CAB-V Oral Presentation – PPT Slides Friday, 2:05pm Section I-4 Abstract #224 Title: Developing collaboration ready health professions students for individual patient care and population health. Presenter: David Pole, PhD, MPH

Developing Collaboration-Ready Health Profession Students for Individual Patient Care and Population Health

Collaborating Across Boarders V Roanoke, VA. Sept 29 – Oct 2, 2015

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Disclosure Statement

I have no financial or other conflicts of interest to disclose related to this presentation



From Education to Practice... Collaboration Ready for Individual Patient Care and Community Health

 Discuss the IPE Programs at SLU
Introduce the IP Team Seminars
Introduce the IPE Community Practicum
Share the evaluations and impact for students and community partners



SLU-IPE Competency Domains Unique to the Mission of SLU Established in 2006 to guide IPE programs

- Interprofessional Practice
- Patient-Centered Care
- Wellness
- Patient Safety and Quality Care
- Social Justice
- IP Competencies applied in the context of where we work together
- Linked to IPEC in 2012



Conceptual Framework of SLU Minor in Interprofessional Practice (IPP)

(Concentration in IPP:4 courses/9 credits. Minor in IP Practice 7 courses/16 credits)

1 Cr./ Conc **IPE 1100*:** Introduction to IP Practice, Roles and Responsibilities of Health Professions; Collaboration Skills, Teams and Teamwork, and the SLU IPE Domains** The IPE and IPCP principles and skills introduced in IPE 1100 are then applied in the various contexts where health professions work together to accomplish the Triple Aim... IPE 3500*: IPCP in the context of the health care system and health promotion 3 Cr./ Conc HCE 2010: Foundations of Clinical Health Care Ethics 3 Cr./ Minor **IPE 4200*:** IPCP in the context of individual patient care (caring response) decision making 3 Cr./ Conc IPE 4900*: IPCP in the context of community/population health, HP/DP , Comm Practicum 2 Cr./ Conc 2 Cr./ Minor IPE 4905: IPCP in the context of the clinical care team, Clinical Practicum **ORES 2320:** IPCP in the context research, IP care team and impact on patient care/outcomes 2 Cr./ Minor

David Pole/Irma Ruebling 5/23/14 *Concentration in IP Practice

** Five SLU IPE Domains include: Interprofessional Practice, Patient-Centered Care, Wellness, Patient Safety & Quality, and Social Justice

Integrating IPE into Post-Baccalaureate Health Professions: IP Team Seminars (IPTS)

- Medicine
- Physician Assistant
- Physical Therapy
- Pharmacy (STLCOP)

Nursing (ABSN, AGMSN), Social Work (MSW), Occupational Therapy *Nutrition/Dietetics Athletic Training*

- Series of Six, 90-min Seminars
- Revised curriculum framework in 2012, embed IPEC behaviors and critical reflection on clinical application

> Pole, D. (2015) Doctoral dissertation on medical student outcomes

L'Ecuyer, K., Pole, D., & Leander, S. (2015, April Special Issue). The use of PBL in an interprofessional education course for health-care professional students. *The Interdisciplinary Journal for Problem-Based Learning*, Vol.9, Issue 1.



