



April 2016

Interprofessional Education in Occupational Therapy: The Idaho State University Model

Bryan M. Gee

Idaho State University - USA, bryan.gee@rm.edu

Jennifer Holst

Idaho State University - USA, holsjenn@isu.edu

Kathleen Baron

Idaho State University - USA, barokath@isu.edu

Eydie Kendall

Idaho State University - USA, kendeydi@isu.edu

Sarah Knudson

Idaho State University - USA, knudsara@isu.edu

See next page for additional authors

Follow this and additional works at: <https://scholarworks.wmich.edu/ojot>

 Part of the Occupational Therapy Commons

Recommended Citation

Gee, B. M., Holst, J., Baron, K., Kendall, E., Knudson, S., McKnight, L., & Streagle, K. (2016).

Interprofessional Education in Occupational Therapy: The Idaho State University Model. *The Open Journal of Occupational Therapy, 4*(2). <https://doi.org/10.15453/2168-6408.1226>

This document has been accepted for inclusion in The Open Journal of Occupational Therapy by the editors. Free, open access is provided by ScholarWorks at WMU. For more information, please contact wmu-scholarworks@wmich.edu.

Interprofessional Education in Occupational Therapy: The Idaho State University Model

Abstract

Interprofessional education (IPE) is becoming a common practice among most allied health professions as a part of entry level training. IPE is intended to promote greater professional collaboration in routine clinical practice. The prerequisites for this type of educational process include gaining an understanding of one's own and other professions while developing mutual respect, trust, and communication skills. The Idaho State University (ISU) Interdisciplinary Evaluation Team (IET) course delivery model is one such vehicle which fosters IPE across numerous disciplines while providing significant clinical support to the local community. This study presents the ISU IET course process, which combines clinical care of community pediatric clients via student/clinician partnership, which reflect on the process of interprofessional care. Occupational therapy student perceptions of the IET course consistently trended in favorable directions. All participants desired more opportunities for IPE combined with direct client interaction as a part of their other course work. Occupational therapy educational programs are well suited and positioned to host and/or to establish key roles in IPE to support student clinical training and meet the health and needs of their local communities.

Keywords

interprofessional education, case-based learning, occupational therapy education

Complete Author List

Bryan M. Gee, Jennifer Holst, Kathleen Baron, Eydie Kendall, Sarah Knudson, Laura McKnight, and Karren Streagle

Credentials Display

Bryan Gee, PhD, OTR/L, BPC; Jennifer Holst, CCC- AuD Kathleen Baron, DNP, FNP, PNP, RN; Eydie Kendall, PT, PHD, PCS; Sarah Knudson, MS, CCC-SLP; Laura McKnight, MPH, LD, RD; Karren Streagle, PhD

Copyright transfer agreements are not obtained by The Open Journal of Occupational Therapy (OJOT). Reprint permission for this Topics in Education should be obtained from the corresponding author(s). Click here to view our open access statement regarding user rights and distribution of this Topics in Education.

DOI: 10.15453/2168-6408.1226

Interprofessional education (IPE) has become a buzzword in today's health care education and training system in the United States. The American Occupational Therapy Association (AOTA) recently stated that "entry-level occupational therapy (OT) curricula should include interprofessional education (IPE) in which students have opportunities to learn and apply the knowledge and skills necessary for interprofessional collaborative practice" (Gray, 2015, p. 1). AOTA (2015) also stated that IPE should address the integration and coordination of health care delivery in dealing with the escalating occurrence of chronic diseases, the complexity of ever-changing health care systems, and the use of technology in health care.

The World Health Organization (WHO) (2010) defines IPE as the process by which students from two or more professions learn from, about, and with each other to enable effective collaboration and improve health outcomes. Furthermore, interprofessional practice occurs when multiple health workers from different professional backgrounds work with patients, families, caregivers, and communities to deliver the highest quality of care (WHO, 2010).

