

Fostering Teamwork: An Interprofessional Simulation Experience



Team Members/Faculty Facilitators

- Kelly Ingram, M.S. CCC-SLP – Clinical Professor and MS Program Director, Arizona State University
- Sandra Mayol-Kreiser, Ph.D, RDN, CNSC – Clinical Professor, Nutrition Program, Arizona State University
- Margaret Calacci, M.S., RN, CNE, CHSE – Clinical Associate Professor and Director of the Simulation Learning Resource Center, Arizona State University
- LeAnn Dykstra, MSN-Ed, RN, CPEN – Clinical Assistant Professor, Nursing, Arizona State University

Disclosures

Kelly Ingram, Sandra Mayol-Kreiser, Margaret Calacci, and LeAnn Dykstra Brooks have no financial or non-financial relationships to disclose.

Goal and Objectives

- Create an experience in Interprofessional Education that is reusable, scalable, and a realistic simile of clinical expectations.
- Provide assessment data from various disciplines so students have information ahead of time.
- Planning objective is the “creation of a plan that recognizes priorities for the patient as a whole”.

IPE Simulated Case Study



**Bertha Strong, 65 y.o. female
DX: LCVA**

- Bertha Strong is 65 years old with history of hypertension, and PTSD, depression, and anxiety related to Vietnam war experiences as a nurse. A month ago her daughter brought her to the ED after she noted that Bertha's speech was "garbled" and she seemed confused. Bertha was discharged with a diagnosis of ischemic stroke (left) with right-sided weakness. The scene of our simulation is the out-patient stroke clinic about 4 weeks later.

Creation



- Creation of a medical record
- Write a script for the video recording
- Find the “actresses”
- Utilize the film crew for online teaching at ASU to film the simulation
- Ensure easy and reliable access to all materials for the students.

Preparation for the event:

This is a learning simulation. It is a safe place

- **Watch** Introduction to Interprofessional Practice
- **Read** Bertha Strong's Medical Record.
- **Watch** Bertha Strong: IPE Simulation
- **Complete page 9** of the medical record: Decide on the issues and interventions that are appropriate for Bertha's care from the point of view of your profession. You will hand this in as your ticket in to the IPE event so **bring to the scheduled event.**

- **Fill out forms and bring to the scheduled event:**
- **Interdisciplinary Education Perception Scale** using the last 4 digits of your phone number so that we can compare your perceptions after the IPE experience.
- Simulation Professional Behavior Agreement
- Photographic Release
- Come prepared to **enjoy** meeting with your colleagues from other professions. Class will begin and end on time.

Simulation & Learning Resources

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Simulation & Learning Resources

Virtual SLR

[Bates Visual Guide](#)

[Videos](#)

[Hours & Location](#)

Virtual SLR

- [Bates Visual Guide to Physical Assessment](#)
- **Interprofessional Education**
 1. [Instructions for IPE Bertha Strong Event](#)
 2. [Presentation on IPE: Bertha Strong](#)
 3. [Bertha Strong Medical Record](#)
 4. [Bertha Strong: IPE Simulation Video](#)
 5. [Interdisciplinary Education Perception Scale](#)
 6. [Simulation Professional Behavior Agreement](#)
 7. [Photo Release - Simulation](#)
 8. [Mercado Map](#)
- **Skills Performance Checklist**

Link to Virtual Simulation and Learning

- <https://nursingandhealth.asu.edu/simulation-learning-resources/virtual>

IPE definition and objectives

- Interprofessional Education (IPE) involves educators and learners from 2 or more health professions and their foundational disciplines who jointly create and foster a collaborative learning environment. The goal of these efforts is to develop knowledge, skills and attitudes that result in interprofessional team behaviors and competence.

IPE objectives:

- Work with individuals of other professions to maintain a climate of mutual respect and shared values. (Values and Ethics)
- Use the knowledge of one's own role and the roles of other professions to appropriately assess and address the health care needs of the patients and populations served. (Roles/Responsibilities for Collaborative Practice)
- Communicate with patients, families, communities, and other health professionals in a responsive and responsible manner that supports a team approach to maintaining health and treatment of disease. (Interprofessional Communication)
- Apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan and deliver patient/population-centered care that is safe, timely, efficient, effective, and equitable. (Interprofessional Teamwork and Team-based Care)

¹Interprofessional Education Collaborative Expert Panel. (2011). *Core competencies for interprofessional collaborative practice: Report of an expert panel*. Washington, D.C.: Interprofessional Education Collaborative.

Chart Review

NAME: Bertha Strong MRN: 3846196
 AGE: 65 yrs DOB: 11/05/19xx
 ADM: Today Service: Stroke Clinic

ASU Hospital
Out Patient Stroke Clinic



ASU Hospital Out Patient Stroke Clinic <u>Registration Form</u>	
Patient Name: Bertha Strong DOB: 11/05/19XX MRN: 3846196 SSN: 001240785	Address: <hr/> 12470 N. Deer Valley Rd. <hr/> Glendale, AZ 85306 <hr/>
Next of Kin: Name: Jean Trimble Phone number: 602-555-1900 Address: 12470 N. Deer Valley Rd. Glendale, AZ 85306	Insurance: Medicare and Veterans Benefits Policy number: 001240785 Guarantor: Self
Race: White Religious preference: Not stated	Advance Directives: Living Will <u>No</u> copy on chart <u>No</u>

Scheduling

- Several different configurations at first:
- Now – one month a semester (Nov and April) where we run simulation each Tues/Thurs.

