

Going Big: Integrating IPE Across a Large Health Sciences Campus

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Disclosures

- Employed by VCU, MCV Physicians
- Funded by HRSA, CMS, Reynolds Foundation, and Macy Foundation (prior)
- Co-owner of an educational technology company stemming from one of our IPE programs
- Many faculty, staff, and students have contributed to this presentation

Objectives

- Describe a framework for integrating interprofessional education across a large population of learners
- Give examples of different instructional modalities for interprofessional education
- Outline some initial work for a developmental approach to assessing interprofessional competency

Virginia Commonwealth University

- 53 acre Health Science campus
- 5 health professional schools: allied health, dentistry, medicine, nursing, pharmacy
- Tertiary academic medical center
- 3200 clinical learners

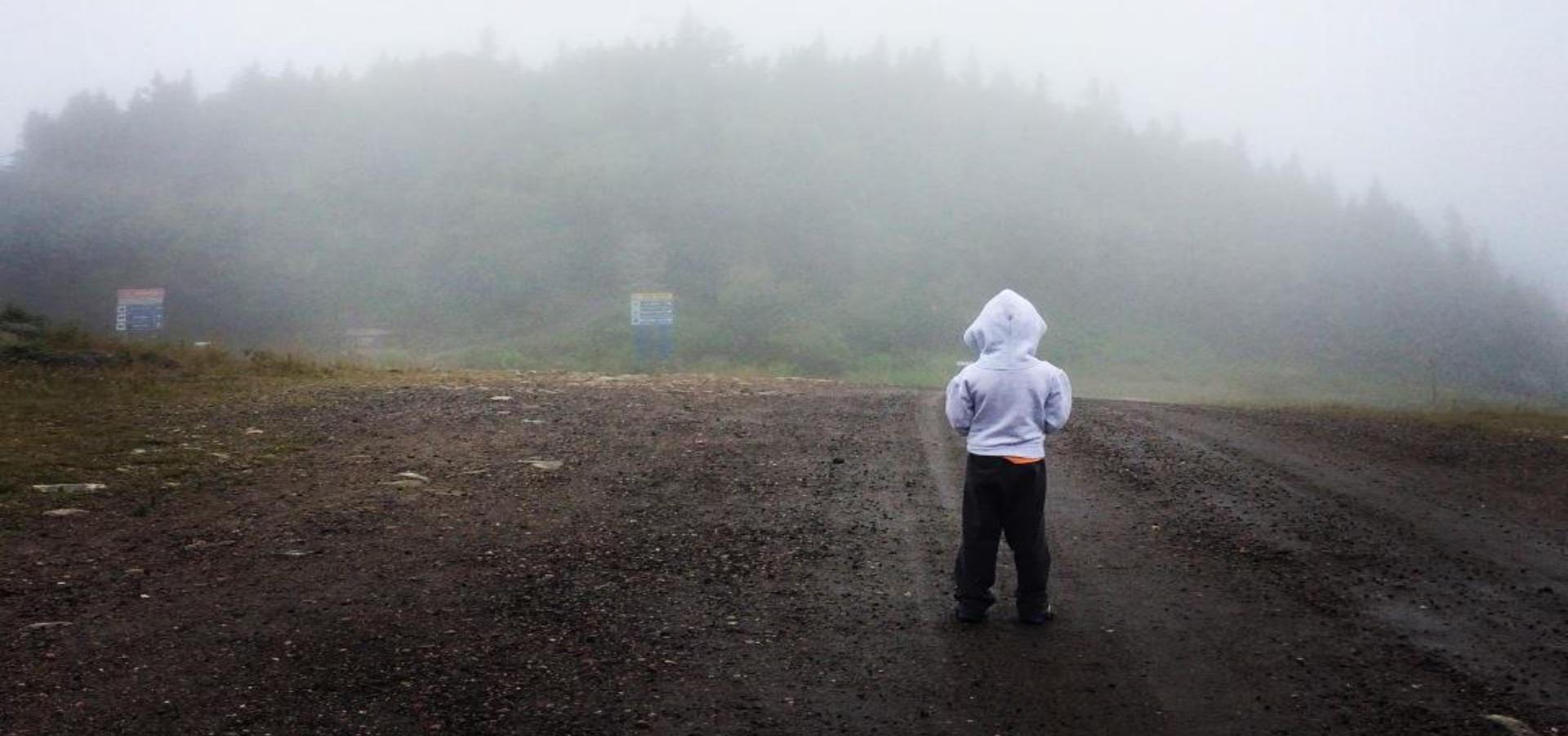


- Monroe Park campus
- School of social work, departments of psychology and health & human performance
- Distant training sites:
 - Inova-Fairfax (70 miles north)
 - UVA (70 miles west)



The Challenge:

Meet our organizational missions and accrediting standards by implementing effective interprofessional education.



