




REVIEW ARTICLES

# "Teamwork Makes the Dream Work": Infusing Interprofessional Education Into Human Services Curriculum and Training

Nicholas Schmoyer, M.S.<sup>1a</sup>, Kristy Carlisle, Ph.D.<sup>1</sup> 

<sup>1</sup> Department of Counseling and Human Services, Old Dominion University

Keywords: interprofessional education, interprofessional collaboration, experiential learning, didactic training

<https://doi.org/10.52678/001c.74213>

---

Journal of Human Services

Vol. 42, Issue 1, 2023

---

Given the provision of health and wellness services is shifting towards an interdisciplinary framework, human services professionals may be in a unique position to collaborate with various professionals in the pursuit of client welfare. To competently engage in interprofessional care, interprofessional education (IPE) in human services training programs is necessary. This paper points to the alignment between human services organizations, values, and practice with the Interprofessional Education Collaborative's competencies and makes recommendations for the didactic infusion of IPE into human services programs, curricula, coursework, and experiences.

Within healthcare and human services, interprofessional collaboration (IPC) occurs when individuals from at least two distinct professional identities work together to achieve various client outcomes (Interprofessional Education Collaborative, 2016). Interprofessional education (IPE) "occurs when two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes" (World Health Organization, 2010, p. 13) and may serve as a key mediating factor in various professionals' abilities to engage in effective IPC. This article provides a general overview into the competencies and effectiveness of IPC, leading to specific recommendations for didactic training and implications for IPE in human services educational programs.

## Interprofessional Collaboration

Human services professionals (HSPs) have the capacity to be in collaboration with a variety of professionals to promote quality, comprehensive care for clients. The role of a HSP has been described as that of a generalist, in which they exhibit knowledge and skills that enable them to work collaboratively with interdisciplinary professionals (Johnson et al., 2017; Neukrug, 2017). This description highlights the importance of IPC for effective practice as an HSP. As they interact with clients and conceptualize their unique experiences, the opportunity to coordinate care with medical providers (i.e., physicians), specialty mental and behavioral health providers (i.e., counselors), and community welfare providers (i.e., social workers) becomes apparent and is documented in current research. Johnson (2016)

---

<sup>a</sup> Correspondence concerning this article should be addressed to Nic Schmoyer, Old Dominion University, 2100 New Education Building, 4301 Hampton Blvd., Norfolk, VA 23513. Email: [nschm005@odu.edu](mailto:nschm005@odu.edu)

has found HSPs to have a wide range of engagement in weekly IPC, varying between minimal to frequent collaboration with counselors and allied health professionals. Case managers specifically have been identified as inherently collaborative professionals (Fink-Samnack, 2019). Within their roles, case managers are recognized as vital in facilitating IPC in medical settings and during mental health crises through care and referral coordination, the use of assessments, strong relationships with clients, and professional flexibility (Donovan et al., 2018; Teper et al., 2020; Winters et al., 2015).

HSPs also have the opportunity to influence the biological, psychosocial, and environmental conditions in which clients exist, known as social determinants of health (SDOH). As per the Health People 2030 initiative, SDOH encapsulates numerous factors towards health and wellness, including economic stability, education and healthcare quality and access, neighborhood environment, and the overarching social context (Office of Disease Prevention and Health Promotion, n.d.) Through IPC, HSPs have the opportunity to work on interdisciplinary teams to effectively address SDOH and increase overall health and wellness of clients (Robins et al., 2021). In this way, HSPs can serve to bridge the gap between various medical, psychological, community, and social services that can improve the quality of life of clients they serve.

IPC has been found to be vital for effective practice for a broad range of medical, mental health, and helping professions like human services. Further, it is related to improved patient outcomes when receiving health and wellness services, including enhanced quality of and access to services (Cox et al., 2014; Donovan et al., 2018), positive client experience (Davidson et al., 2022), satisfaction (Will et al., 2019), and increased prevalence of holistic care related to case conceptualization and treatment planning (Winfield et al., 2017). Researchers emphasizing increased quality of care and improved client outcomes when IPC is practiced suggest that human services educational programs should incorporate IPC activities, assignments, and courses into their curricula. Because IPC smoothly aligns with the field of human services in values and practice, there can be a natural addition of IPC to already excellent human services education.