Example for fall 18

- Tuesday & Thursday 8:30-10:00 (2) & 10:15- 11:45 (2)
- Speech students assigned and required to go as part of Clinical methods class.

Sign up –google sheets

	Student 1	Student 2 -
April 2nd		
8:00-9:30		
10:00-11:30		
April 4th		
8:00-9:30		
10:00-11:30		
April 9th		
8:00-9:30		
10:00-11:30		
April 11th		
8:00-9:30		
10:00-11:30		
April 16th		
8:00-9:30		
10:00-11:30		
April 18th		
8:00-9:30		
10:00-11:30		

Day of event

- Each person gives a brief summary of their discipline in general.
- Group determines a leader and recorder
- Each person shares their recommendations from their discipline for Bertha
- The group crafts the interprofessional plan and determines priorities. Limit of 2 priorities. Specify goals, interventions and referrals.
- Debrief lead by faculty facilitator
- Post evaluation forms/measures including evaluation of the event and a post Interprofessional Education Perception Scale (IEPS)

Discussion of Team behavior:

- What assisted the team interaction?
- What hindered the team interaction?
- Did you learn anything about the other professions that you did not know?
- What would you change about the IPE experience?

Data

- Analyzed data from 130 students who completed a pre and post IEPS

Table 2: Student Demographics (n= 130)

	Frequency	Percentage
Gender		
Female	97	74.6
Male	9	6.9
Declined	24	18.5
Age		
Less than 20	12	9.2
20-29	76	58.5
30-39	17	3.1
40-49	5	3.8
50 and over	2	1.5
Declined	18	13.8
Professional program		
Nutrition	40	30.8
Social Work	24	18.5
Nursing	21	16.2
Speech Therapy	28	21.5
Declined	17	13.1
Level in program		
Undergraduate: Junior	21	16.2
Undergraduate: Senior	41	31.5
Masters Program: Year 1	27	20.8
Master's Program: Year 2	25	19.2
Declined	16	12.3

IEPS

- Only one of eighteen items did not show a significant change from the pre-event measure: *Individuals in my profession have a higher status than individuals in other professions*
- - see table handout for full data

Greatest change

- Individuals in other professions respect the work done by my profession.
- Individuals in my profession make every effort to understand the capabilities and contributions of other professions
- Individuals in other professions think highly of my profession.

References

- Interprofessional Education Collaborative Expert Panel. *Core competencies for interprofessional collaborative practice: report of an expert panel*. Washington, DC: Interprofessional Education Collaborative, 2011.
- Luecht, R.M., Madsen, M.K., Taugher, M.P., & Petterson, B.J., (1990) *Assessing professional perceptions: design and validation of an Interdisciplinary Education Perception Scale*. *Journal of Allied Health*, Vol 19 (2), 181-191

INTERDISCIPLINARY EDUCATION PERCEPTION SCALE

PRE / POST

Last 4 digits of your phone number _____

Using the scale below, (Strongly Disagree–1 to Strongly Agree–6) please rate your perception of your profession and other disciplines.

DESCRIPTOR	Strongly Disagree 1	Moderately Disagree 2	Somewhat Disagree 3	Somewhat Agree 4	Moderately Agree 5	Strongly Agree 6
1. Individuals in my profession are well-trained.	1	2	3	4	5	6
2. Individuals in my profession are able to work closely with individuals in other professions.	1	2	3	4	5	6
3. Individuals in my profession demonstrate a great deal of autonomy.	1	2	3	4	5	6
4. Individuals in other professions respect the work done by my profession.	1	2	3	4	5	6
5. Individuals in my profession are very positive about their goals and objectives.	1	2	3	4	5	6
6. Individuals in my profession need to cooperate with other professions.	1	2	3	4	5	6
7. Individuals in my profession are very positive about their contributions and accomplishments.	1	2	3	4	5	6
8. Individuals in my profession must depend upon the work of people in other professions.	1	2	3	4	5	6
9. Individuals in other professions think highly of my profession.	1	2	3	4	5	6
10. Individuals in my profession trust each other's professional judgment.	1	2	3	4	5	6
11. Individuals in my profession have a higher status than individuals in other professions.	1	2	3	4	5	6
12. Individuals in my profession make every effort to understand the capabilities and contributions of other professions	1	2	3	4	5	6
13. Individuals in my profession are extremely competent.	1	2	3	4	5	6
14. Individuals in my profession are willing to share information and resources with other professionals.	1	2	3	4	5	6
15. Individuals in my profession have good relations with people in other professions	1	2	3	4	5	6
16. Individuals in my profession think highly of other related professions.	1	2	3	4	5	6
17. Individuals in my profession work well with each other.	1	2	3	4	5	6
18. Individuals in other professions often seek the advice of people in my profession.	1	2	3	4	5	6

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Group determines a leader and recorder

Each person shares their recommendations from their discipline for Bertha

The group crafts the interprofessional plan and determines priorities. Limit of 2 priorities. Specify goals, interventions and referrals.