The Center for Interprofessional Education and Collaborative Care

- Official center at VCU in January of 2013
- >1500 learners participate in Center programs annually
- Students and faculty from all five health science Schools, the School of Social Work, & Dept of Psychology



Interprofessional Collaborative Practice Competencies

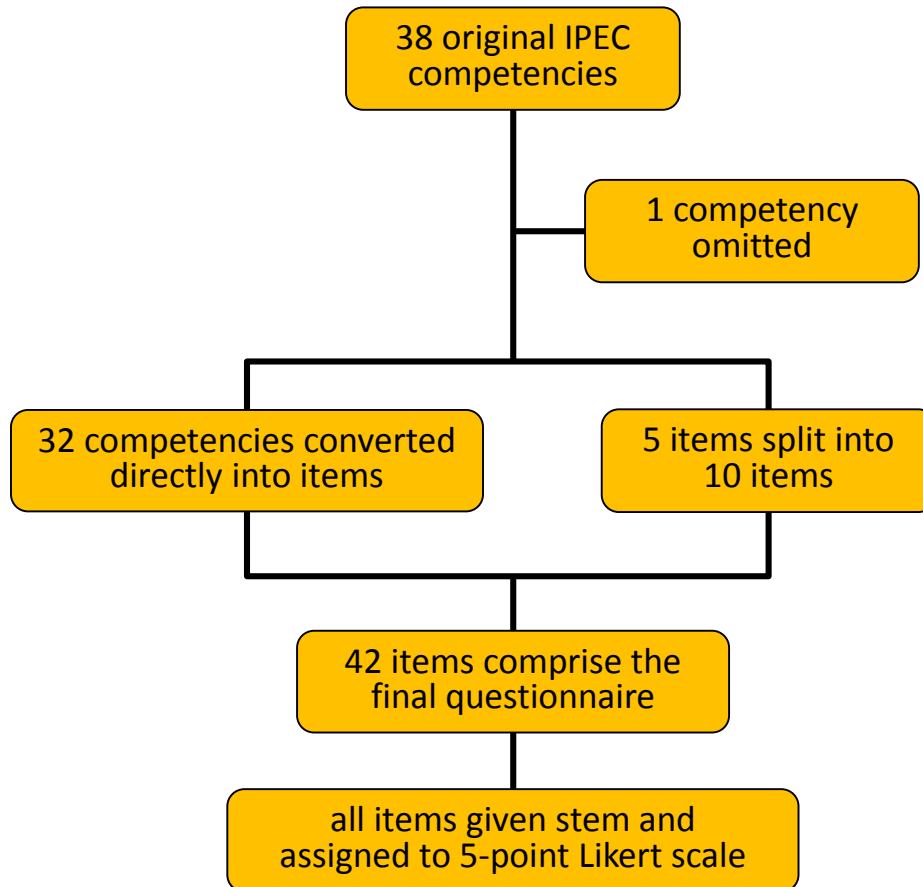
Values/
Ethics
(n = 10)

Roles/
Responsibilities
(n = 9)

Inter-
professional
Communication
(n = 8)

Teams and
Teamwork
(n = 11)

Tool and Survey Methods



- Assesses student self-efficacy using a Likert scale
- Administered as an online survey with invitation email
- Sent to students by program leader

Survey Population

- All students enrolled in clinical degree programs on VCU's Health Science Campus

