



MINIMAL INTERPROFESSIONAL EDUCATION EXPERIENCE POSITIVELY INFLUENCES COLLABORATIVE BEHAVIORS IN DIETETIC INTERNS

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 - ▶ No conflicts of interest to declare



Interprofessional Education (IPE)

- ▶ Teachers/learners from ≥ 2 health professions
 - ▶ Create/foster collaborative learning environment₁
- ▶ Goal is to develop knowledge/skills/attitudes
 - ▶ result in interprofessional team behaviors₂
- ▶ Can be from medical/nursing/health professions/social health
 - ▶ Multiple professions learning from each other



1. IOM 2003
2. CAIPE 2021

Why is IPE Important?

- ▶ Leads to improved patient care¹⁻³
 - ▶ Improves quality
 - ▶ Patients and providers
 - ▶ Lowers costs
 - ▶ Decreases length of stay
 - ▶ Reduces medical errors⁴
- ▶ Endorsed by major healthcare bodies⁵
 - ▶ WHO
 - ▶ National Academies
 - ▶ American Public Health Association



1. Barr 2005
2. Brashers 2001
3. Freeth 2005
4. IOM 2005
5. CAIPE 2021

Forms of IPE

- ▶ Multiple methods used
- ▶ Classroom/seminar settings
 - ▶ Intro to other professions' roles
 - ▶ Team-building exercises
 - ▶ Problem-based learning
 - ▶ Case-based learning
- ▶ Simulation labs
 - ▶ Working in teams with simulated patients
 - ▶ Observation by preceptors
 - ▶ Group/individual debriefs after experiences