### **Interprofessional Competency Alignment with Human Services**

With the goal of advancing team-based care amongst health and helping professionals for ameliorated client outcomes, the Interprofessional Education Collaborative (IPEC, 2016) has identified four core competencies for practical application of IPC: (1) Values and Ethics (work with individuals of other professions to maintain a climate of mutual respect and shared values), (2) Roles and Responsibilities (use the knowledge of one's own role and those of other professions), (3) Interprofessional Communication (communicate in a manner that supports a team approach), and (4) Teams and Teamwork (apply relationship-building values and the principles of team dynamics to perform effectively in different team roles). The competencies were developed by purposefully building upon individual professions' established competencies

to both reaffirm them and broaden them to be applicable to integrated care. Englander et al. (2013) mapped 153 different competency lists from nine health professions and found IPC to be a generally applicable domain. While human services was not identified as a unique health profession in the research, the IPEC competencies directly align with the human services definition, practices, and values. The IPEC competencies are explicitly:

patient centered; community and population oriented; relationship focused; process oriented; linked to learning activities, educational strategies, and behavioral assessments that are developmentally appropriate for the learner; able to be integrated across the learning continuum; sensitive to the systems context and applicable across practice settings; applicable across professions; stated in language common and meaningful across the professions; and outcome driven. (IPEC, 2016, p. 10)

This language mirrors language from several human services sources, including the National Organization for Human Services’ (NOHS) definition for itself, the *Journal of Human Services*, and the NOHS Ethical Code.

The definition of human services according to NOHS exemplifies its inherently interdisciplinary nature:

[Human services] uniquely approach[es] the objective of meeting human needs through an interdisciplinary knowledge base,... The Human Services profession is one which promotes improved service delivery systems by addressing not only the quality of direct services, but also by seeking to improve accessibility, accountability, and coordination among professionals and agencies in service delivery. (NOHS, 2022, p. 1).

Further, the *Journal of Human Services* produced a special interdisciplinary topics issue in 2021 that called for research and writing from “researchers, faculty, administrators, and practitioners in human services, psychology, social work, counseling, criminal justice, medicine and health, education, and associated fields... [such as] public safety, government and non-profit agencies, and faith-based programs” (NOHS, 2021, pp. 1–2). This issue of the journal recognized that the “perspectives of various disciplines and professions working together... [can] construct systematic, efficient, and effective approaches to care within the scope of human services’ mission to meet human needs through prevention, intervention, and advocacy to improve the overall quality of life” (NOHS, 2021, p. 2).

Finally, interdisciplinary language that mirrors the IPEC (2016) competencies is specifically demonstrated by the NOHS (2015) Code of Ethics. Here, we introduce the IPEC competencies and associated NOHS standards as they are written, followed by a brief discussion on the intersection of these two professional documents (see [Table 1](#)).

Table 1. Overview of IPEC Competencies and Associated NOHS Standards

IPEC (2016) Competencies	NOHS (2015) Standards
1. <b>Values and Ethics:</b> Work with individuals of other professions to maintain a climate of mutual respect and shared values.	<b>Standard 29:</b> Human service professionals promote cooperation among related disciplines to foster professional growth and to optimize the impact of inter-professional collaboration on clients at all levels.
2. <b>Roles and Responsibilities:</b> 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.	<b>Standard 19:</b> Human service professionals avoid duplicating another professional's helping relationship with a client. They consult with other professionals who are assisting the client in a different type of relationship when it is in the best interest of the client to do so. In addition, human services professionals seek ways to actively collaborate and coordinate with other professionals when appropriate.
3. <b>Interprofessional Communication:</b> 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	<b>Standard 19:</b> Human service professionals avoid duplicating another professional's helping relationship with a client. They consult with other professionals who are assisting the client in a different type of relationship when it is in the best interest of the client to do so. In addition, human services professionals seek ways to actively collaborate and coordinate with other professionals when appropriate.
4. <b>Teams and Teamwork:</b> 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.	<p><b>Standard 27:</b> Human service professionals know the limit and scope of their professional knowledge and offer services only within their knowledge, skill base, and scope of practice.</p> <p><b>Standard 31:</b> Human service professionals continually seek out new and effective approaches to enhance their professional abilities and use techniques that are conceptually or evidence based. When practicing techniques that are experimental or new, they inform clients of the status of such techniques as well as the possible risks.</p> <p><b>Standard 36:</b> Human service professionals hold a commitment to lifelong learning and continually advance their knowledge and skills to serve clients more effectively.</p>

First, IPEC competency 1: values and ethics for interdisciplinary practice is inherent in Standard 29, calling for cooperation among related disciplines to foster professional growth and to optimize the impact of inter-professional collaboration on clients at all levels. Next, IPEC competency 2: knowledge of one's own role and those of other professions reflects Standard 19 stating that human service professionals avoid duplicating another professional's helping relationship with a client. They consult with other professionals who are assisting the client in a different type of relationship. Third, for IPEC competency 3, they communicate in a responsive and responsible manner aligning with Standard 19 indicating that human services professionals seek ways to actively collaborate and coordinate with other professionals when appropriate. Fourth, for IPEC competency 4, they apply relationship-building values and team dynamics to perform effectively in different team roles as in Standard 27 through which human service professionals know the limit and scope of their professional knowledge; Standard 31 stating that human service professionals continually seek out new and effective approaches to enhance their professional abilities; and Standard 36 proclaiming that human service professionals hold a commitment to lifelong learning and continually advance their knowledge and skills. NOHS, its flagship journal, and its code of ethics indicate close alignment with the IPEC (2016) competencies. Thus, we can further promote the ethical standards and values of NOHS by integrating IPC into coursework, curricula, and programs, while also affirming a strong professional identity in HSPs and improving the quality of care they provide to clients.