Allied Health
Nine Departments

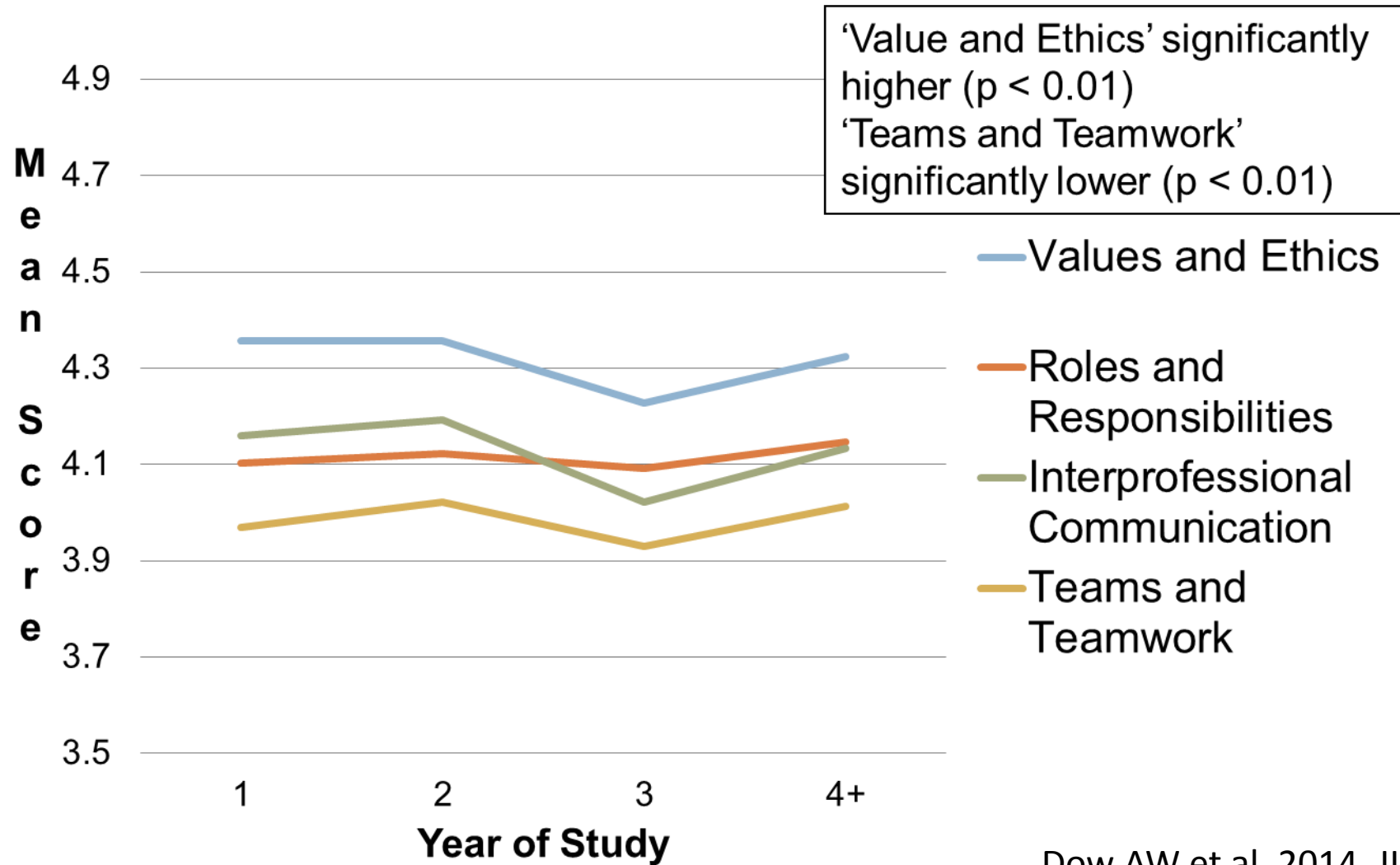
Dentistry
DDS and Dental
Hygiene

Medicine
MD and non-MD
students

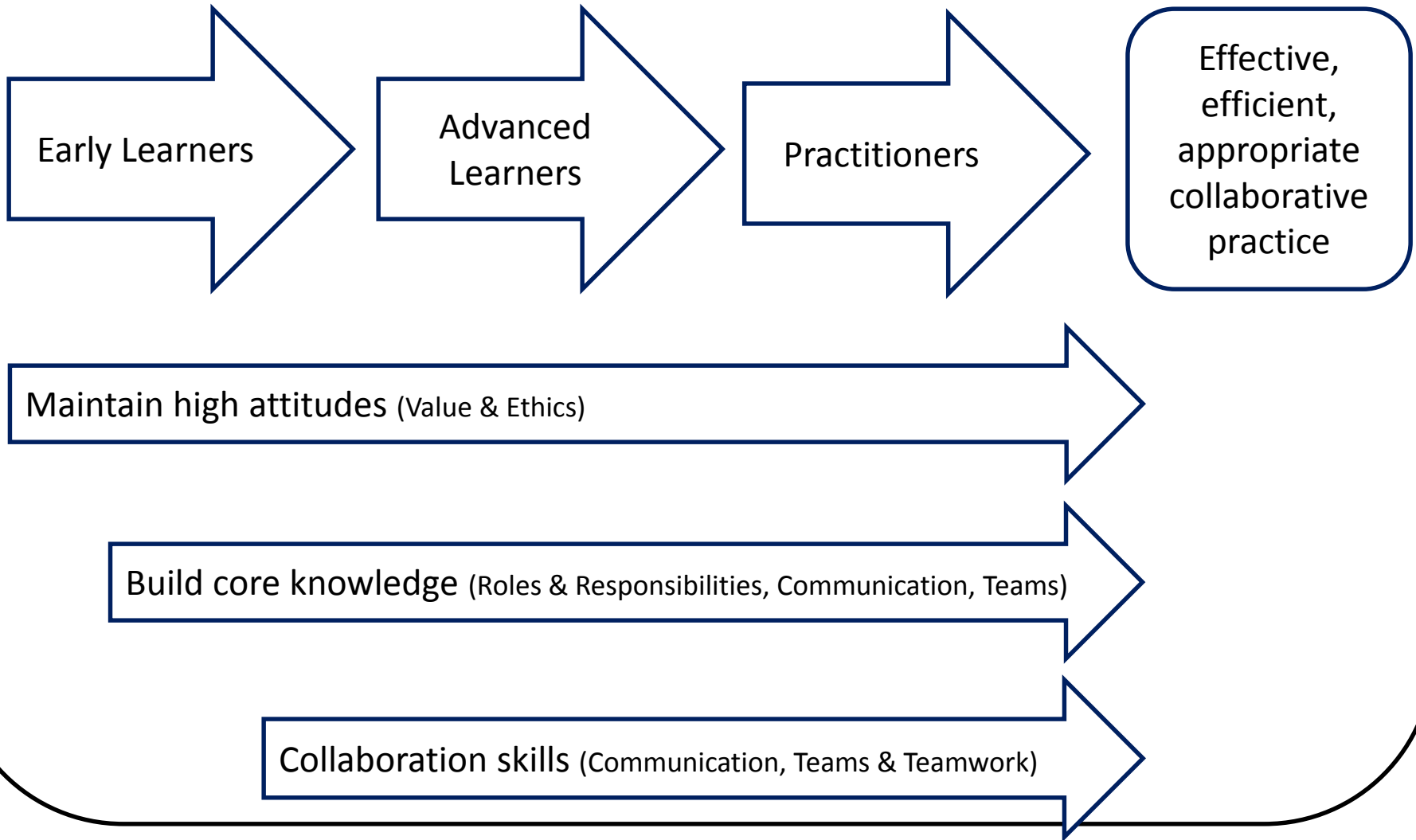
Nursing
BSN, MSN, PhD

Pharmacy

Mean Scores by IPEC Domain versus Year of Study



Center for Interprofessional Education and Collaborative Care



Context-Specific Experiences

Profession-Specific Experiences

Foundational Health Professions Experiences

Pre-Curricular Experiences

Foundational Health Professions Experiences

Interprofessional Case Series

- >600 students
- Classroom-based
- Pericurricular sessions → full 1-credit course