Curriculum Map	IPCP Domains and Selected Competency			
IPTS Course Activities	(Select Core Competencies for IPCP, IPEC 2011)			
Session 1: Intro self, intro	Domain I: Values/Ethics for IP Practice			
profession, discuss scope of	1.Place interest of patients and populations at the center of IP health care delivery (2, 3, 4)			
training in health profession	4. Recognize and respect the unique cultures, values, roles/responsibilities, and expertise of other health professions (1,2,4)			
program, scope of practice for	6. Develop a trusting relationship with patients, families, and other team members (1, 2)			
profession, and personal	9. Act with honest and integrity in relationships with patients, families, and other team members (4, 5)			
experience with patient care.	Domain II: Roles and Responsibilities for Collaborative Practice			
Complete teamwork checklist,	1.Communicate one's roles and responsibilities clearly to patients, families, and other professionals (1, 2, 3,			
discuss 1:1 what attributes you	4, 5) 6. Communicate with team members to clarify each member's responsibilities in executing components of a			
bring to a team (Obj. 1)	treatment plan (2, 3, 4)			
Session 2: Students given complex	8. Engage in continuous professional and interprofessional development to enhance team performance (3,			
patient case (paper) with chart	5, 6)			
notes from their profession	Domain III: Interprofessional Communication			
(provided by faculty). Students will	1. Choose effective communication tools and techniques, including information systems and communication technologies, to facilitate discussion and interactions that enhance team functions (2, 3, 4)			
practice having a BRIEF TEAM	2.Organize and communicate information with patients, families, and health care team members in a form			
HUDDLE, and Create Discharge	and format that is understandable, avoiding discipline specific terminology when possible (2, 3, 4, 5)			
Plan. Students will introduce chart	3.Express one's knowledge and opinions to team members involved in patient care with confidence, clarity,			
notes from their profession and	and respect, and work to ensure common understanding of information, treatment, and care decisions (1, 2, 3, 4, 5, 6)			
discuss needs, concerns, and	6. Use respectful language appropriate to a given difficult situation, crucial conversation, or interprofessional			
potential patient safety issues	conflict (3, 5)			
with team prior to going in to see	8. Communicate consistently the importance of team work in community and patient-centered care (5, 6)			
the patient. Students move from	Domain IV: IP Teamwork and Team-based Care			
•	3.Encourage other health professionals – appropriate to the specific care situation – in shared patient- centered problem solving (2, 4, 6)			
uni-professional to	6. Actively encourage self and others to identify and constructively manage disagreements about values,			
interprofessional approach and	roles, goals, actions that arise among health care professionals and with patients and families (2, 3, 4, 5)			
care plan (Obj. 1, 2, 3)				

Student Narrative Themes (Inductive)

Appreciation for roles and responsibilities	128	
Respect for other professions, culture/environment of respect	49	
Effective communication and the impact on patient care	128	
Good teamwork maintains focus on patient-centered care	45	
IPTS attribution unique quotes, specific and explicit statements	51	
Transformational statements unique quotes	62	

(100/463/350/113)

Theme 1: Increased appreciation for the roles/responsibilities of different professions involved in the patient care (128)

• "Prior to this course, I had only a basic understanding about the roles the individual specialties played in the care of a patient. I would not have known the steps needed to provide the best care to the patient. Since this was a very complex patient... IPTS has given me a better understanding as to the scope of care provided by each of the teams" (M-47).

Theme 6: Transformational learning statements (62)

 "The IPTS discussions allowed me to interact and learn from members of other professions and these [interactions] made it easier for me to approach them during actual patient care situations. Working through the IPTS sessions also helped me identify areas where I needed to improve in order to become a more effective member of the interprofessional healthcare team. Namely, I needed to improve my willingness to communicate with other professionals in the care of the same patient" (M-48).

Outcomes: National and Institutional Context

Student Theme (# of quotes)	IPEC Domains	SLU IPE Domains
Roles and Responsibilities of other professions (128)	Roles and responsibilities for IPCP	Interprofessional Practice
An environment that demonstrated respect for the contributions of all professions (49)	Values and ethics of IPCP interprofessional communication	Interprofessional Practice
The importance of effective communication in patient care and outcomes (128)	Interprofessional communication	Patient Safety and Quality Improvement
The impact of effective teamwork to help maintain a focus on patient centered care (45)	Interprofessional teamwork and team-based care	Patient Centered Care



Revising IPE Curriculum Methods to Improve Health Professions Students becoming Collaboration-Ready for Interprofessional Collaborative Practice: Medical Student Outcomes of an Interprofessional Team Seminars Course



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Greater good."

Study Aim

To assess clinical application of interprofessional education didactic sessions using student critical reflections.

Background

The Interprofessional Team Seminar (IPTS) course engages over 650 post-baccalaureate students from seven professions during the clinical training phase of their programs.

