A Systems Approach to Program Evaluation

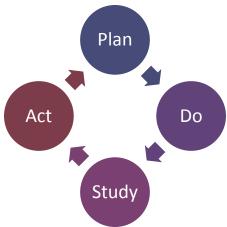
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Introduction

Program Evaluation:

The systematic investigation about the quality of <u>a program</u>, particularly its effectiveness and efficiency. (Yarbrough, 2011)



- A Systems Approach to Assessment/Evaluation:
 - Colleges and learning environments are complex systems and this needs to be considered with assessment/evaluation (Armstrong et al, 2004)

Background about UFCOP

- Attributes that make it a "Complex System"
 - 4 Campuses
 - ▶ Both entry-level and nontraditional (WPPD) Pharm.D. Programs
 - Mission Areas:
 - Professional Education (Both entry-level & WPPD)



- Graduate & Postgraduate Education
- Research Programs
- Faculty as Teachers & Scholars
- Leadership to the Profession (both faculty & students)
- Service (Specialty Advanced Training & Faculty Expertise)
- Continuous Professional Development (CPD) of Practicing Pharmacists

*COP Environment, Structure, and Infrastructure is also evaluated since it is important to all of the mission areas

Examples of Systematic Approach for Professional Education

- "Success" was defined via 5 Dichotomous Statements:
 - Do gross indicators of program quality indicate the UFCOP Pharm.D. programs promote the health and welfare of the citizens of Florida and the Nation by preparing graduates in Pharmacy?
 - Are there indicators of a quality curriculum to support the preparation of graduates who are able to take independent professional responsibility for the outcome of drug therapy in patients?
 - Do graduates achieve the Student Learning Outcomes (SLOs) which define the tasks required to: 1) take independent professional responsibility for the outcome of drug therapy in patients, 2) promote population health, and 3) participate in medication use systems?
 - Do graduates gain the ability to assume leadership roles?
 - <u>Do student pharmacists receive the support needed</u> to make both individual students and the overall program successful?

Examples of Systematic Approach for Professional Education

Analyze the Organization

- In order to identify common metrics across the entry-level & nontraditional program, we had to consider how each is organized.
- Use of a logic model:
 - ▶ A logic model links outcomes with program activities and processes.
 - ▶ Logic Model used in the COP Evaluation Plan:
 - □ Before (resources/inputs)
 - □ During (activities)
 - □ After (the results which are either outputs, outcomes, and impact)
- Efficient Strategies for Communicating Across a Complex Organization

Example of a Report

Inquiry:

Do gross indicators of program quality indicate the Entry-level Program promotes the health and welfare of the citizens of Florida and the Nation by preparing graduates in Pharmacy?

Metric Number	Metric	Source	For Office Use (Source Code)	Benchmark	Results				
					2007-8	2008-9	2009-10	2010-11	2011-12
	Quality of Entering Students (Input)								
1.1A.1	Completed Application to Admission ratio	Student Affairs	PA	>3:1	6.77:1	6.28:1	5.33:1	5.90:1	
1.1A.2	Application to Admission ratio	Student Affairs	PA	>3:1		3.48:1	3.48:1	3.47:1	4.33:1
1.1A.3	Science GPA – Admitted Class	Student Affairs	PA						
1.1A.4	Mean PCAT Score	Student Affairs	PA	>80 th Percentile	82	80 th percentile 86	86 th percentile 80	80 th percentile 80	82nd percentile 83
1.1A.5	Gender	Student Affairs	PA	N/A		1000000		33000004	Na mer VV. s
	Quality of Learning (Process)							10.7	
1.1A.6	UF Course & Faculty Evaluations (Overall Mean of all COP courses)	Curricular Affairs (Scale = 1-5)	CA & A	>3.6			4.18	4.21	
1.1A.7	Focus Groups – Each Semester & Campus	Curricular Affairs	CA & A	N/A			See individual report	See individual report	
	Quality of Graduates (Outcome)								
1.1A.8	% Graduation Rate	Student Affairs	PA	>90%		92%	92%	90%	
1.1A.9	% of Graduates on Schedule	Student Affairs	PA						
1.1A.10	% of Graduates satisfied with their education	Student Affairs	AACP-GSS #86	AACP Benchmark			95.4%	84.5%	
1.1A.11	% of Graduates in Each Career Path:	Graduating Students	AACP- GSS #8	N/A			See below	See below	
1.1A.12	Community Chain						53.26%	65.63%	
1.1A.13	Community- Independent						5.07%	6.25%	
1.1A.14	Hospital		1			1	25.36%	31.25%	
1.1A.15	Long-term Care						1.09%	1.34%	
1.1A.16	Managed Care						1.09%	1.34%	

Summary

Strength:

• Establishment of statements that define success has allowed us to "see the forest for the trees" and better organize our data.

Weakness:

- ▶ Full implementation of a logic model is not easy.
 - □ Our revisions in Spring 2011 helped us realize that we needed more input metrics. We also need to use more outcome and impact metrics.
 - □ Also, this is a new thinking approach for faculty that will require time to inculcate.