facility that provides therapy and special education services to children with multiple disabilities. In collaboration with the Speech-Language Pathologists at the PG Chambers School, the program’s Director of Clinical Education has created a Level 1 clinical education opportunity for the 1st year MS-SLP graduate students. It offers hands-on exposure and practice with the continuum of service delivery from referral and assessment through treatment planning and implementation for children with special needs, ages 3–21. Students reflect on (1) educational, cognitive, communication, and motor status of the child in the classroom; (2) strengths and deficits in speech and language, (3) motor deficits seen in physical therapy (PT) and occupational therapy (OT) that can be a barrier to communication, (4) common deficit patterns seen across all daily activities, and (5) how the team collaborates together to create an optimal treatment plan and reinforce each other’s goals. Students complete a screening form identifying the needs of the “whole child,” as well as a 1–2-page observation report, where students analyze the “whole child” observed at PG Chambers School through thoughtful reflection. Students also participate in an interdisciplinary panel discussion with an OT, PT, and SLP professional. The professionals present on their roles and responsibilities on an IPP team as well as work with the graduate students to analyze video case samples of children from the site (PG Chambers School).
In addition to course content and clinical observation of IPP that is sequenced with the Schoolwide core IPE activities, students in the MS-SLP program have access to several hands-on community-based volunteer IPE activities. A collaborative program in the domain of Oral Health was developed by the faculty in the Departments of Physician Assistant and Speech-Language Pathology. The goal of the program is to promote good oral hygiene and healthy teeth for speech and feeding across three age groups (elementary age students, adolescents, and the geriatric population). Students in the MS-SLP program can also volunteer at the annual Camp Chatterbox (a camp for children with multiple disabilities using augmentative and alternative communication (AAC) methods). MS-SLP students attending this camp observe specialized training in AAC methods and work in collaboration with teachers, social workers, AAC specialists, parents, OTs, and PTs. This program is not operated by Seton Hall University, but students are encouraged to attend. Finally, two students each year have the opportunity to be placed in a 3-week externship at the University of the Philippines Manila (UPM). The on-site clinic of UPM affords the MS-SLP students with the opportunity to observe a collaborative intervention approach implemented by PT, OT and SLP clinicians.

**Outcomes and Future Directions**

The faculty and administration at SHMS are very excited with the current implementation of IPE activities in accordance with the timeline outlined in the Task Force’s strategic plan. In addition, the Task Force was able to lay the foundation for the creation of an IPE Center within the School, and as of today, the Center for Interprofessional Education in the Health Sciences (CIEHS) has been approved by the University’s upper administration. The key goals currently underway by the CIEHS include innovative research, productive scholarship, and the sustenance of the “Core Signature IPE Experiences.”

The Task Force has also been active in disseminating the results of IPE activities implemented in SHMS (i.e., one publication, three presentations, and one grant application). Pre and post surveys were used to capture the impact of IPE activities on student learning. Initial qualitative analysis of student and faculty perspectives on the benefit of the IPE experiences has indicated that the IPE framework in SHMS was successful in promoting awareness and enhancing student recognition of the impact of IPP on patient-centered care (Pinto Zipp, LaFountaine, et al.,

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**Table 2. Description of Program-Wide Clinical Activities that Expose Students to IPP and the Demester During Which Students in the MS-SLP Cohort Participate in the Experience**

<table>
<thead>
<tr>
<th>Clinical Activities</th>
<th>Program Semester</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summit Speech School</td>
<td>1st Fall</td>
<td>Students observe the collective culture of the teachers, SLPs, audiologists and classroom staff who work collaboratively to cultivate the goals of each child with hearing impairments</td>
</tr>
<tr>
<td>JFK Hospital Dysphagia Training</td>
<td>1st Spring</td>
<td>Students observe IPP as it relates to the SLP working with the physician and radiologist in completing chart reviews for swallow studies and designing a holistic plan of care based on patient’s needs</td>
</tr>
<tr>
<td>Cognitive Rehabilitation Program at Kessler Institute for Rehabilitation-West Orange</td>
<td>2nd Fall</td>
<td>Students get to observe co-treatment; PT and OT work on hand skills through vocational tasks while the SLP’s work on memory, cognition and executive functioning skills</td>
</tr>
<tr>
<td>The Horizon School</td>
<td>2nd Fall</td>
<td>Students directly observe examples of teaming with PT and co-treating for effective intervention planning for individuals using AAC.</td>
</tr>
</tbody>
</table>
2013; Pinto Zipp, Maher, et al., 2013; Pinto Zipp et al., 2014). For instance, as indicated in Pinto Zipp et al. (2014), students generally agreed that participating in an IPE activity (e.g., Core Experience #4) resulted in a better understanding of the unique contributions made by other professionals as well as the constructs of interprofessional competencies. Additionally, it is clear from our experience that the preparation, support, and empowerment of faculty and students are very critical to initiating and sustaining the IPE strategy. Over the last 3 years, the task force members have been able to engage a number of additional faculty members to participate in the core experiences as well as involve faculty in developing new IPE activities. Likewise, it is important to continually engage upper administration and secure funding to support these activities. Finally, active participation of department chairs/program directors in the process is necessary so as to customize the content of the activities and sequence the experiences in accordance with the schedules of the student cohorts. In the future, a variety of Schoolwide and program-specific initiatives are being planned as part of the IPE initiative. At the School level, the Task Force is exploring (1) the development of additional IPE Curricular experiences, (2) IPE-based service learning programs, (3) the use of web-based tools to expand the IPE Core Signature Events, and (4) assessing the impact of IPE on graduates. At the MS-SLP program level, we are looking to triangulate data during the program, at the student’s exit interview, and at the end of the student’s first year in the program. Specifically, we will examine the influence of the IPE experiences at Seton Hall University on their clinical practice. Further, we are exploring the development of interprofessional support groups for patient populations (e.g., TBI Work Group, Stroke Support Group, etc.) as well as developing online content that is aligned with the Schoolwide Core Signature Experiences and departmental events.

References


Pinto Zipp, G., Maher, C., LaFountaine, M., Rizzolo, D., Phillips, J., Dayalu, V., N., … Cahill, T. (2013, October). *Student perceptions of visually unfolding case-based (VUCB) IPE experience as a teaching and learning model for the promotion of interprofessional care in health science students*. Poster presented at the Annual meeting of the Association for the Behavioral Sciences and Medical Education.