Put simply, IPE efforts are meant to promote greater professional collaboration in clinical practice. The prerequisites for this professional collaboration include gaining an understanding of one's own and other professions while developing mutual respect, trust, and communication skills (Barrett, Sellman, & Thomas, 2005; Juntunen & Heikkinen, 2004; Parsell, Spalding, & Bligh, 1998).

Morison, Boohan, Jenkins, and Moutray (2003) have argued that students need to have training in both the classroom and the clinical environment to develop these skills.

Traditionally, health care education has occurred in discipline "silos," resulting in minimal communication between providers and fragmented patient care. The WHO (2010) proposed a *Framework for Action on Interprofessional Education and Collaborative Practice* that would combine fragmented health care systems with health care education to provide IPE. The intended result was that candidates would emerge from IPE programs ready for collaborative practice that would strengthen health care systems and promote improved patient outcomes. In 2011, the Interprofessional Education Collaborative Expert Panel (IECEP) recommended 32 core competencies in four domains to improve interprofessional, patient-centered education. These domains included students (a) valuing and developing ethics for interprofessional practice, (b) having an understanding of their professional roles and responsibilities, (c) developing interprofessional communication with other disciplines, and (d) working as teams and developing interprofessional teamwork (Interprofessional Education Collaborative, 2011).

Over the years, various institutions have implemented IPE through team case studies, simulations, didactic instruction, standardized patient scenarios with discussion, and student and instructor reflection exercises. The major limitation for campus-based IPE has been in maintaining high-

fidelity scenarios that accurately imitate reality (Walsh & Van Soeren, 2012).

In spite of many years of effort, true interprofessional collaboration still seems elusive and difficult to achieve in clinical practice. However, research indicates that exposure to a good IPE framework and curriculum may mitigate negative attitudes and barriers commonly seen in teamwork (Bainbridge, Nasmith, Orchard, & Wood, 2010; McPherson, Headrick, & Moss, 2001). By introducing IPE in academic coursework and providing other experiences embedded throughout the curriculum, it may be possible to promote the values associated with professional collaboration (Coster et al., 2008).

Recent IPE Studies

Recent studies have collected data on the health professions students' attitudes, enthusiasm, perceptions, and professional identity in relation to IPE experiences. For example, Cameron et al. (2009) created a large-scale IPE experience to assess first-year students' perceptions and attitudes toward IPE prior to and after a brief exposure, to explore the limitations and benefits of IPE, and to evaluate the effectiveness of a short course. One thousand students participated in a brief IPE event that included nine disciplines. In the 2 hr 30 min session, the students interacted during multiple small group activities and discussions, participated in patient discharge scenarios, and evaluated the IPE process.

The results suggested positive attitudinal and perceptual changes while documenting the value, benefits, and importance of collaboration as

with a large-scale IPE activity. The authors noted that the experience provided the foundational skills and behaviors necessary for interprofessional collaboration, even after only a brief session. However, this study was not designed to assess students' attitudes over time.

A longitudinal study conducted by Coster et al. (2008) assessed the interprofessional attitudes among undergraduate health profession students during their academic and clinical education. The study, which involved 1,683 students from three institutions and eight disciplines, assessed the students' readiness for and attitudes toward interprofessional learning, the strength of their professional identity, the amount of interaction with students of other professions, and how each domain changed over time. They were sampled four times during their programs of study: at entry, at the beginning of the second year, prior to the third year, and within months of graduation.

The results indicated that, except for those in nursing, the students' overall attitude became more negative and their readiness to pursue IPE declined during their programs of study, indicating decreased enthusiasm for learning from and about other professions. However, even though their enthusiasm decreased, a vast majority of these students remained positive about IPE as a pedagogical concept, thus leading to a somewhat mixed study outcome.