## **IPE in Human Services Curriculum**

The IPEC competencies were designed to guide curricula in myriad health fields including dentistry, medicine, public health, and any field devoted to improved health outcomes for populations it serves (IPEC, 2016). IPE can be facilitated in human service programs through a variety of avenues. This may include embedded topics in core courses for human services students, independent coursework emphasizing IPC, and experiential learning activities alongside various healthcare and social service professionals within a campus community (Park et al., 2019). The crux of incorporating IPE into human services training is to promote a curriculum that fosters shared experiences, learning, and practice between various disciplines (Bridges et al., 2011).

### **Benefits of IPE**

The importance of IPC has been recognized by a diverse range of health professions, leading towards research into the effects of IPE for effective practice. For allied health professionals who utilize IPC, IPE is related to improved confidence in discharge planning, shared decision making, and clinical thinking skills (Smith et al., 2018). Discharge planning has been identified as a critical role for health professionals, especially case managers, in which active collaboration with clients and interdisciplinary professionals is required to solve complex clinical concerns, such as hospital readmission (Hunter et al., 2013). Additionally, researchers have found IPE workshops and coursework is related to improved understanding of the roles of various disciplines, respect for interdisciplinary teams, communication for IPC, and self-assessment of IPEC competencies (Roberts et al., 2019; Singh et al., 2019). This indicates the importance of IPE towards outcomes that may improve IPC and client care, such as meeting IPEC competencies, interdisciplinary communication, and collaborative problem solving between professionals. Further, IPE programs were found to be effective in increasing students' skills and conceptualization of IPC, commitment to collaboration, and understanding of various professionals' roles and responsibilities (Brandon & Knapp, 1999).

While limited, available research on the impact of IPE specifically for human services students does indicate promising results regarding the effectiveness of IPE for HSPs-in-training. Researchers have found that an IPE course designed for human services, public health, and nursing students was related to improvements in all four IPC competency domains set forth by IPEC (Porter et al., 2018, 2020). This highlights the relationship between IPE coursework and IPEC competencies for students studying to be HSPs. The importance of the IPEC competencies for effective IPC has been identified (Ansa et al., 2020; Chen et al., 2018), and while research surrounding IPE for human services education is a recently emerging field, the available literature indicates the benefits of infusing IPE into educational programs for HSPs-in-training.

In addition to human services students, IPE has been related to benefits for other stakeholders, such as institutions and surrounding communities. These benefits include enhanced engagement and involvement with the local

community, improved collaboration between departments within an academic setting, and the introduction of novel educational strategies faculty can implement to promote student learning (Brandon & Knapp, 1999). Throughout undergraduate and graduate training experiences for human services professionals, there are opportunities to infuse IPE throughout didactic training and experiential learning.

### **Challenges of IPE**

Despite the benefits of infusing IPE into human services education, it is important for educators to acknowledge the various professional, institutional, and interpersonal challenges associated with this adjustment to the curriculum (Lawlis et al., 2014) so that human services faculty can effectively address them. Across professions that value IPC, lack of adequate funding is a common challenge in the implementation of IPE (Kruse, 2012; Lawlis et al., 2014; Schapmire et al., 2018; Ward et al., 2018). This lack of funding may contribute to difficulties compensating educators and allocating institutional funds towards facilitating interprofessional learning (Ward et al., 2018). For this reason, past literature exploring the challenges to implementing IPE across health and wellness professions have encouraged institutions to seek federal, state, and regional grants to better enable academic programs to provide IPE to students (Lawlis et al., 2018; Schapmire et al., 2018). Federal organizations such as the Health Resources and Services Administration (HRSA) have historically provided grant funding for programs who seek to incorporate IPE, IPC, and integrated behavioral health into programs training the next generation of health and wellness professionals. For human services educators, grants from HRSA and similar organizations may be instrumental in developing and implementing IPE for future HSPs in academia.