Physical Therapy

Health Professions Include:

- ♦ Medicine
- Nursing
- Occupational Therapy Physician Assistant Social Work
- Pharmacy (St Louis College of Pharmacy)

Curriculum team & facilitators represent all 7 professions

Revised Curriculum Design

- For AY 2012-13. the curriculum design was revised to move away from Scholarly- Academic Ideology (Focus: Knowledge Transfer) to an integrated model using Social Efficiency Ideology (Focus: Behavioral Competencies) and Learner Centered Ideology (Focus: Internalized Meaning)
- · Maintained a series of six seminars concurrent with MS3 clinical clerkships.
- Selected IPEC Core Competencies for Interprofessional Collaborative Practice were embedded into the activities, requiring students to explicitly practice the desired IP behaviors during the activities.
- · A Critical Reflection assignment was added addressing application in a clinical setting.



Methods

David Pole, PhD MPH^{1,2}; Milta O. Little, DO, CMD³; Fred Rottnek, MD, MAHCM²;

¹Center for Interprofessional Education & Research, ² Family and Community Medicine, ³Internal Medicine, Division of Gerontology & Geriatric Medicine

Assignment: Students were instructed to write a structured critical reflection (CR) on a clinical experience and identify & describe how interprofessional teamwork impacted patient care or outcomes. They were instructed to consider this in the context of the activities in IPTS.

Qualitative Study Design. Descriptive content analysis of 101 medical students critical reflections. (100% of the complete, usable critical reflections out of 175 medical students).

- Analysis of 101 medical student critical reflections resulted in 463 unique, coded quotations.
- Investigators conducted a deductive content analysis to determine how the student critical reflections correlated to course learning objectives.
- · And an inductive content analysis was completed to identify themes across the student reflections.

Results: Themes within Student Quotes

- 1. Increased appreciation for roles and responsibilities of different professions involved in patient care (128 quotes).
- 2. Respect for other professions, creating an environment/culture of respect (49 quotes)
- 3. Effective communication and the impact on patient care (128 quotes).
- 4. Good teamwork maintains a focus on patient-centered care (45 quotes).
- 5. Specific, explicit statement of attribution to IPTS that changes the students' understanding and/or behaviors that impact patient care (51 quotes).
- 6. Transformational learning statements about IPE/IPCP and future practice (62 quotes).

NOTE: The four primary themes from the inductive content analysis match all IPEC Competency Domains.

Exemplar Student Quotes

- · I will now be sure to emphasize the critical nature of certain patients during handoffs (24)
- The teamwork enabled patients to receive their care in a timely manner and led to shorter hospitalizations. Interdisciplinary rounds nearly eliminated information discrepancies and allowed consistency, which translated to a more coherent plan of care and ultimately better care for the patient (36)
- · Having many health care professionals trained in different ways and approaching a patient in a different manner helps the patient, and the rest of the team better understand the patient and provide better care (2)
- IPTS sessions made me think of the medical team as a coordinated unit, rather than a collection of individuals providing specific services (62)
- IPTS helped to identify areas of weakness as well as areas of strength that have helped me in interactions with different health professionals during my clinical rotations thus far (65)
- The IPTS course is about communication, communication that extends beyond the scope of the patient chart notes... IPTS more thoroughly introduced me to the other aspects of patient care and the value that everyone brings to the table (74)
- · IPTS made me realize that as a physician I am not alone. We can definitely rely on each other and help each other while respecting each other's roles. By doing so, we can be more effective as well as work well together (43)

Conclusions and Implications

- 1. Adapting curriculum design and ideology had a strong, positive impact on accomplishing the desired learning outcomes.
- 2. Embedding the practice of IPEC core competencies in the activities improved students' awareness & skills as collaborationready practitioners.
- 3. IPTS enabled students to identify and describe roles of other professions and better engage with them in patient care.
- 4. IPTS provided a "safe" place to practice teamwork and communication skills resulting in students' improved ability to identify positive and negative teamwork in a clinical setting and the impact on patient care.