Robben et al. (2012) assessed the attitudes, skills, and behaviors of primary care professionals already practicing in their respective fields. Eighty professionals from seven different practices and various disciplines participated in a nine hr IPE

program focusing on elder care. The results were somewhat mixed. Two evaluation scales suggested improved attitudes and increased skills, while the results of a third scale did not change after the IPE program. However, a focus group yielded positive comments and noted increased knowledge and skills and overall reactions were positive. The interviewees noted they would be more likely to collaborate with other professions in the future as a result of the program.

On the basis of these and other studies, it appears that even brief exposures to IPE experiences might have a positive influence—helping health care professionals in various disciplines to understand one another and interact more effectively. Idaho State University (ISU) has been exploring and implementing the concept of IPE for nearly three decades. Its Interdisciplinary Evaluation Team (IET) course, which is a case-based, multilevel interprofessional model for graduate and undergraduate education in the health professions, has the potential to be a model for IPE in general.

Potential Model: IPE Course at ISU

The IET is a unique course providing authentic IPE experiences for students who are preparing to enter the health care professions. In this introduction to the principles and techniques of interdisciplinary evaluation, the students gain skills and knowledge in the interdisciplinary process that can be applied to their future health care practices. The IET—a one-semester, single-credit course—is designed to (a) provide the students with an introduction to various models of team assessment, (b) provide an overview of the assessment goals and

procedures associated with the nine disciplines participating in the course, (c) develop a recognition and appreciation of the overlap between disciplines, (d) integrate information from the various disciplines into the student's own profession, and (e) provide clinical training opportunities in the interdisciplinary team assessment process for the advanced students.

History of IET Course

In 1987, an innovative multidisciplinary evaluation team assembled at ISU with faculty from the departments of Audiology, Nursing, Psychology, Social Work, Special Education, and Speech-Language Pathology. Eight students enrolled in the original course and participated in the professional evaluation of clients. As interest and participation grew, the one-credit course was cross-listed for Audiology, Nursing, Psychology, Social Work, and Speech-Language Pathology. In 1992, a didactic component was added to accompany the clinical experience. Twenty students from the five cross-listed programs enrolled in the course; eight faculty members guided student learning on the rationale for multidisciplinary practice, discipline-specific evaluation strategies, and scope of practice. In 2006, the professions of Dietetics, Occupational Therapy (OT), Physical Therapy, and Special Education were added. Twenty-eight years later, the course enrolls approximately 100 students each spring semester from the nine disciplines, supervised by corresponding clinical faculty.

IET Course Participation and Structure

OT students who are enrolled in the IET course are selected by the core Master of

Occupational Therapy (MOT) faculty as part of the first of two clinical practicum courses. The students are assigned to the IET course based on several factors: (a) interest in pediatrics, (b) previous exposure or experience working with children with complex conditions, and (c) demonstrated development of professional abilities.

Each semester, the students are immersed in a didactic/practicum environment (see Figure 1).

Allowing more than 100 undergraduate or graduate

students from nine disciplines to engage in didactic and clinical instructional activities is highly demanding logistically. To address this, ISU uses synchronous distance learning (DL) technology linked to multiple classrooms and locations in the university system. The disciplines videotape all of their classroom lectures, client evaluations, and team meetings to allow for asynchronous review by the students.

