

# Measuring the Impact of IPE: A System Designed to Assess IPE Activity Yield and Resource Utilization

Stephen Jernigan, PhD, PT, University of Kansas Medical Center

Kristy Johnston, MSW, University of Kansas Medical Center

**Collaborating Across Borders VI**

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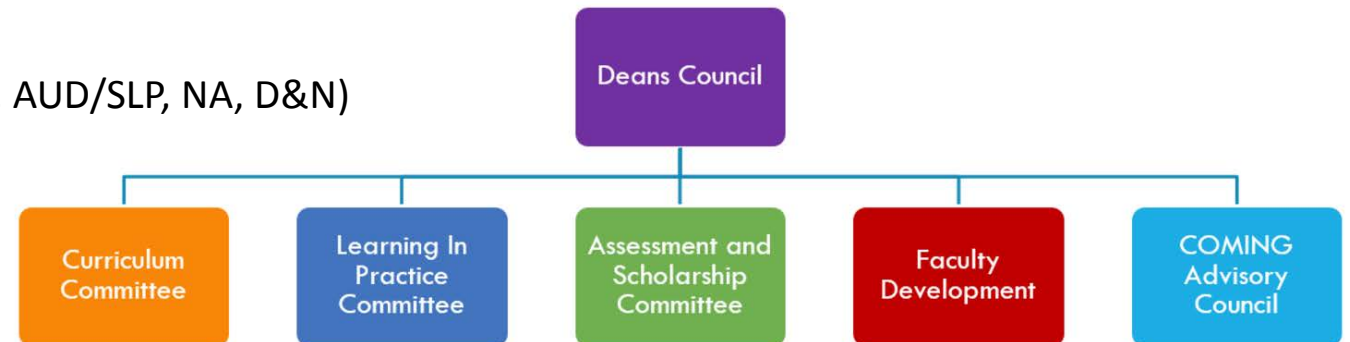
# Objectives

1. Describe one approach to understanding yield and resource utilization of IPE activities.
2. Discuss factors related to yield and resource utilization of IPE activities.
3. Explain the challenges and benefits associated with assessing the yield and resource utilization of IPE activities.

# Background

## University of Kansas Medical Center (Kansas City, KS)

- Four Schools
  - Medicine (Medicine, HPM)
  - Nursing (BSN, DNP)
  - Health Professions (RT, PT, OT, HIM, CLS, AUD/SLP, NA, D&N)
  - Pharmacy (KU – Lawrence, KS)
- Over 1000 students per cohort



## Center for Interprofessional Practice, Education and Research (CIPER)

- Curriculum Committee
  - Consult and maintain IPE activities for overarching CIPER programming
  - Inform new program design
  - Track programs for IPEC competencies
  - Identify gaps and opportunities to expand
- Website: Resources and Development → Developing or Refining an IPE Activity