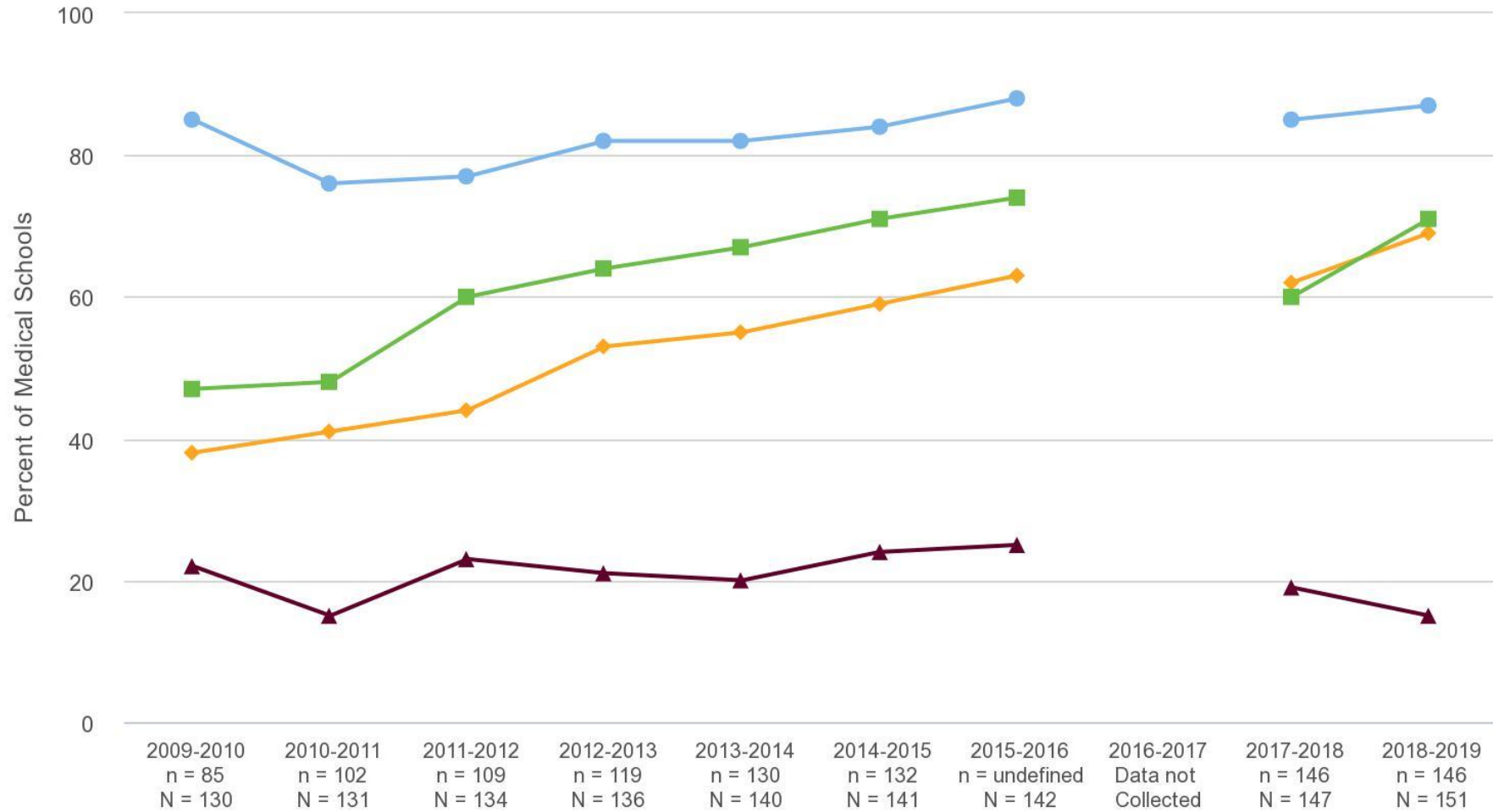


Forms of IPE

- ▶ Direct patient exposure
 - ▶ Inpatient/outpatient settings
 - ▶ Teams of students assess, interview patients
 - ▶ Collaborate of plan of care
 - ▶ Intervention provided in conjunction with practitioner