Collaboration-Ready for Community / Population Health

- Course Advisory Committee
- Faculty Facilitators
- Community Sites and Site Coordinators
- 30 agencies and sites serving medically underserved populations

Address the Triple Aim: Population Health

- Learn about community needs
- Learn about agency efforts to address needs
- Develop and implement a project in support of the agency & community need



IPE 4900: Learning Objectives

- Exhibit effective interprofessional teamwork in a community setting for population health
- 2. Engage with a community health agency and the people they serve
- 3. Plan and implement a project that aims to improve health or promote wellness
- 4. Evaluate a community health/wellness project
- Reflect on personal and societal biases and preconceptions in terms of income, race, culture, religion, age, sexual orientation, and/or ability, and their impact on individual health and health care system

CHILD SAFETY FROM SUMMER HEAT **NEIGHBORHOOD HOUSES:** FROEBEL LITERACY ACADEMY AFTER SCHOOL CARE

Team 22 Members: Alison Finan [Physical Therapy], Kathleen Goldman [Occupational Therapy], Jenee Jones [Nursing],

Josh Koutas [Physical Therapy], Dave O'Loughlin [Athletic Training], Julia Schroeder [Physical Therapy]

AGENCY DESCRIPTION

- Neighborhood Houses is part of the St. Louis Public School System.
- The program educates students from preschool through fifth grade.
- Our project covers the afterschool program provided through Neighborhood Houses to students at Froebel.

Mission statement of Neighborhood Houses:

"Neighborhood Houses inspires children and families to reach their magnificent potential through transformative, educational and empowering experiences anchored in faith, hope and love" (After School Programs, n.d.).

Froebel Literacy Academy strives to:

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"...provide a guality education for all students and enable them to realize their full intellectual potential" (Saint Louis, 2002).

- Continuum of care: community-based organization
- Responds to the needs of the neighborhood population through providing a positive environment for children
- Services provided:
 - Educational enrichment
 - Character education
 - Life skills
 - Nutrition and fitness
- The program is funded by grants from over 20 different agencies; United Way being the main contributor since 1955.

PROJECT DESCRIPTION

- This project is centered around surviving and thriving in the summer heat.
- It discusses various preventative strategies and warning signs to heat-related issues.
- The project addresses different ways for children to stay active and safe in the summer.
- It introduces first aid and some light aspects of rehabilitation.
- Each portion of information has an activity to go with it in order to help the children remember what our group has presented.









REFLECTION

- Athletic trainers' perspective:
 - Prevention is key for well-being
 - I.e. hydration, nutrition, and sunscreen
- Physical Therapists' perspective:
 - prevention and education are key
 - · Inform children about precautionary safety in the
 - · Suggestions on how to stay active safely
- Occupational therapists' perspective:
 - · Health and wellness are key
 - Educating children to participate in occupations outside in the heat without compromising their health and wellbeing
- Nurses' perspective:
 - Education is key
 - Including visuals and activities to enforce concepts
 - Work together to provide patient centered care
 - and involved patient demographics

PROJECT OUTCOMES

- Children will learn about preventative measures for playing in the heat (i.e. applying sunscreen, proper nutrition, and symptoms of heat exhaustion).
- Children will learn actions to take once heat exhaustion is recognized.
- Children will receive practical suggestions of games and activities to stay active and safe during the summer months.

POSSIBLE FUTURE ACTIONS AND NEXT STEPS

- Addressing how to deal with people who suffer from heat related injuries and the best way to treat them
- Handing out samples may aid in making a more lasting impression on the children
 - Sunscreen
 - Water bottles
 - Cool clothing

Neighborhood Houses After School(Sp.2014)

Evaluation of Community Impact

- No student team is going to change community health in one semester
- Assess the community agency ability & satisfaction to engage in collaboration, use of student teams
- Agency clarification of project goals, mission, & community need
- How have projects increased agency capacity and/or ability to meet community health needs?
- Develop longitudinal projects
- Agency reports, outcomes and links to HP2020



