

Are Students Practicing Self-awareness? An Inventory of Critical Reflection Throughout the Curriculum/Co-Curriculum

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Abstract:

Objective: To assess self-awareness in the required curriculum and examine how existing assignments contribute to a meaningful, intentional thread.

Methods: An inventory of existing assignments within the required didactic and experiential curriculum and required co-curriculum was undertaken. Faculty were asked to describe assignments where students reflect upon an activity/experience, analyze their participation, and describe applicability toward future practice/behaviors.

Student instructions, assignment status (required/bonus/remedial), number of times administered, grading status and mechanisms of student feedback were collected for each assignment. A gap analysis was performed using a curricular design framework developed by the ACPHS Assistant Dean of Curricular Assessment to assess the existing curricular thread.

Results: There are eleven distinct assignments (7 required, 2 bonus, 2 remedial), most occurring multiple times in the required curriculum. A typical ACPHS student will complete at least 40 reflections upon graduation (P1=12, P2=10, P3=11, P4=7). More are possible with bonus assignments, elective courses and remediation. Reflection topics include P1 orientation, white coat ceremony, habits of mind, exam performance, assignment performance, experiential learning, and co-curricular domains; reflections for remediation include professionalism and poor IPPEs/APPE performance. Rubrics are used to grade reflections in 6 of 11 assignment types (54.5%). While most reflection assignments are graded for completion, faculty feedback on student reflections is atypical. The gap analysis revealed several areas for further development including: (1) the need for better defined outcomes for self-awareness, (2) documentation of curricular organization and structure for critical reflection (3) prospective, consistent collection and analysis of student achievement data to inform further change/continuous improvement

Implications: Self-awareness is well developed in the ACPHS required curriculum and students meet the outcome through completion of reflection assignments. The gap analysis revealed areas for further development and quality improvement of the self-awareness curriculum.

Background:

ACPE Standards 2016

Standard 4: Personal and Professional Development: Key Element 4.1: **Self-awareness** – The graduate is able to examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth

Reflection is a commonly employed method used to increase self-awareness. It is often used to support education of student pharmacists engaging in practice or service learning experiences, interprofessional collaborations, and co-curricular professional development activities. Critical reflection involves describing an action/activity to gain understanding, denoting the importance of the activity, and reflecting on how the activity will personally effect a change in perspective or future behavior. This process of critical self-reflection has been noted to enhance professional competency as well as self-awareness, a key curricular element in contemporary pharmacy curricula. Learning how to critically reflect is not necessarily intuitive, and consequently for many learners, it takes consistent practice to develop. The habit of critical reflection is important to introduce early in the pharmacy didactic curriculum with the goal of early adoption leading to lifelong practice as a reflective practitioner. It is important for colleges of pharmacy to assure that they offer ample opportunity for students to engage in critical reflection throughout the didactic and experiential curriculum, and within the co-curriculum.

Objectives:

To assess the extent of Critical Reflection/Self-Awareness exercises throughout the required curriculum. Secondly, to examine if/how these existing assignments contribute to a meaningful, intentional curricular thread of Critical Reflection.

Methods:

An inventory of existing assignments within the required didactic and experiential curriculum and required co-curriculum was undertaken. Faculty who offered required courses were surveyed to report assignments where students describe an experience, analyze participation activities, and reflect upon the applicability toward future practice/behaviors.

Student instructions, assignment status (required/bonus/remedial), number of times administered, grading status and mechanisms of student feedback were collected for each assignment. A gap analysis was performed using a curricular design framework developed by the ACPHS Assistant Dean of Curricular Assessment to assess the strengths and gaps within the existing curricular thread.

Table 1: Courses Within Curriculum/Co-Curriculum Offering Critical Reflection Opportunities

Year	Course	Assignment Direction	Total re- flections	Is it as- sessed? How?	Count towards grade?	Do stu- dent get feedback?
P1	Foundations of Pharmacy	Reflections on White Coat Ceremony, P1 Orientation, Career Exploration	3	rubric	y	yes
P1	Immunology	Reflection on Group Dynamics	1	yes, rubric	y	no
P1	Pharmacy Skills 1	Habits of Mind reflections	2	few, by rubric	y	no
P1	Pharmacy Skills 2	Habits of Mind reflections	2	few, by rubric	y	no
P1	PhIT Portfolio (co-curriculum)	reflections on Healthcare-related community service, patient care service, professional development	5	rubric	y	prn
P2	PTPM Cardiovascular	Reflection on Exams of Strengths & Opportunities report	3	no	y	
P2	Scientific Literature Evaluation	reflection of presentation topic and group response	1	yes, rubric	y	no
P2	Pharmacy Skills 3	Habits of Mind reflections	2	few, by rubric	Y	no
P2	Pharmacy Skills 4	Habits of Mind reflections	2	few, by rubric	Y	no
P2	PhIT Portfolio (co-curriculum)	Reflections on Career Exploration, patient care service, leadership/service to profession, professional development, legislative advocacy	5	rubric		prn
P3	PTPM Nephrology	Weekly self-evaluation on areas for improvement (Nephro PTPM).	3	whether it was completed on time (Nephro)	y	no
P3	Pharmacy Skills 5	HOM reflections	2	few, by rubric	Y	no
P3	Pharmacy Skills 6	HOM reflections	2	few, by rubric	Y	no
P3	PhIT Portfolio (co-curriculum)	Reflections healthcare-related community service, patient care service, leadership/service to profession, professional development, legislative advocacy	5	rubric		prn
P3	Integrated Problem-Solving Workshop	Self-critique on patient counseling. Self-critique on case presentation activity. (IPS 3)	2	no	y	no
P4	APPE	Reflection on experience	7	no	y	prn
"PRN", Remedial Critical Reflections						
P4	APPE	Experiential Success Plans		rubric		Yes
P1-P4	Professionalism Code	Professionalism Success Plan		Reviewed for completeness by Dir Prof Affairs		Yes