Required Interprofessional Education: Types of Settings

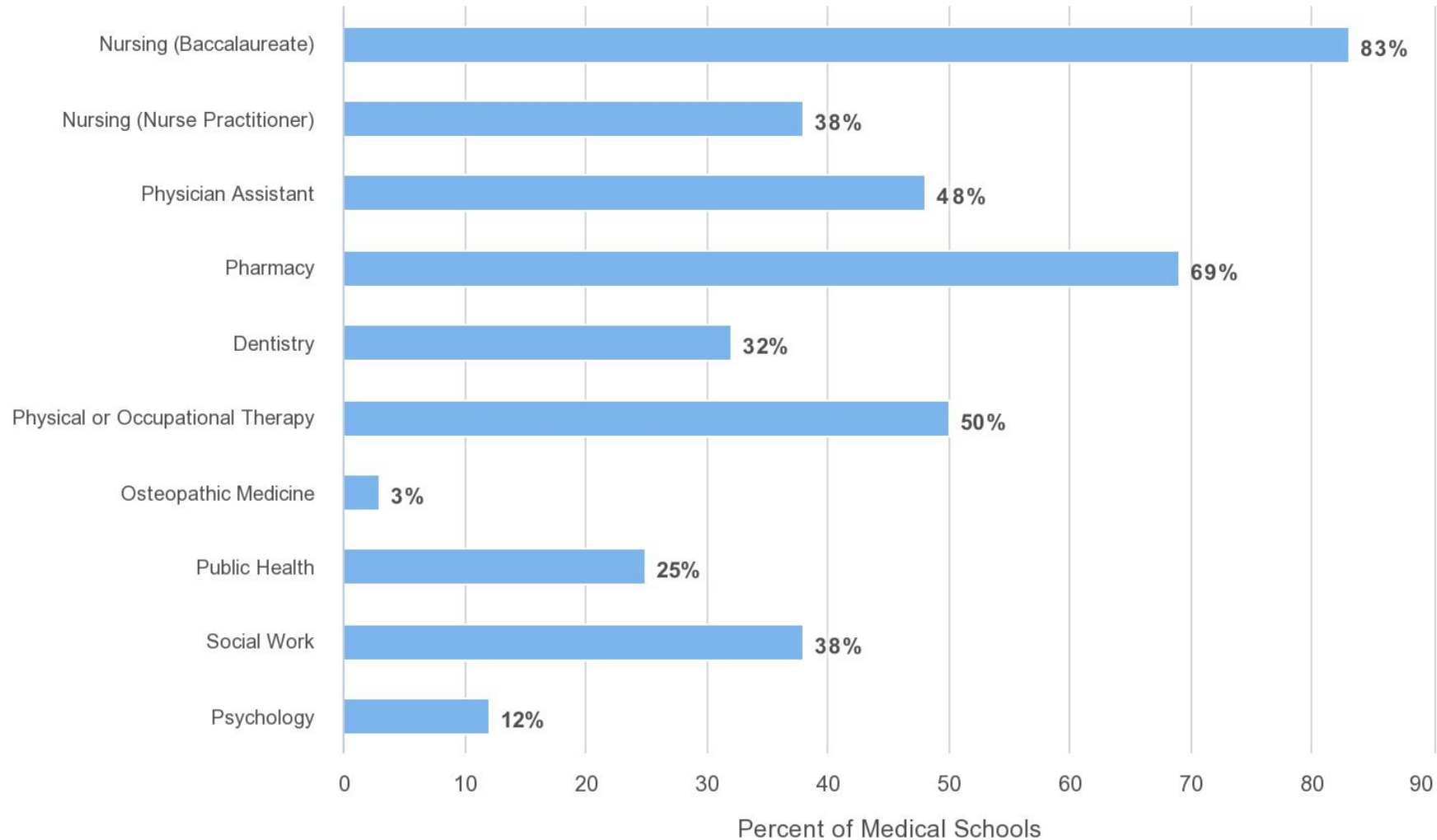


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● Classroom / Seminar
 ◆ Simulation Center
 ■ Patient Care
 ▲ Other Setting

AAMC 2021

Required Interprofessional Education: Other Health Professions Students Learning with Medical Students 2017-2018



AAMC 2021

#SNEB2021: Raising Reliance and Resilience



IPE Training for Dietetic Interns

- ▶ Varies greatly
 - ▶ Little training at undergraduate level
 - ▶ Gradually increasing
 - ▶ More training at graduate level
 - ▶ Depends on resources
- ▶ Exposure to other professions is key
 - ▶ Reduces siloing
 - ▶ Demonstrates value of nutrition to other professions



Dietetic Intern Training in IPE

- ▶ University of Kansas Medical Center
 - ▶ All interns attend IPE training
- ▶ Use two IPE clinics
 - ▶ Family Medicine
 - ▶ Geriatrics
- ▶ Geriatric Interprofessional Assessment Clinic (GIAC)
 - ▶ Location for direct assessment of interprofessional skills



GIAC

- ▶ Held every Wednesday afternoon
- ▶ Multiple professions
 - ▶ MD/OT/Pharm/RD/PT/Psych/SW
- ▶ Teams of three assessed patients prior to visit
 - ▶ Pre-huddle
- ▶ Interviewed patient as a team
 - ▶ 30 minutes
- ▶ Post-huddle
 - ▶ Discuss findings, debrief with supervising doctor
 - ▶ Develop intervention as a team
- ▶ Return to room as team to treat patient
- ▶ Final debrief at end of rotations

Methods

- ▶ N=42 dietetic interns
- ▶ Part of clinical rotation
- ▶ Observed directly via video camera by preceptors
 - ▶ Part of separate research protocol
- ▶ Evaluated using ITOFT₁
 - ▶ Individual Teamwork Observation and Feedback Tool
- ▶ Interns evaluated once per rotation
 - ▶ Max 2 interns/rotation
 - ▶ Two rotations/intern



1. Thistlethwaite 2016



ITOFT Description

- ▶ Eleven behaviors assessed
 - ▶ Across 2 subscales
- ▶ Shared Decision Making
 - ▶ Planning intervention w/team
 - ▶ Prioritizing actions for pt management
 - ▶ Reviews client goals if/when situation changes
 - ▶ Advocates for pt in decision-making
 - ▶ Shares appropriate information w/pt
 - ▶ Includes pt circumstances/beliefs into care plan
 - ▶ Involves relevant health professionals

ITOFT Description

- ▶ Working as a Team
 - ▶ Participates in IP discussions
 - ▶ Respects other team members
 - ▶ Invites opinions
 - ▶ Discusses team performance

Analysis

- ▶ Behaviors scored
 - ▶ 0=not applicable to this activity
 - ▶ 1=beginner
 - ▶ 2=meets expectations
 - ▶ 3=exemplary
- ▶ Differences between rotations analyzed using Wilcoxon Signed-Rank tests for related samples
- ▶ Sum iTOFT scores analyzed using paired-samples t-tests
 - ▶ SPSS v.25