Professional differences in values and vision surrounding IPE is another common challenge that educators must address (Kruse, 2012; Lash et al., 2014; Lawlis et al., 2014; Ward et al., 2018). Related to this issue, ensuring accurate representation of diverse professionals is a challenge (Schapmire et al., 2018), despite the importance of exposure to different professions in IPE experiences (Champagne-Langabeer et al., 2019). To address this concern, facilitators of IPE can model IPC by designing educational experiences that are informed by the values, ethics, and competencies of IPEC and the diverse organizations whose professionals engage in IPC, such as NOHS, American Counseling Association, American Psychological Association, National Association of Social Workers, American Nurses Association, American Medical Association, and other professional allied health organizations. Additional challenges related to educator training (Freeman et al., 2010; Lawlis et al., 2014; Schapmire et al., 2018; Singh et al., 2019), logistical and administrative barriers such as campus location and scheduling (Kruse, 2012; Schapmire et al., 2018; Ward et al., 2018), and institutional support for interdisciplinary education (Lash et al., 2014) must be considered. These have the potential to be addressed

with intentional collaboration and planning from interdisciplinary faculty of programs that would benefit from comprehensive IPE, including human services students.

### **Implications for Human Services Educators**

In order to contribute and stay relevant to the health and helping professions, HSPs need the knowledge and skills to effectively participate in IPC. “Interprofessional,” “interdisciplinary,” and “integrative” are buzz words in the helping fields and in research on health and helping professions. So that HSPs stay current with the trends in health and helping practice, human services educators should further educate themselves and enhance their courses and curricula with IPC (Johnson et al., 2017; Park et al., 2019; Winfield et al., 2017). Human services is a unique and often misunderstood profession (Neukrug, 2017); thus, human services students need to learn how to identify their role in any interprofessional encounter. IPE may not only prepare students for IPC, but may increase their self-efficacy as professionals. The unique human services identity can be clarified by confident and knowledgeable HSPs who assert themselves as legitimate members of interprofessional teams. Human services educators already providing exceptional human services education can enact IPC activities, assignments, experiences, and curriculum to enhance the quality and relevancy of the education they provide to their students. Below we present examples of such activities, assignments, experiences, and curricula in the hope that they are a springboard for more research and practice of IPE in human services education.

### **Didactic Recommendations**

Within human services educational programs, there are ample opportunities to incorporate IPE activities and experiences into existing coursework. [Table 2](#) provides an exploration into potential IPE activities and associated human services courses in which integration of these activities may serve to enhance student learning and preparation for IPC.

Given the alignment between the IPEC (2016) competencies and NOHS (2015) ethical standards, human services faculty have the opportunity to integrate IPE into didactic coursework and curriculum that train future HSPs. IPE can be infused into introductory human services courses (i.e., Introduction to Human Services, Human Services Methods) that provide students with the foundational skills, knowledge, and professional dispositions for effective practice. This can be done by inviting guest lecturers from interdisciplinary professions to provide their perspectives on IPC, the roles of HSPs, and effective practices for IPC in their respective settings. Additionally, faculty can present students with opportunities to directly practice the broad range of skills for IPC, such as active listening, interdisciplinary communication, conflict resolution, treatment planning, navigating different professional values and ethics, and addressing systemic factors related to client outcomes. This can be done in both introductory and advanced (i.e., Crisis