Debrief lead by faculty facilitator

Post evaluation forms/measures including evaluation of the event and a post Interprofessional Education Perception Scale (IEPS)

Facilitator role and guidelines

Created a facilitator guide so everyone follows the same steps and covers the same objectives.

Created “discipline specific” recommendations in the event that one discipline is absent.

Discussion of Team behavior:

Data

Analyzed data from 130 students who completed a pre and post IEPS

IEPS

Only one of eighteen items did not show a significant change from the pre-event measure: *Individuals in my profession have a higher status than individuals in other professions*

Greatest change

- Individuals in other professions respect the work done by my profession.
- Individuals in my profession make every effort to understand the capabilities and contributions of other professions
- Individuals in other professions think highly of my profession.

Data Tables

Bertha Strong

<i>Student Demographics (n= 130)</i>		
	<i>Frequency</i>	<i>Percentage</i>
Gender		
Female	97	74.6
Male	9	6.9
Declined	24	18.5
Age		
Less than 20	12	9.2
20-29	76	58.5
30-39	17	3.1
40-49	5	3.8
50 and over	2	1.5
Declined	18	13.8
Race/Ethnicity		
American Indian or Alaska Native	1	0.8
Asian	6	6.2
Black or African American	6	4.6
Native Hawaiian or Other Pacific Islander	1	0.8
White	89	68.5
Middle East - Egypt	1	0.8
Other	1	0.8
Declined	17	17.7
Professional program		
Nutrition	40	30.8
Social Work	24	18.5
Nursing	21	16.2
Speech Therapy	28	21.5
Declined	17	13.1
Level in program		
Undergraduate: Junior	21	16.2
Undergraduate: Senior	41	31.5
Masters Program: Year 1	27	20.8
Master's Program: Year 2	25	19.2
Declined	16	12.3

<i>Changes in students' responses to Interdisciplinary Education Perception Scale (n = 130)</i>					
	Pre-test mean (sd)	Post-test mean (sd)	Pre-test Mean Rank	Post-test Mean Rank	z
1. Individuals in my profession are well-trained.	5.50 (.65)	5.59 (.62)	17.0	17.0	-2.263*
2. Individuals in my profession are able to work closely with individuals in other professions.	5.35 (.73)	5.78 (.50)	25.88	27.38	-5.556**
3. Individuals in my profession demonstrate a great deal of autonomy.	4.99 (.97)	5.22 (.97)	26.78	27.61	-3.176**
4. Individuals in other professions respect the work done by my profession.	4.66 (1.02)	5.57 (.75)	38.37	27.67	-6.778**
5. Individuals in my profession are very positive about their goals and objectives.	5.36 (.71)	5.72 (.53)	22.75	25.00	-4.863**
6. Individuals in my profession need to cooperate with other professions.	5.78 (.51)	5.93 (.29)	10.06	9.50	-3.411**
7. Individuals in my profession are very positive about their contributions and accomplishments.	5.39 (.66)	5.67 (.61)	22.39	20.00	-4.441**
8. Individuals in my profession must depend upon the work of people in other professions.	5.33(.87)	5.81 (.45)	25.05	18.50	-5.569**
9. Individuals in other professions think highly of my profession.	4.51 (1.05)	5.35 (.71)	33.35	22.00	-6.992**
10. Individuals in my profession trust each other's professional judgment.	5.10 (.84)	5.63 (.58)	29.10	23.50	-5.766**
11. Individuals in my profession have a higher status than individuals in other professions.	3.09 (1.45)	2.95 (1.70)	30.48	32.24	-1.326
12. Individuals in my profession make every	4.84 (.88)	5.58 (.65)	36.66	25.00	-7.060**

effort to understand the capabilities and contributions of other professions					
13. Individuals in my profession are extremely competent.	5.14 (.80)	5.50 (.70)	27.79	29.43	-5.228**
14. Individuals in my profession are willing to share information and resources with other professionals.	5.50 (.73)	5.85 (.65)	24.61	20.50	-4.826**
15. Individuals in my profession have good relations with people in other professions	5.20 (.71)	5.69 (.51)	30.94	26.50	-6.069**
16. Individuals in my profession think highly of other related professions.	5.19 (.78)	5.67 (.51)	28.67	25.50	-6.473**
17. Individuals in my profession work well with each other.	5.30 (.78)	5.69 (.51)	26.47	22.50	-5.389**
18. Individuals in other professions often seek the advice of people in my profession.	4.88 (.97)	5.40 (.74)	31.06	37.00	-4.560**

References

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