Building a Model for Community Collaboration & IPE

- Grant from J. Macy Foundation
- Added Community Coordinator
 - Faculty Resources
 - Summary of past projects
 - Google Sites: https://sites.google.com/a/slu.edu/slu-ipe-490---corrections-medicine/home
- Site Visits and Site Satisfaction Survey (2014-15) (5 pt. scale)

 - Engagement with agency in planning, implement, evaluation.... 4.22

 - Students engaged agency in planning/implementing projects.... 3.64
- CBPR Approach Agency Goals for addressing community health needs, have these drive projects





Background/Rationale

The goal of IPE is to prepare students as collaboration-ready members of interprofessional care teams. Interprofessional Collaborative Practice can contribute to improve patient outcomes (WHO, 2010).

Additionally, IPE and IP Collaborative Practice have been identified as key strategies to address the **Triple Aim** (Brandt, 2014), improved individual patient care experience and outcomes, improved population/ community health outcomes, and cost-effective delivery of care.

The Saint Louis University (SLU) IPE Framework has guided the implementation and evaluation of the IPE programs since their formal integration into the curriculum in 2006. The SLU IPE framework has five domains, including: addressing wellness & prevention and addressing social justice (health inequities) (Breitbach, 2013).

The Interprofessional Community

Practicum course (IPE 4900) enables students to practice interprofessional teamwork in collaboration with a community agency. Students develop a project that supports and advances the goals of the agency and complete a poster presentation.

The course has been provided each semester since 2009 (12 semesters) with ~30 teams of five students (~150 students per semester)

We now collaborate with over 30 agencies addressing needs of underserved populations in the region.

References

World Health Organization. (2010). Framework for Action on Interprofessional Education and Collaborative Care. Geneva: World Health Organization.

Brandt, B., Lutfiyyal, M.N., King, J., & Chioresol, C. (2014) A scoping review of interprofessional collaborative practice and education using the lens of the Triple Aim. J. Interprofessional Care Sept. 2014. 28(5):393-9.

Breitbach, A., Sargeant, D., Gettemeier, P., Ruebling, I., Carolson, J., Eliot, K., Kienstra, K., Gockel-Blessing, E. From by-in to integration: Melding an interprofessional initiative into academic programs in health professions. J.Allied Health (2013) Fail: 42(3) e67-73.

Preparing Health Professions Students to Become Collaboration-Ready To Improve Community/Population Level Health

David Pole, PhD, MPH, Anna Hardy, RN, MPH, Leslie Hinyard, PhD, MSW Saint Louis University Center for Interprofessional Education and Research

Engaging Community Partners to Improve Team Projects and to Determine Community Impact

- **Our primary assumption** is that no team engaged with the community for one semester is going to change population health.
- **Our focus** was to expand sustainable partnerships with community agencies, enhance their capacity to achieve agency goals, develop a method to quantify the positive impact on the community, and strengthen the learning experiences for students to become collaboration-ready for community/population health. This work was supported by a grant from the **Macy Foundation**.

Specific Activities

- 1. The Community Coordinator conducted face-to-face visits and phone calls with each agency partner to expand understanding of the goals of the IPE Community Practicum and clarify the primary goals of the agency in service to their community.
- 2. We developed an Agency Satisfaction Survey in collaboration with our community partners.
- 3. We required all student projects to respond to and align with the agency goals.
- 4. We required the students to identify the link between their projects and HP2020 goals.
- 5. We developed "Google Sites" for every agency with resources and each semester's project.
- 6. We added partner agency site coordinators to the course advisory committee.