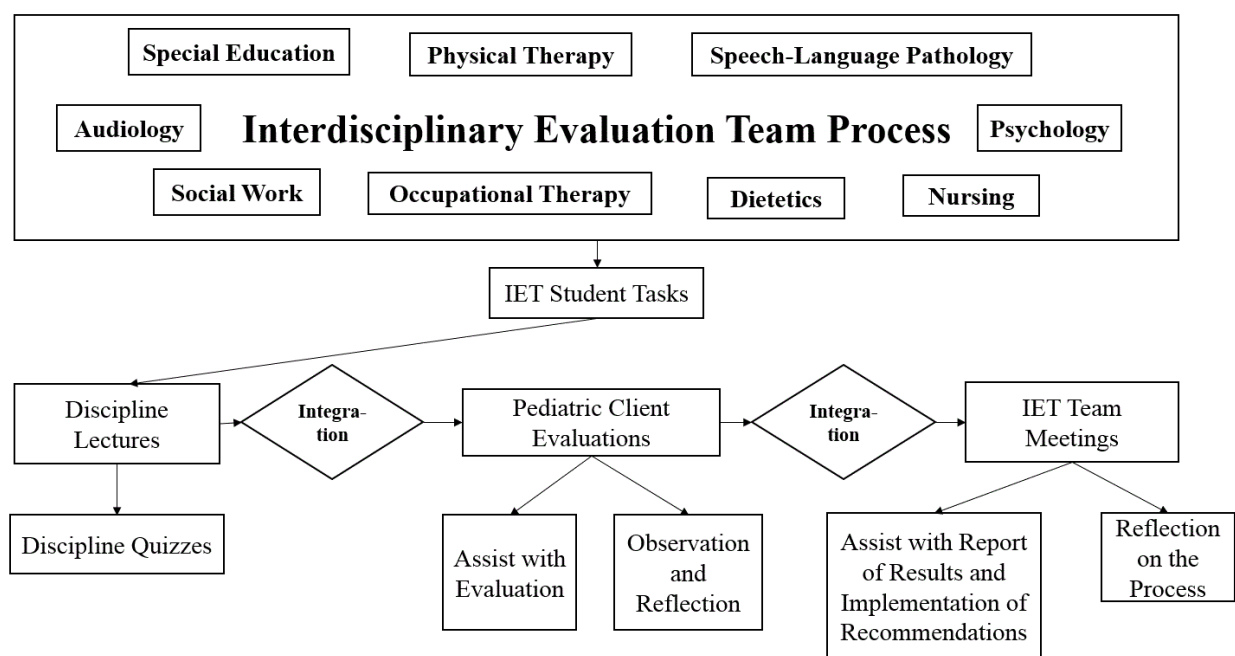


Figure 1. Overview of student tasks and experiences in the Idaho State University IET course.

To begin, all of the students attend class, which includes one or two lectures about a specific discipline followed by a quiz on the content. Additional lectures include information about collaborative team meetings, the implementation of recommendations, models of team assessments, and how each discipline fits in the interdisciplinary team model.

Next, the students observe or participate in the full evaluation process for one of three pediatric clients during the semester. These assessments are conducted during a weeklong series of evaluations by the nine disciplines represented. The students observe a few of the disciplines' evaluations and document the information gathered during the session, learning how to integrate and apply the

information learned in class to each discipline's evaluation. Not all of the students have the opportunity to attend all of the evaluations, nor do all discipline evaluations have enough space to accommodate all of the students. Thus, all of the disciplines videotape their client evaluations and upload them onto a secure server on the university's learning management system for the students to review prior to the final step—collaborative team meetings.

The students observe or participate in a team meeting for one of the three clients assessed. This meeting completes the evaluation process and models a team approach for sharing, summarizing, and integrating assessment information; prioritizing recommendations according to client and family needs; and identifying sources of service delivery. The family is at the center of this process and attends the team meeting.

The students take part in the team meeting in one of three ways. A few of the students are present in the meeting and take part in reporting findings and recommendations. Many of the students observe the proceedings of the meeting through synchronously transmitted DL. In addition, the videotaped proceedings of the meetings are uploaded so all of the students can review them prior to the end of the course.

Reflections of Occupational Therapy Students

A focus group was conducted at the end of ISU's IET course in the spring of 2014. All four of the graduate-level OT students who completed the course took part in the focus group. Using a brief

semi-structured interview guide, the students provided feedback about their perceptions and experiences related to the IET process and course. The questions related to the students' perceptions of how the IET course supported their understanding and ability to take part in the IPE process with pediatric clients. Specifically explored were the discipline lectures, OT evaluation process, observations of other disciplines, and participation in the team process and team meetings. The descriptions were tape recorded, transcribed verbatim, and reviewed and categorized based on similarity.