# Background – Motivation and Development

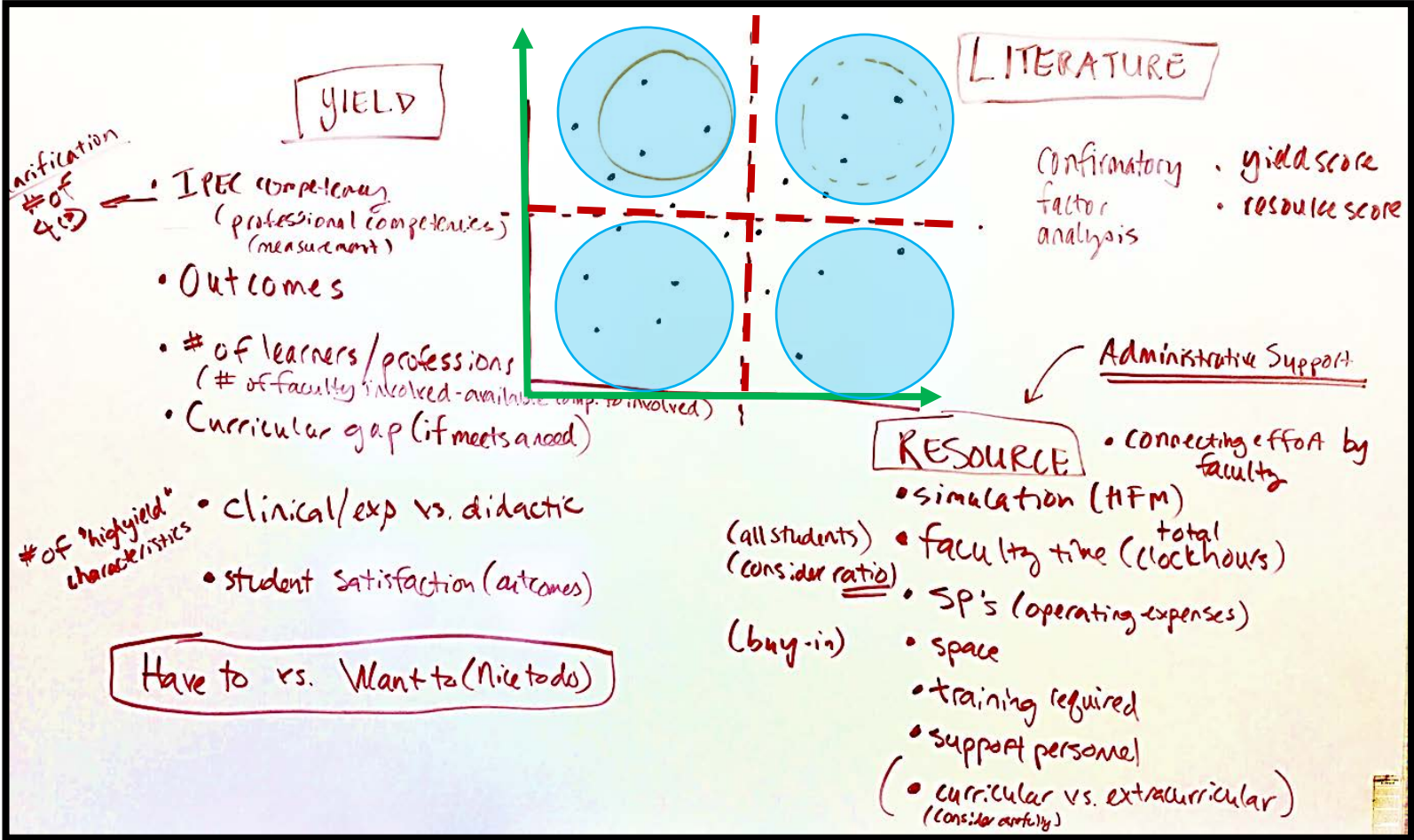
## Motivation

- Leadership asking questions about resource allocation
- Understand sustainability of activities as grants began to end
- Identify gaps in competency coverage and profession involvement
- Be strategic in planning new activities or modifying existing activities
- *Opportunity to educate faculty on high quality IPE*

## Development

- Biweekly meetings for 3-4 months oriented around this topic
- Brainstorming sessions
- Create structure/process
- Test algorithm created (trial and error)

# Background - Brainstorming Session



# Background – Factors - Yield

## Scored Factors

- IPEC Competencies addressed
- A required activity (e.g. part of curriculum, etc.) – percent of participating learners
- Outcomes assessed A (select types that apply)
- Outcomes assessed B (learner behavior or clinical outcomes)
- Type of activity (e.g. didactic or experiential)

## Contextual Factors (not scored, but considered with interpretation)

- Which schools/professions involved
- Number of professions involved
- Total number of learners involved (small, medium, large)

# Background – Factors – Resource Utilization

## Scored Factors

- Total clock hours of faculty/preceptor time per year
- Total clock hours of staff/standardized patient time per year
- Space required for IPE activity (no fee/fee for use)
- Approximate cost of supplies per year

## Contextual Factors (not scored, but considered with interpretation)

- Use of high-fidelity mannequins
- Current internal or external grants being used to conduct IPE activity

# Process

1) IPE activity **registered** with CIPER  
(detailed form)

2) Staff inputs data into Google Survey  
(factors) → **Excel Spreadsheet**

3) Spreadsheet responses input into  
algorithm spreadsheet → **Scores Calculated**



# 1) IPE Activity Registered with CIPER

## Developing or Refining and IPE Activity

- Register your IPE activity with CIPER if new and/or not currently [listed here](#).
  - Please download the following form ([IPE Activity Data Collection Form](#)) and send the completed form to Serra Goodman ([sgoodman@kumc.edu](mailto:sgoodman@kumc.edu)).

**1. Interviewer:**

**2. IPE Activity Title:**

**3. IPE Activity Lead/Contact:**

**4. Please characterize the #, type, and academic level of learners participating in this IPE activity by answering the following:**

- a. What is the # of learners from each profession that are participating in this activity annually? (please provide data by school, division, or department, as appropriate)
  - i. INSERT LIST HERE
- b. If not already answered above, given current resources, what is the total # of learners from each profession that could participate in this activity? (please provide data by school, division, or department as appropriate)
  - i. INSERT LIST HERE

## 2) Staff Inputs Data into Google Survey

### KUMC IPE Activity Survey

The purpose of this CIPES survey is to gather essential descriptive information about each IPE activity at KUMC. Thank you for the time you spend completing this survey for each activity you've volunteered to gather information about.