Table 2. Examples of IPE Didactics and Appropriate Human Services Coursework

IPE Experiences and Activities	Appropriate Human Services Coursework
<p>In class activity asking students to match a NOHS standard with each IPEC competency, followed by discourse about their alignment. Instructors may use Socratic questioning (thoughtful, curious questioning used to examine complex and challenging topics) to explore the implications for IPC.</p>	<ul style="list-style-type: none"> <li>• Introduction to Human Services</li> <li>• Crisis Intervention, Prevention, and Ethics</li> <li>• Introduction to Substance Abuse</li> </ul>
<p>The above activity may be followed with an assignment asking students to critically examine how NOHS’ values and standards compare and contrast to the values and ethics of other professional organizations (i.e., American Counseling Association, American Medical Association). In the assignment students should a) compare and contrast human services values and practice to other related professions, b) identify new discoveries they find intriguing, and c) explore an area of growth for themselves as a future HSP engaging in IPC.</p>	
<p>Guest lectures from interdisciplinary professionals who work with HSPs in different settings (i.e., correctional facilities, hospitals, government agencies, educational settings, etc.) Instructors can prepare guest lectures to speak about a) their career journey, b) their conception of IPC and their role in it, c) how they view and have worked with HSPs in interprofessional settings, and d) what they predict continuing development of IPC will look like.</p>	<ul style="list-style-type: none"> <li>• Introduction to Human Services</li> <li>• Human Services Methods</li> <li>• Crisis Intervention, Prevention, and Ethics</li> <li>• Introduction to Substance Abuse</li> <li>• Substance Abuse Treatment and Research through Field Observation</li> <li>• Case Management and Crisis Techniques through Field Observation</li> <li>• Internship in Human Services</li> </ul>
<p>Role-plays for basic IPC communication skills (i.e., active listening, sharing professional values) to provide foundational communication and collaborative skills necessary for interdisciplinary integration and competence.</p>	<ul style="list-style-type: none"> <li>• Human Services Methods</li> <li>• Crisis Intervention, Prevention, and Ethics</li> <li>• Introduction to Substance Abuse</li> </ul>
<p>Instructors can ask students to take on assigned roles (HSP, medical doctor, nurse, counselor, social worker) and research the values of that profession. Students should engage in a group discussion sharing the values of each role. To conclude, they should write a reflection on the role-play to include a) a description of their profession’s values, b) an identification of the profession with which their profession most closely aligned and from which it most deviated, and c) a reflection on the challenges and benefits of sharing professional values they observed during the role play.</p>	
<p>Role-plays for advanced IPC communication skills (i.e., treatment planning, conflict resolution).</p>	<ul style="list-style-type: none"> <li>• Crisis Intervention, Prevention, and Ethics</li> <li>• Substance Abuse Treatment and Research</li> <li>• Case Management and Crisis Techniques through Field Observation</li> <li>• Internship in Human Services</li> </ul>
<p>Instructors can ask students to engage in a treatment planning process for a case scenario client by assigning students various interprofessional roles (i.e., HSP, medical doctor, nurse, counselor, social worker). Students prepare together to implement different treatments according to their roles. They should prepare a group presentation that a) describes each group member’s role in the IPC, b) explores how the interventions would support each other and potentially conflict, and c) explains why the integrative treatment they suggest is the best individualized treatment for the case scenario client by considering their medical, psychological, and social needs, as well as their backgrounds, cultures, and life experiences.</p>	
<p>Assignments emphasizing experiential and service learning in IPC (i.e., interprofessional communication plan, interprofessional advocacy plan, shadowing a practicing HSP).</p>	<ul style="list-style-type: none"> <li>• Case Management and Crisis Techniques through Field Observation</li> <li>• Internship in Human Services</li> </ul>
<p>Following in-class role plays of sharing professional values and preparing an interdisciplinary treatment plan, they should engage in real life engagement with students from other departments (i.e., nursing, pre-medical/medical, psychology, physical therapy). Collaborating with multiple departments may be challenging, but the benefits to all students makes it worth considering. The goal of the interaction could be to a) create an IPC plan to comprehensively address the presenting concern(s) in a provided case scenario, b) reflect by writing on the barriers they encountered, c) reflect on the ways each profession enhanced the treatment plan in the scenario, and d) how they would work with other professionals in the future.</p>	<ul style="list-style-type: none"> <li>• Human Services Methods</li> <li>• Crisis Intervention, Prevention, and Ethics</li> <li>• Substance Abuse Treatment and Research</li> <li>• Case Management and Crisis Techniques through Field Observation</li> <li>• Internship in Human Services</li> </ul>
<p>Programs could explore the creation of a stand-alone IPE course. Topics and assignments could include reflections on HSPs’ roles in IPC, case conceptualization, treatment planning, using evidence-based practices, evaluation of practices in IPC setting.</p>	<ul style="list-style-type: none"> <li>• New Interdisciplinary IPE Elective</li> </ul>
<p>This could be supplemented by interdisciplinary seminars, lectures, and presentations led by faculty from various departments on campus. Additionally, assignments to address interdisciplinary conflict, ethical dilemmas, treatment planning, and discharge planning can serve to enhance preparation for IPC.</p>	

Intervention, Prevention, and Ethics, Substance Abuse Treatment and Research) human services courses, with faculty designing role plays and case studies that attend to the unique developmental levels of students at various



stages of professional development. In this way, students in the beginning of their academic career can learn the basic skills for effective IPC based on IPEC competencies, while students who are preparing for the transition professional settings or graduate education can further hone their skills needed for competence in IPC.

Didactic training in IPE can also occur through the development of new elective courses. These courses can focus on IPEC competencies, best-practices for IPC, and consistent interaction with various professions. These learning experiences can be created collaboratively and offered between departments within a campus community, including human services, psychology, nursing, pre-medicine, and other allied health professions. Courses such as this may feature numerous co-instructors from these departments to promote regular engagement with interdisciplinary professionals who are called to collaborate for client health and wellness. Didactic activities in these electives may include group projects in which students from interdisciplinary departments are presented with case scenarios with client concerns that cannot be adequately addressed through the values, skills, and practices of a singular profession. These activities can be supplemented by lectures, presentations, and role-plays facilitated by interdisciplinary instructors, providing students with scaffolding through modeling effective IPC practices. In this format, students in human services education can experience stages of exposure, immersion, and mastery of IPC (Charles et al., 2010), improving preparation for collaboration.