Foundations of Quality and Safety

- ~500 students
- Classroom-based
- Full 1-credit course



2012-2013

Extracurricular Interprofessional Case Series

- Meet your peers
- Learn something (roles)
- Encouraged but not required
- Pizza
- Positive evaluations with suggestions



2012-2013

Extracurricular Interprofessional Case Series

- Meet your peers
- Learn something (roles)
- Encouraged but not required
- Pizza
- Positive evaluations with suggestions

2013-2014

Pericurricular Interprofessional Case Series

- Meet your peers
- Learn something (roles, teams)
- Required*
- Positive evaluations with suggestions



2012-2013

Extracurricular Interprofessional Case Series

- Meet your peers
- Learn something (roles)
- Encouraged but not required
- Pizza
- Positive evaluations with suggestions

2013-2015

Pericurricular Interprofessional Case Series

- Meet your peers
- Learn something (roles, teams)
- Required*
- Positive evaluations with suggestions

2015-2016

Curricular Foundations Course

- Meet your peers
- Learn something (roles, teams, systems)
- Required 1-credit course

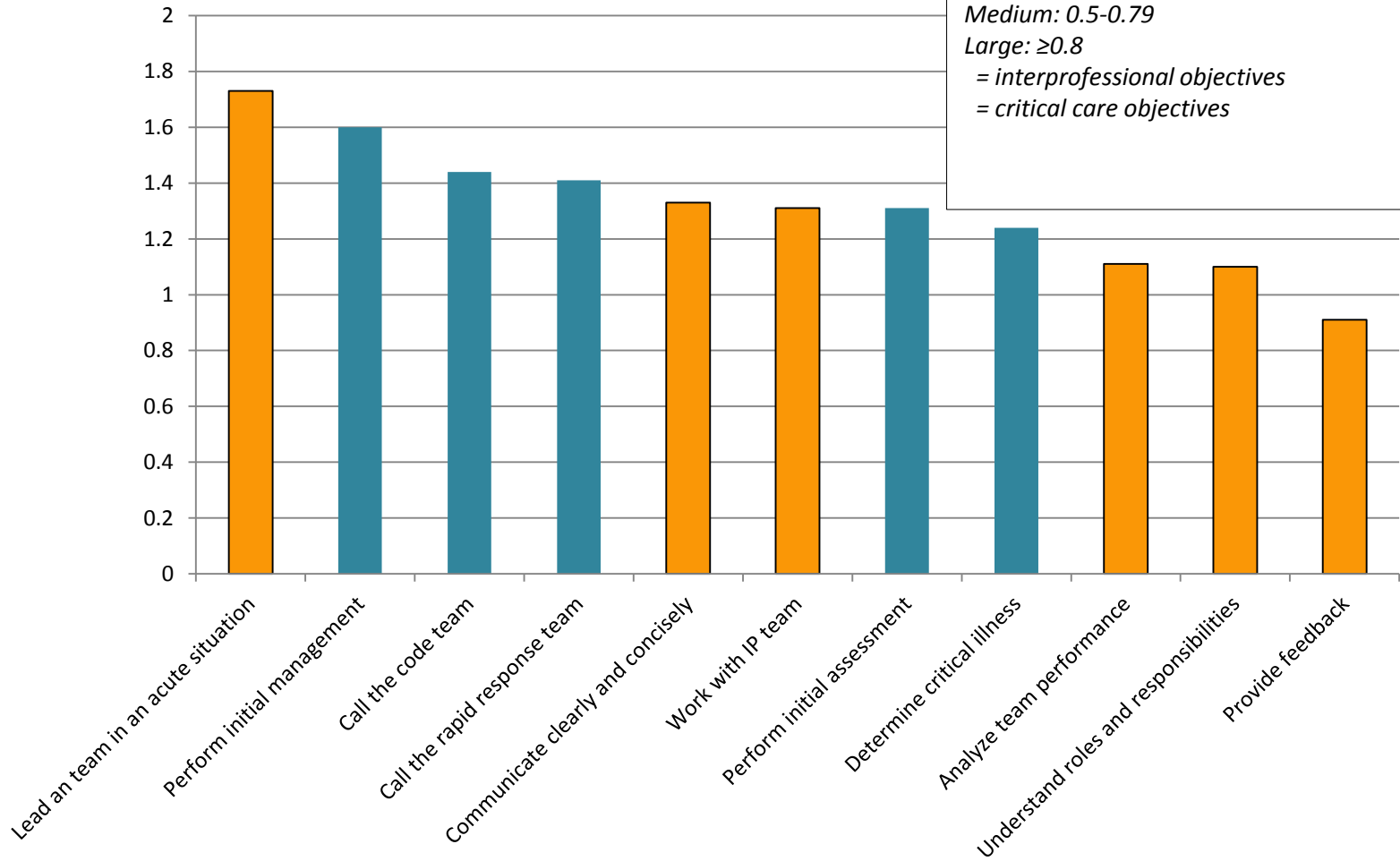
Profession-Specific Experiences



Interprofessional Critical Care Simulations

- All BSN4s and M4s (320 students)
- Three two-hour sessions around simulators: how do you manage a patient with an acute clinical deterioration?
- Student feedback: more!