\* Required

Title of the IPE Activity \*

Your answer

1) Which IPEC Competencies are addressed with this IPE activity? (YIELD)


Values and Ethics

<https://docs.google.com/forms/d/e/1FAIpQLSdJcSOuKGTlxzycMqwln65pxyUgmNJmlOPvfi5oIzorfvf7RA/viewform>

## 2) Staff Inputs Data into Google Survey

Title of the IPE Activity	1) Which IPEC Competencies are addressed with this IPE activity? (YIELD)	2) Which KU or KUMC Schools are current participants in this IPE activity? (YIELD)	3) If this IPE activity includes School of Health Professions learners, please check the involved professions/programs. Please skip this question if not applicable. (YIELD)	4) How many total professions are consistently involved with this IPE activity? (YIELD)	5) How many total different learners PER YEAR are consistently involved with this IPE activity? (YIELD)	6) For what percent of learners that participate consistently in this IPE activity, is the activity required (as part of curriculum or otherwise)? (YIELD)
Values and Ethics, Roles	School of Nursing, School of Medicine (Medi	Clinical Lab Science, Health Int	13	>400	Required part of curricula	
Values and Ethics, Roles	School of Nursing, School of Medicine (Medi	Clinical Lab Science, Health Int	10+	>400	> 80%	
Values and Ethics, Roles	School of Medicine (Medi	Occupational Therapy, Speech	3-4	100-400	> 80%	
Values and Ethics, Roles	School of Medicine (Medi	Dietetics and Nutrition, Occupa	5-6	<100	> 80%	
Values and Ethics	School of Medicine (Medi	Occupational Therapy, Speech	3-4	<100	> 80%	
Values and Ethics, Roles	School of Nursing, School of Medicine (Medi	Dietetics and Nutrition, Occupa	3-4	100-400	21-40%	