### **Experiential Learning**

Experiential learning is an important component of human services education (Patil et al., 2020) and IPE (Curran et al., 2010), as it promotes application of basic and advanced concepts needed for competent practice. Students can engage in experiential learning by shadowing human services professionals who engage in IPC regularly, allowing for students to observe ways to engage in IPC as a human service professional and receive scaffolding for competent practice. Experiential learning could be integrated into observation and professional development courses such as Case Management & Crisis Techniques Through Field Observation. Additionally, human service internship opportunities within integrated institutions can be facilitated as a part of the Internship in Human Services course. Integrated settings for human services professionals in their internship may include correctional facilities, general hospitals, primary care clinics, inpatient and residential psychiatric facilities, specialty care medical and behavioral health settings, university health centers, regional and local government agencies, and community health centers, among others. In these experiences, students could directly practice IPC as a professional-in-training while under the supervision of a competent HSP supervisor. The experience of shadowing and internships may be significant in promoting skills and competencies of IPC while integrating IPE into human services educational programs.

Finally, IPE can be integrated into experiential learning by creating interprofessional learning activities enmeshed in various core and elective courses, where students from different departments are called to collaborate. These learning activities may include case studies, standardized role-plays, and advanced client simulations in which there is a problem to be solved from an interdisciplinary perspective. Emphasis can be placed on small groups of students from different professions working together to address interdisciplinary ethical dilemmas, collaborative treatment planning, and discharge planning. In these experiences, IPC may be taught and applied in a low-risk IPE environment, allowing students to make mistakes, attempt new skills, and learn more the professional identity of human services and other professionals.

### **Discussion and Future Research**

There is limited research examining the benefits and outcomes of IPE in human services education, yet there is the promise to enhance the education of human services through these experiences and room to conduct studies. Currently, the bulk of research on IPE and IPC exists within the realms of medical (i.e., nursing, family medicine), social and behavioral health (i.e., social work, psychology), and allied health (i.e., occupational therapy) professions. Future research could explore the impact of IPE on human services student outcomes, such as HSPs' self-efficacy as generalists within interdisciplinary settings, utilization and understanding of IPEC competencies, and ability to effectively engage in IPC with other professionals. This may serve to better inform human services educators on the unique benefits of infusing IPE into human services education. Additionally, human services educators can contribute to the growing empirical base for IPE in the profession by exploring the impact of experiential and service learning within educational settings for future HSPs. This can be done by exploratory research into the experiences of HSPs-in-training during IPE activities (i.e., case studies, role plays) and in supervised internship settings, such as hospitals, where students frequently engage in IPC.

To better understand the factors that facilitate effective IPE, research that explores the professional experiences, training, and challenges of IPE and IPC among human services faculty and professionals may yield information that can inform pedagogical, institutional, and interdepartmental practices that facilitate or hinder effective IPE. Additionally, an exploration of students' perspectives on their experiences and understanding of IPE may yield important insights into the best practices for infusing IPE into human services curriculum.

HSPs seek to serve clients in a comprehensive manner, and they increasingly understand the importance of effective IPC for optimal client outcomes. As generalists, HSPs have the capacity to contribute to interdisciplinary teams in meaningful ways, ultimately improving the biopsychosocial conditions in which clients exist. In order to do so, an accurate understanding and effective practice of IPC is vital, yet human services programs may not be adequately

preparing HSPs-in-training with the knowledge and skills to serve in this role. By incorporating IPE into coursework, human services faculty may provide students with experiences to better prepare them to work in an increasingly connected professional world.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CCBY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.