Bibliography:

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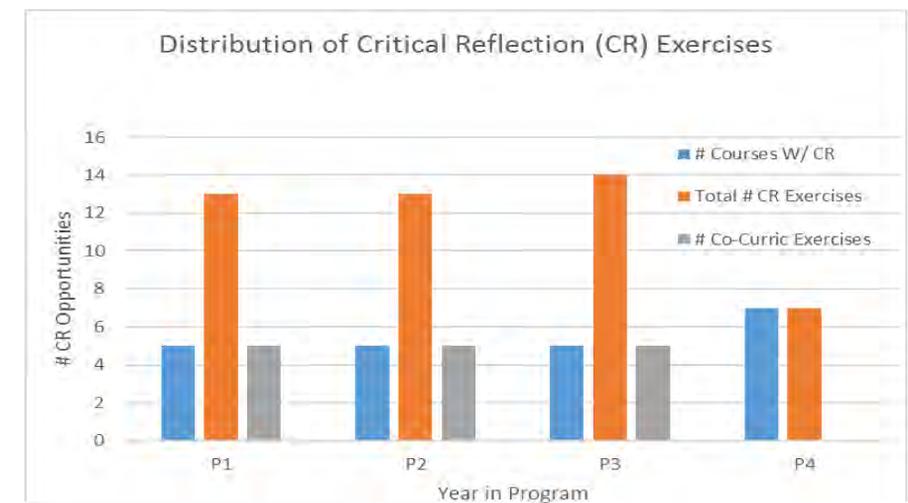
Results:

- Table 1 denotes the required courses within the curriculum/co-curriculum which offer Critical Reflection Opportunities. Nine distinct courses are represented, with critical reflection offered in multiple semesters, and spanning classroom, laboratory, experiential and co-curricular settings (e.g., community outreach events).
- An ACPHS student will complete at least 47 reflections within the required curriculum upon graduation, with additional opportunities available through course bonus assignments, elective courses, and course remediation, as applicable.
- Opportunities to critically reflect occur in roughly equal distribution across all 4 years in the program, as depicted in Figure 1.
- Rubrics are used to grade reflections in some assignment types (see Table 1). An example of a rubric used to assess Critical Reflection is included in the Appendix.
- While most reflection assignments are assessed for completion, faculty feedback on student reflections is atypical.
- The gap analysis revealed several areas for further development including need for:
 - 1.) better defined outcomes for self-awareness
 - 2.) documentation of curricular organization and structure for critical reflection
 - 3.) prospective, consistent collection and analysis of student achievement data to inform further change/continuous improvement

Implications:

Practicing Self-Awareness via Critical Reflection is well developed in the ACPHS required curriculum, with students meeting this curricular outcome through completion of numerous reflection assignments across the program. The gap analysis revealed areas for further development and quality improvement of the Self-Awareness curriculum/co-curriculum.

Figure 1



Appendix: Example Grading Rubric for Student Reflections on P1 White Coat Ceremony

Assessor*	3 (Critical Reflection)	2 (Reflection)	1 (Understanding)	0 (Non-reflection)
Critical Reflection (3 point maximum)	Student provides sufficient description and critical analysis of participation in the experience and applies it to future practice/behaviors. Reflection is thorough, thoughtful, detailed and clear.	Student provides sufficient description and analysis of participation of the experience but DOES NOT apply it to future practice/behaviors.	Student mentions in general the importance of WCC to future practice, but provides superficial or is lacking description and analysis of personal WCC participation.	Student provides a brief, superficial, generalized analysis of the WCC, AND does not adequately reflect on the impact of the White Coat Ceremony (or Professionalism Pledge if not at WCC); reflection is incomplete or unclear.
Spelling and Grammar (2 point maximum)	--	No apparent spelling or grammar errors	No more than 3 spelling and/or grammatical errors	More than 3 spelling and/or grammatical errors

* Maximum grade 5 points