Effect Sizes between Retrospective Pre and Post Ratings by Item



Profession-Specific Experiences

Interprofessional Virtual Case

- Homegrown case system for asynchronous collaboration
- ~600 participants annually (SOM, SON, SOP, SOSW)
- Now being used at several other institutions

Case of Mattie Johnson

Logout

Gregory House

Case Drug List Problem List Resources 360 Eval User Profile

Unit 1 Unit 2 Unit 3 Unit 4

PATIENT CASE

Vital Signs

- [01/22/2012] today BP 150/95 pulse 92 respirations 20 per min ...
- [01/22/2012] vital signs on Tuesday for first day of therapy: temp 37.4 C respirations 18 BP 135/90 pulse 80...
- [01/21/2012] T 37.8C BP 160/90 HR 96 R 28 92% 4LNC...
- [01/21/2012] In hospital: BP is 160/90 Heart rate of 96 Respirations of 28 Oral Temperature of 37.8 Celsius Satting 92% on 4 liters of oxygen by

Recent Medical History

- [01/22/2012] -right bipolar total hip arthroplasty on Monday for severe OA -on Tuesday for her first day of therapy; muscles were atrophic thin, loose
- [01/21/2012] 79yo AAF who is Post op day 3 from right total hip replacement. Called for concerns of AMS. Pt is very confused and is trying to escape.
- [01/20/2012] Mattie Johnson is a 79 yo AAF with PMH significant for HTN, DM2, CKD stage IV, hyperlipidemia, OA of knees, hands, and R hip, mild

Past Medical and Surgical History

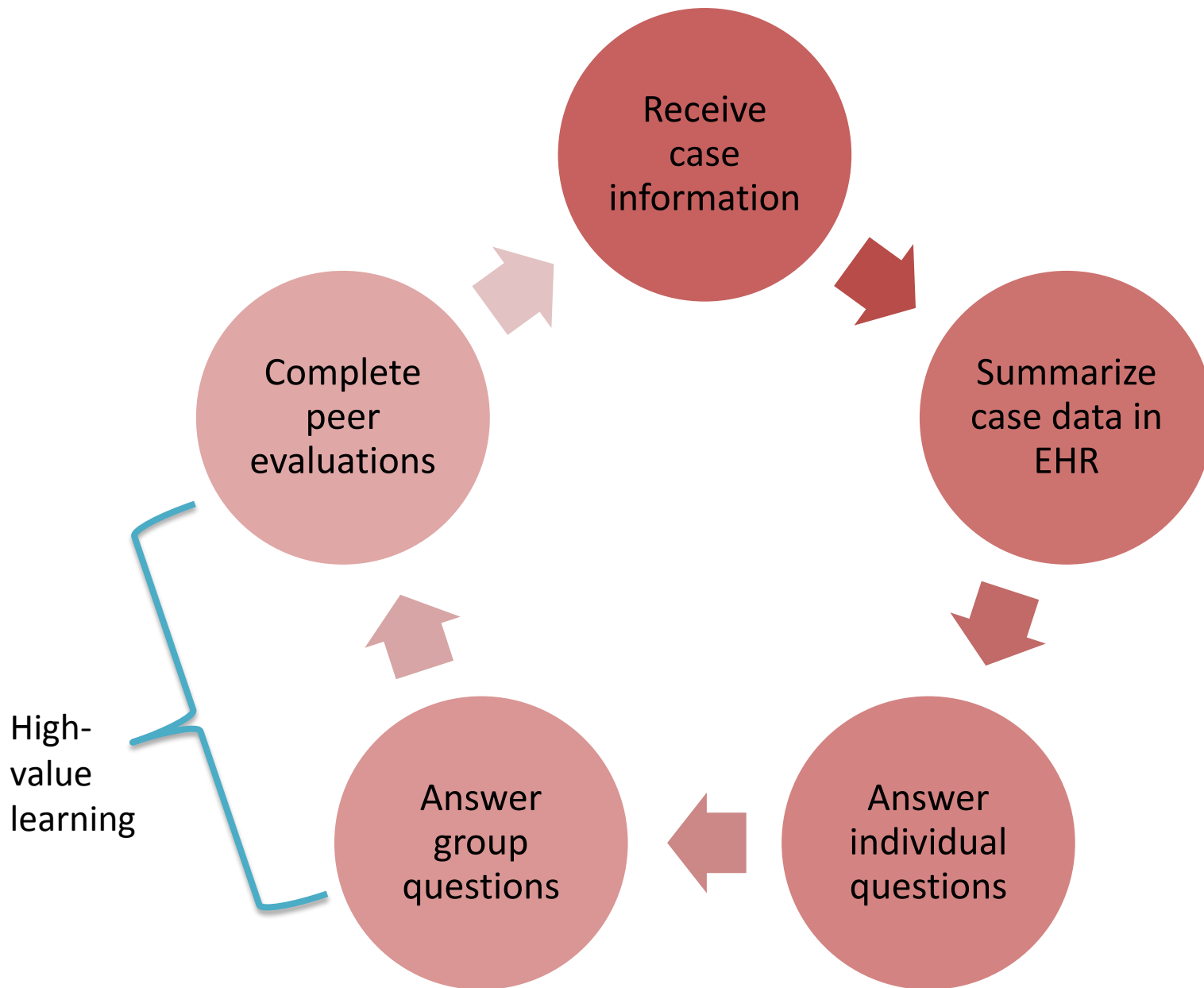
- [01/22/2012] Also PMH includes urinary incontinence...
- [01/22/2012] cataracts surgically removed and a lens implant placed which improved her vision...
- [01/22/2012] right bipolar total hip arthroplasty on Monday for severe OA...
- [01/21/2012] On top of chronic problems (see problem list) Pt has had one hospital admission 6 months ago for a complicated UTI with sepsis and
- [01/20/2012] Past Medical Hx: hospital admission for complicated UTI w/ sepsis sip GLF HTN DM2 CKD stage IV Hyperlipidemia progressive OA