## References

- Brandon, R. N., & Knapp, M. S. (1999). Interprofessional education and training: Transforming professional preparation to transform human services. *American Behavioral Scientist*, 42(5), 876–891. <https://doi.org/10.1177/00027649921954453>
- Bridges, D. R., Davidson, R. A., Odegard, P. S., Maki, I. V., & Tomkowiak, J. (2011). Interprofessional collaboration: Three best practice models of interprofessional education. *Medical Education Online*, 16(1), 6035. <https://doi.org/10.3402/meo.v16i0.6035>
- Champagne-Langabeer, T., Revere, L., Tankimovich, M., Yu, E., Spears, R., & Swails, J. L. (2019). Integrating diverse disciplines to enhance interprofessional competency in healthcare delivery. *Healthcare*, 7(2), 75. <https://doi.org/10.3390/healthcare7020075>
- Charles, G., Bainbridge, L., & Gilbert, J. (2010). The University of British Columbia model of interprofessional education. *Journal of Interprofessional Care*, 24(1), 9–18. <https://doi.org/10.3109/13561820903294549>
- Chen, D. W., Gerolamo, A. M., Harmon, E., Bistline, A., Sicks, S., & Collins, L. (2018). Interprofessional collaborative practice in the medical intensive care unit: A survey of caregivers' perspectives. *Journal of General Internal Medicine*, 33(10), 1708–1713. <https://doi.org/10.1007/s11606-018-4623-3>
- Cox, J., Adams, E., & Loughran, M. J. (2014). Behavioral health training is good medicine for counseling trainees: Two curricular experiences in interprofessional collaboration. *Journal of Mental Health Counseling*, 36(2), 115–129. <https://doi.org/10.17744/mehc.36.2.c426q74431666762>
- Curran, V. R., Sharpe, D., Flynn, K., & Button, P. (2010). A longitudinal study of the effect of an interprofessional education curriculum on student satisfaction and attitudes towards interprofessional teamwork and education. *Journal of Interprofessional Care*, 24(1), 41–52. <https://doi.org/10.3109/13561820903011927>
- Davidson, A. R., Kelly, J., Ball, L., Morgan, M., & Reidlinger, D. P. (2022). What do patients experience? Interprofessional collaborative practice for chronic conditions in primary care: An integrative review. *BMC Primary Care*, 23(1), 8. <https://doi.org/10.1186/s12875-021-01595-6>
- Donovan, A. L., Aldrich, J. M., Gross, A. K., Barchas, D. M., Thornton, K. C., Schell-Chaple, H. M., Gropper, M. A., & Lipshutz, A. K. M. (2018). Interprofessional care and teamwork in the ICU. *Critical Care Medicine*, 46(6), 980–990. <https://doi.org/10.1097/ccm.0000000000003067>
- Englander, R., Cameron, T., Ballard, A. J., Dodge, J., Bull, J., & Aschenbrener, C. A. (2013). Toward a common taxonomy of competency domains for the health professions and competencies for physicians. *Academic Medicine*, 88(8), 1088–1094. <https://doi.org/10.1097/acm.0b013e31829a3b2b>
- Fink-Samnick, E. (2019). Leveraging interprofessional team-based care toward case management excellence. *Professional Case Management*, 24(3), 130–141. <https://doi.org/10.1097/ncm.0000000000000360>
- Freeman, S., Wright, A., & Lindqvist, S. (2010). Facilitator training for educators involved in interprofessional learning. *Journal of Interprofessional Care*, 24(4), 375–385. <https://doi.org/10.3109/13561820903373202>
- Hunter, T., Nelson, J., & Birmingham, J. (2013). Preventing readmissions through comprehensive discharge planning. *Professional Case Management*, 18(2), 56–63. <https://doi.org/10.1097/ncm.0b013e31827de1ce>
- Interprofessional Education Collaborative. (2016). *Core competencies for interprofessional collaborative practice: 2016 update*. <https://www.ipecollaborative.org/assets/2016-Update.pdf>

- Johnson, K. F. (2016). Understanding interprofessional perceptions and experiences: An investigation of professional counselors and allied health professionals. *Health & Interprofessional Practice*, 3(1), eP1095.
- Johnson, K. F., Sparkman-Kay, N., & Kalkbrenner, M. T. (2017). Human service students' and professionals' knowledge and experiences of interprofessionalism: Implications for education. *Journal of Human Services*, 37(1), 5–13.
- Kruse, J. (2012). Overcoming barriers to interprofessional education: The example of the joint position statement of the Physician Assistant Education Association and the Society of Teachers of Family Medicine. *Family Medicine*, 44(8), 586–588.
- Lash, D. B., Barnett, M. J., Parekh, N., Shieh, A., Louie, M. C., & Tang, T. T.-L. (2014). Perceived benefits and challenges of interprofessional education based on a multidisciplinary faculty member survey. *American Journal of Pharmaceutical Education*, 78(10), 180. <https://doi.org/10.5688/ajpe7810180>
- Lawlis, T. R., Anson, J., & Greenfield, D. (2014). Barriers and enablers that influence sustainable interprofessional education: A literature review. *Journal of Interprofessional Care*, 28(4), 305–310. <https://doi.org/10.3109/13561820.2014.895977>
- National Organization for Human Services. (2015). *Ethical standards for human services professionals*. <https://www.nationalhumanservices.org/ethical-standards-for-hs-professionals#profession>
- National Organization for Human Services. (2021). *Journal of Human Services Special Interdisciplinary Issue*. <https://www.nationalhumanservices.org/journal-of-human-services-special-interdisciplinary-issue>
- National Organization for Human Services. (2022). *About human services*. <https://www.nationalhumanservices.org/about-nohs>
- Neukrug, E. (2017). *Theory, practice, and trends in human services: An introduction* (6th ed.). Cengage.
- Office of Disease Prevention and Health Promotion. (n.d.). *Social determinants of health*. U.S. Department of Health and Human Services. <https://health.gov/healthypeople/priority-areas/social-determinants-health>
- Park, K., Rivas, R., Borden, N., & Carlisle, K. L. (2019). Preparing practice-ready collaborative healthcare human services students: Considerations on developing interprofessional education competencies in human services. *Journal of Human Services*, 39(1), 85–96.
- Patil, T., Hunt, M., Cooper, K., & Townsend, R. (2020). Developing a case-based experiential learning model at a program level in a regional university: Reflections on the developmental process. *Australian Journal of Adult Learning*, 60(2), 225–244.
- Porter, K. J., Nandan, M., Varagona, L., & Maguire, M. B. (2018). Competency-based interprofessional education: Lessons from the field. *Journal of Human Services*, 38(1), 111–115.
- Porter, K. J., Nandan, M., Varagona, & Maguire, M. B. (2020). Effect of experiential competency-based interprofessional education on pre-professional undergraduate students: A pilot study. *Journal of Allied Health*, 49(2), 79–85.
- Roberts, S. D., Lindsey, P., & Limon, J. (2019). Assessing students' and health professionals' competency learning from interprofessional education collaborative workshops. *Journal of Interprofessional Care*, 33(1), 38–46. <https://doi.org/10.1080/13561820.2018.1513915>
- Robins, L., Johnson, K., Gantt, A., Brookover, D., Suggs, B., Jones, J., & Cannedy, M. (2021). The role of human services providers in addressing social determinants of health. *Journal of Human Services*, 40(1), 83–101. <https://doi.org/10.52678/2021.6>