The students' criticisms related to: (a) not having in-depth IPE experiences earlier in the MOT curriculum, (b) needing more clients with whom to evaluate and interact, and (c) having limited opportunities to assist with the implementation of recommendations in the long term. In addition, they noted that the course occurs in the OT curriculum two semesters before students receive didactic instruction related to pediatric practice, evaluation, and interventions—a consequence of coordinating a formal IPE experience with nine health and education disciplines.

The students' statements overall, however, trended toward positive affirmation of the interprofessional experience. Based on how the students were selected for the course, they might have been strongly biased toward the course and the interprofessional experience, and their statements might not necessarily reflect the attitudes of all of the students taking part in the IET course.

However, the following statements exemplify the prominent attitudes shared by the students participating in the focus group.

When discussing their perceptions of the presentations about the role and scope of practice of each professional discipline, the OT students stated:

- “They [the faculty] provided a basic overview of many different disciplines, but most lectures were focused on the role of the discipline specific to interprofessional teams and pediatrics. It was very helpful to have an overview of what each discipline’s evaluation would be looking for.”
- “Even after working with other professionals for several years, I did not gain an understanding of the discipline from quite the same perspective as was offered by the lectures. The lectures revealed similarities and differences between professions that were not clear before.”

When discussing their perceptions of being observed during the OT evaluation by students from other disciplines, the OT students stated:

- “The practice of performing the evaluations while being observed by fellow students and my professor prompted me to be more thoughtful about the whole process. I realized this was a learning opportunity not only for myself, but also for the students watching so that each interaction with the child during the evaluation was more purposeful and thoughtful.”
- “The most valuable aspect of the evaluation experiences was having the opportunity to review videotaped sessions of myself interacting

with the child. This was initially very uncomfortable, but ended up being extremely valuable.”

When discussing their perceptions related to observing the other disciplines’ evaluation procedures with pediatric clients, the OT students stated:

- “I also observed techniques used by other disciplines that either worked well or did not work for the child and was able to use that information during the OT evaluations to help make them more effective.”
- “It was helpful to see how different evaluation rooms were set up. It was helpful to observe the interaction styles of the different evaluators and how they engaged with the child and parent during the evaluation.”

When discussing their perceptions related to participating in the interprofessional team meetings, the OT students indicated:

- “The process has helped me become much more of a team player because I not only realize what other disciplines are looking for, but also how the contributions of the entire team can work together to benefit the child much more so than a single discipline.”
- “Participating in the lectures, evaluations, and team meetings really enhanced my awareness because the whole process is so integrated and thoughtful. As a team member, I felt acutely aware of not only what the OT evaluation results would be but also what other disciplines would

find and bring and how all of this information fit together.”

When discussing their overall impressions of the IPE process and the IET course, the OT students stated:

- “As OT students we are constantly encouraged to always look at the ‘whole person.’ We must always consider every domain of development, every environmental factor, every body structure and function. I feel sometimes a bit overwhelmed. With every other discipline available to look so closely at the child’s progress and development from their specific lens, it is a bit of a relief to know that OT can focus more specifically on areas we are experts in and feel a little less pressure to be an expert on everything else.”
- “The IET process made me acutely aware of how broad OT can be and how important it is when working on a team to take advantage of the expertise of all members.”

Discussion

Over the years, ISU’s IET course has been shown to offer several advantages to all of the participants and stakeholders involved. For example, clinically, it provides the client’s family members, teachers, and service providers with a comprehensive snapshot of the client’s current level of functioning, diagnostics, strengths, and areas for improvement. The interprofessional process includes input and recommendations from the students, faculty, caregivers, teachers, and community service providers. Each pediatric client

is assigned to a case coordinator, who develops a plan of action based on those recommendations. The case manager then follows up with the client and his or her family to help facilitate and plan implementation.