Results

- ▶ Interns improved in all iTOFT collaborative behaviors

iTOFT Behavior	Median Week 1	Median Week 2	T-statistic (T)	p-value	Effect Size (r)
Planning Intervention	2.00	2.00	252.00	<0.001	0.43
Prioritizing Actions	2.00	2.00	197.00	0.003	0.33
Reviewing Goals	2.00	2.00	167.50	0.002	0.33
Advocating for Pt	2.00	2.00	241.50	<0.001	0.39
Sharing Information	2.00	2.00	213.00	0.002	0.33
Including Beliefs	2.00	2.00	243.00	<0.001	0.38
Involving Other Professions	2.00	2.00	145.50	0.004	0.31
Participating in Discussions	2.00	2.00	242.50	<0.001	0.45
Respecting Others	2.00	2.00	152.00	0.001	0.36
Inviting Opinions	2.00	2.00	339.00	<0.001	0.43
Discussing Performance	2.00	2.00	258.00	0.001	0.36

Sum iTOFT scores improved from Week 1 to Week 2 (20.60 vs. 25.43, $p < 0.001$)

Discussion

- ▶ Dietetic interns improved significantly
 - ▶ Little previous IPE experience
- ▶ Highlights positive effects minimal experience in IPE settings on improving collaborative behaviors



Discussion

▶ Strengths

- ▶ Direct observation via camera
- ▶ Preceptors all RDs with IPE experience
- ▶ Preceptors from other professions added feedback

▶ Weaknesses

- ▶ Small sample size
- ▶ Interns had different levels of clinical experience

Implications

- ▶ ANY IPE experience is beneficial
 - ▶ Develops collaborative behaviors
- ▶ Minimal exposure in clinic
 - ▶ Possibility of increased presence in other clinics?
- ▶ Building more IPE clinical experience into curricula?
 - ▶ Reaching out to other allied health programs w/o DI

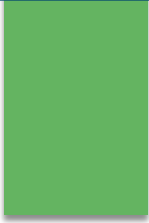


Thank You!

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Questions?



Improving Student Confidence for Engaging in the Nutrition Policy Process Through Authentic Assignments and Class Activities

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GILLINGS SCHOOL OF
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#SNEB2021: Raising Reliance and Resilience

Nutrition Policy: An Important Topic for Nutrition and Dietetics Professionals

- ▶ Policies at a federal, state, local and organizational level play a large role in influencing dietary behaviors
- ▶ Important that nutrition and dietetics professionals have the confidence and skills to engage in nutrition policy-related activities
- ▶ Nutrition and dietetics programs should provide students with opportunities to gain competence in activities related to nutrition policy

SNEB Nutrition Educator Competencies: Food and Nutrition Policy

- ▶ 5.1. Describe the roles of government agencies in regulating the manufacturing, labeling and advertising of individual foods and dietary supplements
- ▶ 5.2. Describe the roles of government agencies in regulating food systems and the food supply.
- ▶ 5.3. Describe the history, purpose and funding of key pieces of legislation that authorize programs supporting nutrition education, research, and food assistance to address malnutrition and food security and to promote health.
- ▶ 5.4. Describe the history and current roles of governmental and nongovernmental organizations that develop and implement nutrition education programs and related health promotion or food security activities.
- ▶ 5.5. Describe ways to collaborate with community members and other professionals to create communities and settings in which healthy food options are easy, affordable, and desired and unhealthy foods are less prominent and less desired.

Accreditation Council for Education in Nutrition and Dietetics

- ▶ Competencies for graduate degree programs in nutrition and dietetics by the Accreditation Council for Education in Nutrition and Dietetics includes:
 - ▶ 4.3 Engages in legislative and regulatory activities that address community, population and global nutrition health and nutrition policy.
 - ▶ 4.2.1 Interprets legal terminology used to establish nutrition regulations and policies for populations.
 - ▶ 4.2.2 Navigates governmental, intergovernmental and nongovernmental organizations to promote nutrition legislation and regulations that address public, population and global nutrition health.
 - ▶ 4.2.3 Analyzes political interests and their impact on program development, goals and objectives.