- Schapmire, T. J., Head, B. A., Nash, W. A., Yankeelov, P. A., Furman, C. D., Wright, R. B., Gopalraj, R., Gordon, B., Black, K. P., Jones, C., Hall-Faul, M., & Faul, A. C. (2018). Overcoming barriers to interprofessional education in gerontology: The interprofessional curriculum for the care of older adults. *Advances in Medical Education and Practice*, 9, 109–118. <https://doi.org/10.2147/amep.s149863>
- Singh, S., McKenzie, N., & Knippen, K. L. (2019). Challenges and innovations in interprofessional education: Promoting a public health perspective. *Journal of Interprofessional Care*, 33(2), 270–272. <https://doi.org/10.1080/13561820.2018.1538114>
- Smith, L. M., Keiser, M., Turkelson, C., Yorke, A. M., Sachs, B., & Berg, K. (2018). Simulated interprofessional education discharge planning meeting to improve skills necessary for effective interprofessional practice. *Professional Case Management*, 23(2), 75–83. <https://doi.org/10.1097/ncm.0000000000000250>
- Teper, M. H., Vedel, I., Yang, X. Q., Margo-Dermer, E., & Hudon, C. (2020). Understanding barriers to and facilitators of case management in primary care: A systematic review and thematic synthesis. *Annals of Family Medicine*, 18(4), 355–363. <https://doi.org/10.1370/afm.2555>
- Ward, W., Zagoloff, A., Rieck, C., & Robiner, W. (2018). Interprofessional education: Opportunities and challenges for psychology. *Journal of Clinical Psychology in Medical Settings*, 25(3), 250–266. <https://doi.org/10.1007/s10880-017-9538-3>
- Will, K. K., Johnson, M. L., & Lamb, G. (2019). Team-based care and patient satisfaction in the hospital setting: A systematic review. *Journal of Patient-Centered Research and Reviews*, 6(2), 158–171. <https://doi.org/10.17294/2330-0698.1695>
- Winfield, C., Sparkman-Key, N. M., & Vajda, A. (2017). Interprofessional collaboration among helping professions: Experiences with holistic client care. *Journal of Interprofessional Education & Practice*, 9, 66–73. <https://doi.org/10.1016/j.xjep.2017.08.004>
- Winters, S., Magalhaes, L., & Kinsella, E. A. (2015). Interprofessional collaboration in mental health crisis response systems: A scoping review. *Disability and Rehabilitation*, 37(23), 2212–2224. <https://doi.org/10.3109/09638288.2014.1002576>
- World Health Organization. (2010). *Framework for action on interprofessional education & collaborative practice*. [https://apps.who.int/iris/bitstream/handle/10665/70185/WHO\\_HRH\\_HPN\\_10.3\\_eng.pdf;jsessionid=6B300BA511DCF099C0CB24AA11606F39?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/70185/WHO_HRH_HPN_10.3_eng.pdf;jsessionid=6B300BA511DCF099C0CB24AA11606F39?sequence=1)