Results								
Table 1. Likert-type items using Strongly Disagree-Strongly								
Item	Mean (SD)	Mode	Table 2.	FL 14 Projects	SP 15			
Overall, I was satisfied with the partnership between my agency and SLU IPE.	4.88 (0.32)	5	HP2020 Topic*	(n)	(n)			
The IPE program welcomes and uses input from my agency in a way that makes us feel like equal partners.	4.75 (0.4)	5	Healthy Behaviors Maternal and Infant	46	27 2			
My agency and the IPE program have established trust between one another.	4.69 (0.60)	5	Maternal and Infant Health	5	2			
I felt well informed about the purpose of the IPE Program	4.63 (0.50)	5	Access to Care	3	7			
I feel the activities student must do to complete this course	4.56 (0.63)	5	Quality of Care	5	6			
offers an adequate opportunity for students to learn about and perform community health practice.			Injury Prevention	4	11			
In general, the benefits of working with the students			Other	2	4			
outweighed any burdens it may have added to our work.	4.56 (0.73)	5	Responsible Sexual	1	0			
Participation in the Community Practicum Course has resulted in valuable benefits for my agency.	4.50 (0.63)	5	Behavior Social Determinants	1	6			
Communication with the faculty advisor was satisfactory.	4.50 (0.52)	4, 5	Substance Abuse	1	0			
This partnership positively affected the community.	4.50 (0.52)	4, 5	Mental Health	0	2			
The student team project(s) helped address our agency's	· · · · · ·			0	2			
overarching goals and objectives.	4.44 (0.51)	4	Chronic Disease	0	11			
The students engaged me and/or my agency in planning, implementing, and evaluating their project.	4.40 (0.74)	5	Environmental Determinants	0	0			
Communication with the student team was satisfactory.	4.25 (1.00)	4	Tobacco	0	0			
The students engaged my agency's target audience/ client population in planning, implementing, evaluating projects.	4.13 (0.72)	4	Priority topics described Indicators for Healthy Pe					



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Publication on Student Outcomes

"Power of Many Minds Working Together" A Qualitative Study of an Interprofessional Capstone Course. Leander, S.A., Maloney, S.M., Ruebling, I., Banks, R., Pole, D., Kettenbach, G. (2014). Journal of Research in Interprofessional Practice and Education. Vol 4.2, Dec.2014.

Conclusions

- 1.Students can articulate beliefs, emotions and behaviors related to interprofessional teamwork.
- 2.Students understand interprofessional practice as a process, rather than a one-time event.
- Students developed a new sense of apperception for the value of, and skills to practice, communication across teams and with the community members.
- 4. Students valued the communitybased interprofessional projects as a unique learning experience.

Representative Student Quotes

"The power of many minds working together can be much more dynamic, efficient and thorough than one person making decisions"

"I worked with the same group for almost 4 months and I noticed a huge change in our team dynamics. Now when we meet we can talk things out, bounce ideas off each other, give constructive advice, and tips without worrying about voicing our opinion or offending other group members"

"It [IPE 4900 project] has taught me to be respectful of other professional opinions and how to work together with other healthcare members to achieve a common goal for a patient"

Student Outcomes

- First experience in the community for many students
- Posters and presentations improved each year
- Critical Reflections
 - Different needs & assets in community than were aware of before
 - Challenges of working as a team
 - Learned significantly about teamwork in a real setting and project
 - New awareness of challenges of working in/with community

Leander, S.A., Maloney, S.M., Ruebling, I., Banks, R., Pole, D. & Kettenbach, G. (2014). "The Power of Many Minds Working Together": Qualitative Study of an Interprofessional Service-Learning Capstone Course. *Journal of Research in Interprofessional Practice and Education, V4.No 2*, 1-17.



Conclusion: Collaboration Ready for Individual Patient Care

- 1. Students practice IPEC Competency behaviors embedded in case-based learning activities
- 2. Faculty Guides/development help to facilitate personal meaning and clinical application
- 3. Students' ability to identify and describe teamwork in a clinical setting and the impact on the patient
- 4. Students demonstrate ability to provide case report of IPCP to peers



Conclusion: Collaboration Ready for Community/Population Health

- Students develop skills to identify community health needs and understand community agencies
- 2. Help the agencies implement projects related to agency goals and HP2020
- 3. Students discuss projects in the context of IPE 4900 learning objectives to cultivate personal meaning
- Present professional poster and oral report on project, meaning to community, & personal meaning



QUESTIONS or COMMENTS



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