Social History

- [01/22/2012] " in the hospital for hip surgery " out of town POA " most of family living out of town " "niece" struggling with the amount of time
- [01/21/2012] Addition to problem list: urinary incontinence per electronic health record...
- [01/21/2012] Chronic: Hypertension, DM1, CKD Stage IV, Hyperlipidemia, Osteoarthritis of the knees, hands and right hip, GOut, mild cognitive

General Physical Exam

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Case Activity Measures

Case activity measures	Medical Students (n=194)	Nursing Students (n=146)	Pharmacy Students (n=60)	Social Work Students (n=122)
Logins	21 (2-98)	28 (5-197)	25 (2-86)	22 (1-114)
EHR entries	11 (0-44)	14 (2-53)	5 (0-19)	7 (0-43)
Message board posts and replies	8 (0-157)	8.5 (0-131)	9.5 (0-81)	5 (0-108)
Message board posts viewed	24 (0-659)	27 (0-675)	36.5 (0-335)	17.5 (0-460)

Correlations between Case Activity Measures and Scores

	1	2	3	4	5	6	7
1. Individual Score	—						
2. Individual Logins	0.32*	—					
3. Individual EHR Entries	0.33*	0.32*	—				
4. Individual Message Board Posts/Replies	0.39*	0.50*	0.28*	—			
5. Individual Message Board Views	0.35*	0.46*	0.25*	0.80*	—		
6. Team Score	0.18*	0.23*	0.07	0.34*	0.27*	—	
7. Team Size	-0.03	-0.01	-0.10	-0.12	-0.03	0.02	—

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Context-Specific Experiences

Richmond Health and Wellness Program

- Community-focused care coordination in an indigent setting
- “Hotspotting
- Nursing, Pharmacy, Social Work, Medicine, Psychology
- HRSA-funded
- Patient and student impact