The IET offers a significant opportunity for student professionals to take part in a team process well before they have established opinions or biases regarding interprofessional service delivery. The IET process broadens opportunities for students and their faculty to learn more from each other and be educationally challenged with the complexity of each case. It is not unusual for incongruent findings to emerge, resulting in critical analysis and respectful discourse, ultimately guiding the comprehensive plan of action.

In any team approach, of course, challenges are inevitable. Time and scheduling conflicts present the greatest hurdles for the clients, professionals, and students. Other notable barriers include role confusion and identifying and coordinating cases. Client challenges may include the overlap of information across disciplines and, most notably, feeling overwhelmed with all of the information and number of professionals involved during the evaluations and the team meetings. In spite of these and other challenges, the results of the spring 2014 focus group showed that the four OT students enrolled in the course displayed positive attitudes toward the IET course in general, the content, the client processes, and the interactions and discussions with students in the other professional programs.

Recommendations

For the OT profession to move toward increased inclusion of IPE as part of the training for entry-level OT students, the following recommendations should be considered.

For programs that have yet to engage in IPE:

- Consider starting with case-based learning activities with a related discipline. Journal clubs, for example, can be part of foundational courses in anatomy, physiology, and kinesiology. Also, case-based learning with one or more disciplines may work well as an extension of an intervention-based course.
- Develop curricular collaborations across health and education disciplines regarding the process of creating courses or instructional activities that meet the criteria of IPE.

For programs that are currently engaged in IPE:

- Increase institutional funding to support the direct costs for developing and implementing IPE so that it becomes the focus of some courses and course assignments rather than an addendum.
- When students from the same academic institution are completing clinical rotations at the same clinical site, orchestrate increased opportunities for those professions to collaborate on the same clients. Clinical affiliation sites,

with assistance from academic institutions, could orchestrate clinical case colloquia so professions could collaborate on real or simulated cases.

For professional associations:

- Develop dissemination case examples related to how academic institutions and OT programs (especially those that are smaller and have less funding) can develop instructional activities, courses, and institutional initiatives related to IPE.
- Consider highlighting IPE as a part of special interest sections, based on an area of practice, that have a focus on IPE or interprofessional collaborations in OT programs and clinics.
- Highlight points in model OT curricula where IPE may most effectively support the optimal times when students are ready to interact with other professions and with clients prior to clinical rotations.

Conclusion

The ISU's IET course is an ever-evolving process that models a team-oriented approach to pediatric evaluation while offering an IPE experience for the students. As ISU's IET course continues to seek excellence and serve as a model for IPE, cross-sectional and longitudinal data need to be collected regarding the efficiency and efficacy of the course. Plans are underway for future scholarly exploration regarding student attitudes

toward interprofessional collaboration and the short-term versus long-term impact of recommendations on the quality of life for clients and their families.

The ISU IET course has several specific attributes and unique features. For example, the course is: (a) case-based, with three cases per semester; (b) multilevel, with undergraduate (observational) and graduate students (direct care providers); (c) flexible to the needs of each discipline, using distance learning to support multiple programs and sites; (d) family-centered, meeting the needs in the community; and (e) offered as a course for credit and/or a service opportunity for faculty.

As stated by Brandt and Schmitt (2011), to achieve the goals of improved health outcomes and client experiences along with reduced health care costs, practitioners must be prepared to contribute to interprofessional care teams. We believe that IPE is the most efficient way to instill the values and skills that will ultimately support occupational therapists' abilities to function in and lead health care teams.

The objectives of the IET course are in alignment with the IECEP's (2011) recommended core competencies. We believe this unique opportunity available to faculty, students, clients, and caregivers in rural Idaho can function as an effective model for IPE in other OT educational contexts with limited resources, funding, and staff, and yet provide a rich experience for students.