<https://www.eatrightpro.org/-/media/eatrightpro-files/acend/futureeducationmodel/femgraduatefinal.pdf?la=en&hash=89123715A3E0E426F0A0CA960299FFEA06714FE5>

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Authentic Assignments

- ▶ Allow students to apply skills they learn in class to real-world situations
- ▶ Research in social work and nursing has shown students in policy courses with authentic assignments and class activities have improved their knowledge, motivation, confidence, and skills for engaging in policy-related activities

References:

Weiss-Gal I. Policy practice in social work education: A literature review. *Int. J. Soc. Welf.* 2016;25(3):290-303.

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Rains JW, Carroll KL. The effect of health policy education on self-perceived political competence of graduate nursing students. *J Nurs Educ* 2000;39(1):37-40.

Byrd ME, Costello J, Shelton CR, Thomas PA, Petrarca D. An active learning experience in health policy for baccalaureate nursing students. *Public Health Nurs.* 2004;21(5):501-506.

Objective

- ▶ To assess how authentic assignments and class activities impact student's confidence for engaging in policy-related activities

Overview of Nutrition Policy Course and Students

- ▶ Graduate-level nutrition policy course at UNC Chapel Hill
- ▶ Required course for Master of Public Health students in the Nutrition and Nutrition/Registered Dietitian concentrations and offered as an elective to others
- ▶ Two sections of the course offered in Fall of 2020
 - ▶ Residential – 56 students enrolled
 - ▶ MPH@UNC – 16 students enrolled

Course Components

- ▶ Pre-recorded lecture and live weekly sessions
- ▶ Guest speakers and instructors sharing real-world nutrition policy experiences
- ▶ Informational interview
- ▶ Authentic Assignments
 - ▶ Group policy brief project
 - ▶ Letter to a legislator
 - ▶ Case studies
 - ▶ Elevator pitch on a nutrition policy issue

Evaluation Methods

- ▶ Online pre- and post-survey
- ▶ Confidence for engaging in policy-related activities assessed from a list of 11 policy-related class activities
 - ▶ Scale of 1 (not at all confident) to 5 (very confident)
- ▶ Statistical significance for changes in confidence from pre- to post-survey assessed using Wilcoxon signed-rank tests

Participants

- ▶ A total of 35 students (24 students (43%) in the residential section and 11 (69%) in the online section) had matched pre and post-surveys and were included in the analyses.

Students Majors

	Residential (n)	Online (n)
MPH - Nutrition/Registered Dietitian	18	0
MPH - Nutrition	2	3
MPH – Leadership	0	6
MPH – Health policy	0	2
PhD – Nutrition	4	0

Changes in Confidence for Engaging in Nutrition Policy-Related Activities

	Pre Mean (SD)	Post Mean (SD)	p-value
Know where to begin looking for resources or evidence	2.97 (1.15)	4.14 (0.77)	<.001
Know who to ask to connect with experts or resources	2.29 (1.10)	4.06 (0.94)	<.001
Write an effective letter to a legislator	1.83 (1.01)	4.06 (0.91)	<.001
Write an effective comment for an item posted in the Federal Register	1.89 (0.99)	3.69 (0.99)	<.001
Identify potential policy options for addressing nutrition-related issues	2.40 (1.01)	3.86 (0.88)	<.001
Compare strengths and weaknesses of food and nutrition policies	2.83 (0.95)	4.11 (0.72)	<.001
Develop a clear justification as to why a particular policy solution is needed to address a nutrition-related issue	2.66 (0.97)	4.14 (0.65)	<.001
Identify key stakeholders who may have an interest in particular food and nutrition policies	2.97 (1.04)	4.34 (0.68)	<.001
Develop a policy drop sheet (i.e. fact sheet on a proposed policy)	2.54 (1.04)	4.28 (0.75)	<.001
Develop an evaluation plan for a nutrition-related policy	2.26 (0.92)	3.69 (0.87)	<.001
Deliver an elevator pitch to a policy maker on a proposed policy	2.09 (1.01)	3.51 (1.15)	<.001

Conclusions

- ▶ The use of authentic assignments increased students' confidence for engaging in nutrition policy-related activities
- ▶ Authentic assignments may be helpful for preparing students to participate in the nutrition policy process

Questions?

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