### 3) Responses Put Into Algorithm → Scores

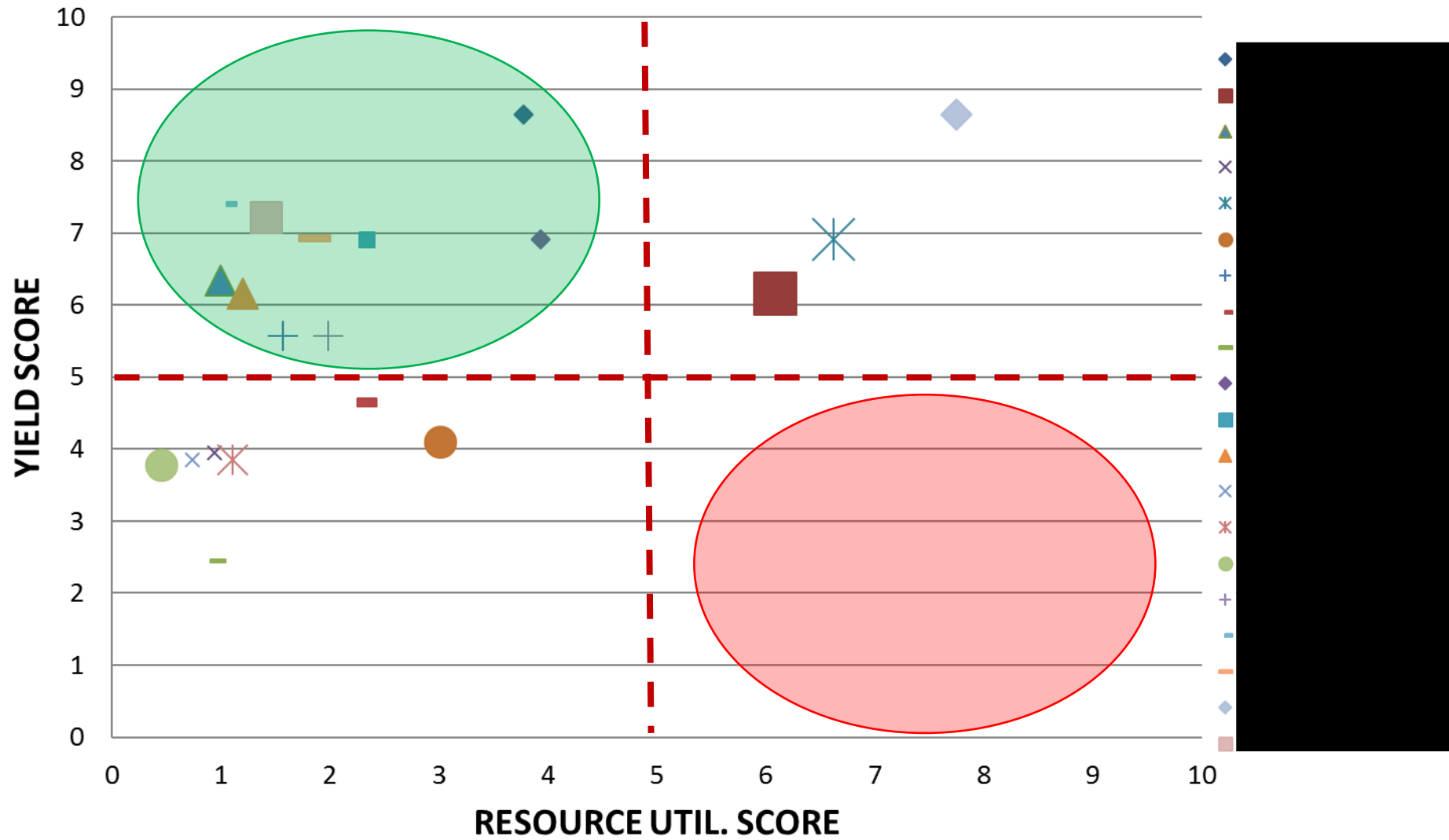


	A	B	C	D	E	F
1	<b>Yield Score</b>	<b>Response</b>	<b>Base</b>	<b>Q score</b>	<b>Weight</b>	<b>Score</b>
2	IPEC Competencies	4	0.192	0.768	3	2.304
3	Curriculum	5	0.154	0.77	3	2.31
4	Outcomes A	1	0.096	0.096	1	0.096
5	Outcomes B	1	0.385	0.385	3	1.155
6	Setting	2	0.256	0.512	3	1.536
7	<b>TOTAL YIELD SCORE</b>				13	<b>7.401</b>
8						
9						
10	<b>Activity</b>	<b>Yield Score</b>	<b>Cost Score</b>			
11		8.649	see next sheet			
12		6.15	see next sheet			
13		6.342	see next sheet			
14		3.942	see next sheet			
15		6.918	see next sheet			
16		4.092	see next sheet			

### 3) Responses Put Into Algorithm → Scores

	A	B	C	D	E	F
1	<b>Cost Factors</b>	<b>Response</b>	<b>Base</b>	<b>Q score</b>	<b>Weight</b>	<b>Score</b>
2	HF Sim/Stand Patient	0	1.176	0	1	0
3	Faculty Time or NonK	7	0.107	0.749	4	2.996
4	Staff Time	2	0.107	0.214	2	0.428
5	Space	0	0.131	0	1	0
6	Supplies	1	0.118	0.118	0.5	0.059
7	<b>TOTAL COST SCORE</b>				8.5	<b>3.424</b>
8						
9						
10	<b>Activity</b>	<b>Yield Scor</b>	<b>Cost Score</b>			
11		8.649	3.424			
12		6.15	5.245			
13		6.342	3.364			
14		3.942	0.773			
15		6.918	6.101			
16		4.092	2.485			
17		5.574	2.08			

**IPE ACTIVITY YIELD vs. RESOURCE UTIL. SCORES**



# What Do You Do With The Results?

## Have your IPE Activity Assessed

- CIPER and its Curriculum Committee have developed a system that allows individuals to receive an assessment score associated with the YIELD and RESOURCE UTILIZATION of an IPE activity. The system has been developed taking into consideration advice of experts in the field and recent IPE literature. To have an IPE activity assessed, first please register the IPE activity with CIPER (see above). Then, please notify [sgoodman@kumc.edu](mailto:sgoodman@kumc.edu) if you are interested in having an IPE activity assessed.

## Report

- Transparency with the process (scored vs. not scored)
- Score Considerations
  - Does not take size of the activity into account (learner #, professions involved, etc.)
  - Does not take into account whether or not grant funding was used
  - Scores are *ordinal* level data; range is 0 to 10
- Average score across all registered IPE activities
- Individual IPE activity scores
- General suggestions for improving the YIELD or the RESOURCE UTILIZATION score
- Opportunity to discuss it further...

# General Suggestions - YIELD

- Directly target one or more of the IPEC competencies.
- Collect outcomes on learner behavior or patient outcomes.
- Embed the activity in the curricula.
- Approximate practice in some capacity (e.g. case-based scenarios, simulation, actual practice).



# General Suggestions – RESOURCE UTILIZATION

- If paper resources are used, consider electronic options.
- Consider using classrooms that do not cost per use.
- Create systems that increase efficiency.
- Consider asking staff to conduct coordination activities that are currently requiring faculty time.

# Conclusions

- Set out to compare IPE activities across campus in some meaningful way
- Led to...perhaps more importantly...
  - a robust discussion (over many weeks) about what constitutes high quality IPE activities
  - a better understanding of costs associated with IPE activities
- Turned into a tool useful for faculty development around IPE!

# Acknowledgements

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- Beth Young & Nelda Godfrey (Nurs)
- Serra Goodman (CIPER)



Feel free to contact:  
[sjernigan@kumc.edu](mailto:sjernigan@kumc.edu)