References

- Bainbridge, L., Nasmith, L., Orchard, C., & Wood, V. (2010). Competencies for interprofessional collaboration. *Journal of Physical Therapy Education*, 24(1), 6-11. Retrieved from <http://www.ipe.uwo.ca/Administration/teachings/Competencies%20for%20Interprofessional%20Collaboration.pdf>
- Barrett, G., Sellman, D., & Thomas, J. (Eds.). (2005). *Interprofessional working in health and social care: Professional perspectives*. Basingstoke: Palgrave Macmillan.
- Brandt, B. F., & Schmitt, M. (2011). *Interprofessional education and training in the United States—resurgence and refocus*. International Health Workforce Collaborative (IHWf). Retrieved 9/15/2015 from http://rep.sc.medical.org/publicpolicy/imwc/Interprofessional_Education_US_Brandt_Schmitt.PDF
- Cameron, A., Rennie, S., DiProspero, L., Langlois, S., Wagner, S., Potvin, M., . . . Reeves, S. (2009). An introduction to teamwork: Findings from an evaluation of an interprofessional education experience for 1,000 first-year health science students. *Journal of Allied Health*, 38(4), 220-226.
- Coster, S., Norman, I., Murrells, T., Kitchen, S., Meerabeau, E., Sooboodoo, E., & d'Avray, L. (2008). Interprofessional attitudes amongst undergraduate students in the health professions: A longitudinal questionnaire survey. *International Journal of Nursing Studies*, 45(11), 1667-1681. <http://dx.doi.org/10.1016/j.ijnurstu.2008.02.008>
- Gray, J. M., Coker-Bolt, P., Gupta, J., Hissong, A., Hartmann, K. D., & Kern, S. B. (2015). The importance of interprofessional education in occupational therapy curricula. *American Journal of Occupational Therapy*, 69(suppl 3), 1-14. <http://dx.doi.org/10.5014/ajot.2015.69s02>
- Interprofessional Education Collaborative. (2011). *Core competencies for interprofessional collaborative practice: Report of an expert panel*. Washington, D.C.: Interprofessional Education Collaborative. Retrieved from <http://www.aacn.nche.edu/education-resources/IPECReport.pdf>
- Juntunen, A., & Heikkinen, E. (2004). Lessons from interprofessional e-learning: Piloting a care of the elderly module. *Journal of Interprofessional Care*, 18(3), 269-278. <http://dx.doi.org/10.1080/13561820410001731313>
- McPherson, K., Headrick, L., & Moss, F. (2001). Working and learning together: Good quality care depends on

- it, but how can we achieve it? *Quality in Health Care*, 10(suppl 2), 1146-1153.
<http://dx.doi.org/10.1136/qhc.0100046>
- Morison, S., Boohan, M., Jenkins, J., & Moutray, M. (2003). Facilitating undergraduate interprofessional learning in healthcare: Comparing classroom and clinical learning for nursing and medical students. *Learning in Health and Social Care*, 2(2), 92-104.
<http://dx.doi.org/10.1046/j.1473-6861.2003.00043.x>
- Parsell, G., Spalding, R., & Bligh, J. (1998). Shared goals, shared learning: Evaluation of a multiprofessional course for undergraduate students. *Medical Education*, 32(3), 304-311.
<http://dx.doi.org/10.1046/j.1365-2923.1998.00213.x>
- Robben, S., Perry, M., van Nieuwenhuijzen, L., van Achterberg, T., Rikkert, M. O., Schers, H., . . . Melis, R. (2012). Impact of interprofessional education on collaboration attitudes, skills, and behavior among primary care professionals. *The Journal of Continuing Education in the Health Professions*, 32(3), 196-204.
<http://dx.doi.org/10.1002/chp.21145>
- Walsh, M., & van Soeren, M. (2012). Interprofessional learning and virtual communities: An opportunity for the future. *Journal of Interprofessional Care*, 26(1), 43-48.
<http://dx.doi.org/10.3109/13561820.2011.620187>
- World Health Organization (WHO). (2010). *Framework for action on interprofessional education and collaborative practice*. Geneva: World Health Organization. Retrieved from
http://www.who.int/hrh/resources/framework_action/en/