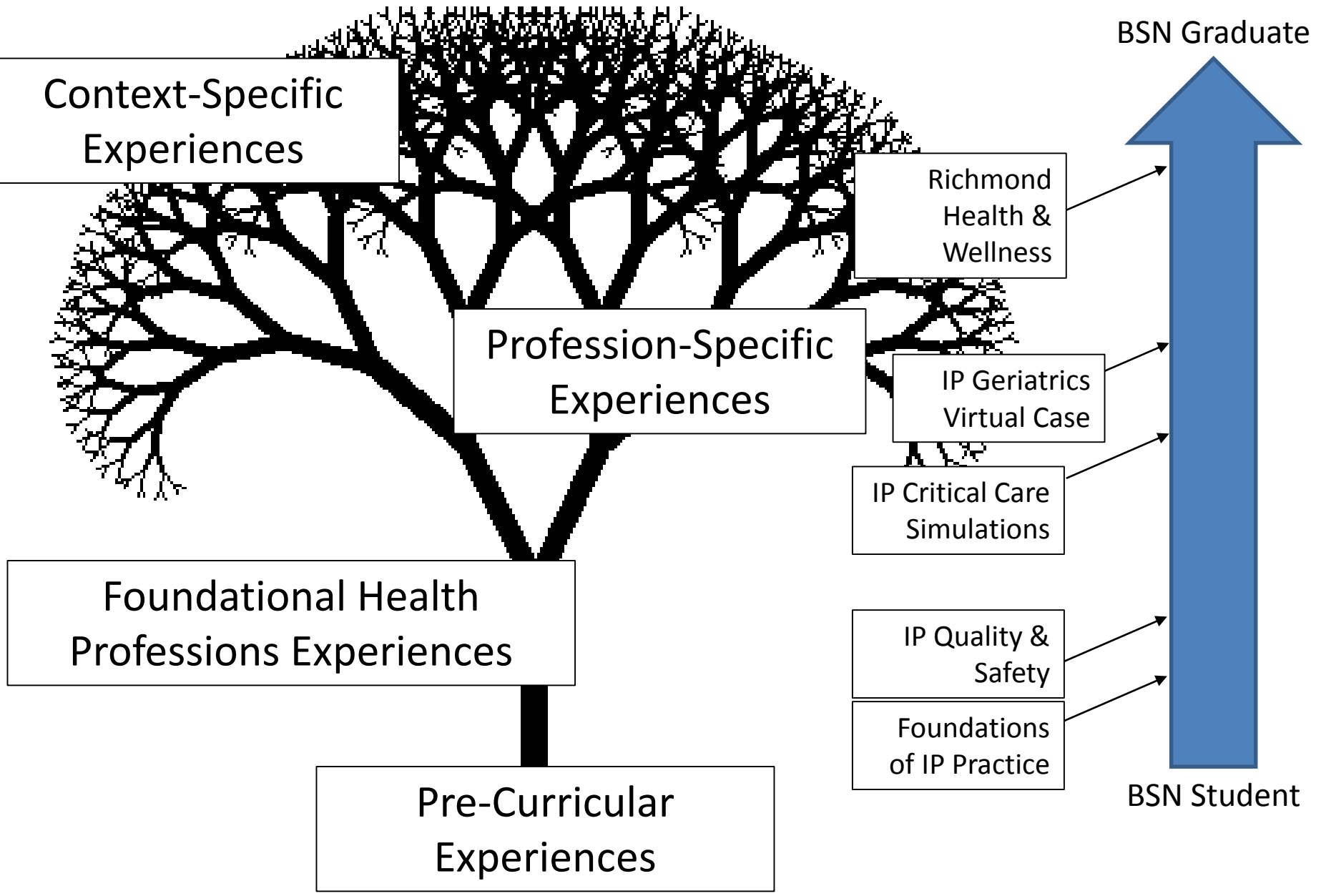


Context-Specific Experiences

Profession-Specific Experiences

Foundational Health Professions Experiences

Pre-Curricular Experiences



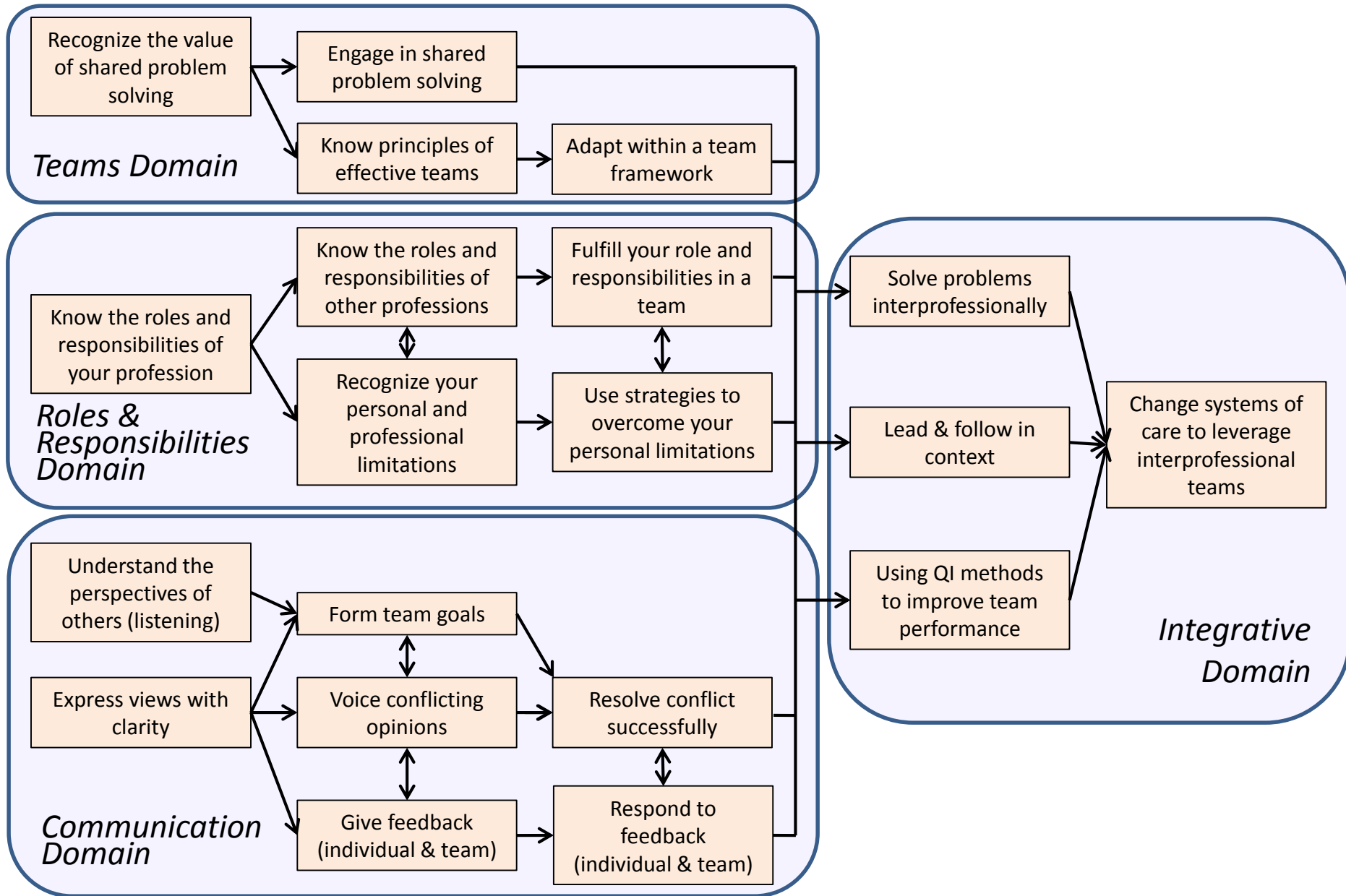
Novice

Advanced Beginner

Competent

Proficient

Expert



Context-Specific
Experiences

Profession-Specific
Experiences

Foundational Health
Professions Experiences

Pre-Curricular
Experiences

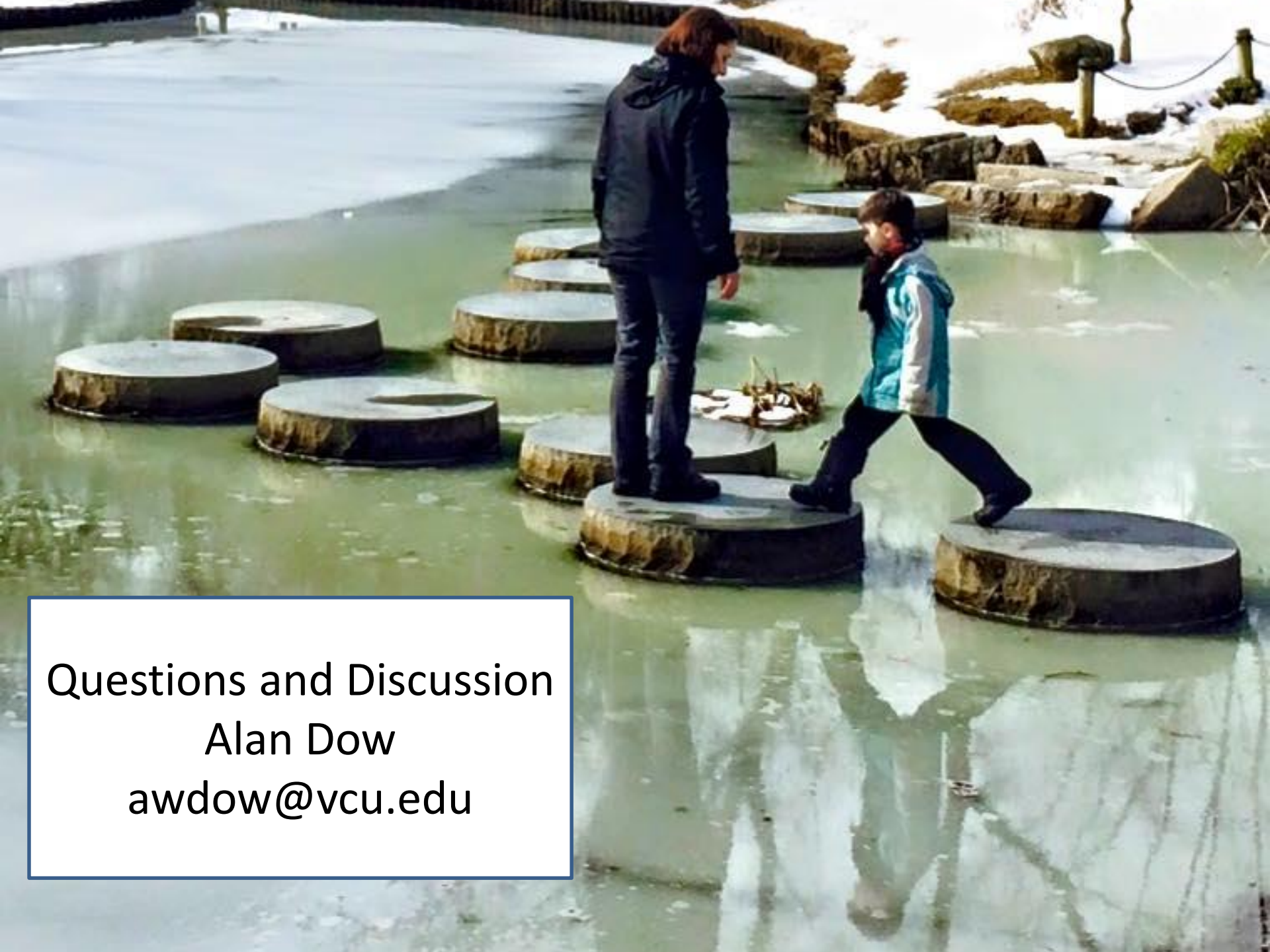
Engage in Shared
Problem Solving

Experience
Interprofessional
Problem Solving

Be Exposed to
Interprofessional
Problem Solving

Key points

- Large scale interprofessional education is possible
– you can do it!
- Building incrementally is essential
- Consider multiple different instructional approaches
- Plan with a developmental approach
- We are all trying to navigate the same tricky path



Questions and Discussion
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