

RESEARCH BRIEF

Design and Implementation of a Professional Development Course Series

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Objective. To design and implement a longitudinal course series focused on professional development and professional identity formation in pharmacy students at Western New England University.

Methods. A four-year, theme-based course series was designed to sequentially and longitudinally impart the values, attributes, and characteristics of a professional pharmacist. Requirements of the course include: goal planning and reflective assignments, submission of “Best Works,” attendance at professional meetings, completion of service hours, annual completion of a Pharmacy Professionalism Instrument, attendance at Dean’s Seminar, participation in roundtable discussions, and maintenance of an electronic portfolio. Though the Professional Development course series carries no credit, these courses are progression requirements and students are assessed on a pass/fail basis.

Results. Course pass rates in the 2015-2016 academic year for all four classes were 99% to 100%, suggesting the majority of students take professional development seriously and are achieving the intended outcomes of the courses.

Conclusion. A professional development course series was designed and implemented in the new Doctor of Pharmacy program at Western New England University to enhance the professional identity formation of students.

Keywords: professional development, professional identity formation, co-curricular

INTRODUCTION

Over the past decade, pharmacy education has identified that something more than knowledge and skill is needed to be a pharmacy professional.¹ Upon completion of the PharmD program, pharmacy students assume the title of pharmacist, allowing them entry into the profession. A passing score on the licensing exam demonstrates that the new pharmacist has acquired the necessary knowledge base to begin practicing; donning of the white coat visually symbolizes the pharmacist’s entry into the profession; but how can academia ensure that we have developed the professional identity of that pharmacist? This awareness has resulted in a heightened emphasis in pharmacy education to include programming targeted at the preparation of students, beyond knowledge and skill, to assume the role of a pharmacist. In 2009, the AACP Curricular Summit predicted future competencies needed, and called for curricula to foster five cross-cutting abilities: professionalism, self-directed learning, leadership and advocacy, interprofessional collaboration, and cultural competency.² Additionally, the CAPE

2013 Educational Outcomes identified the affective domain’s importance in the development of a pharmacist and included Domain 4 (Personal and Professional Development) as an outcome describing elements of self-awareness, leadership, innovation, and professionalism.³ ACPE Standards 2016 also require programs to impart the skills and attitudes that demonstrate personal and professional development (Standard 4).⁴ Calls have been made for schools and colleges to share their approaches to meeting and assessing Standard 4 elements.⁵

An AACP Council of Deans Taskforce defined Professional Identity Formation (PIF) in pharmacy as the “transformative process of identifying and internalizing the ways of being and relating within a professional role.”⁶ This transformational process is one that a student should experience before assuming the role of a pharmacy professional, and involves more than donning a white coat or passing a licensing exam. Within medical education, PIF has been described as encompassing the following dimensions: personal identity (self), role identity (professional commitment), and social identity (relation by group).⁷ This developmental process is one that establishes and integrates core beliefs, moral values, and self-awareness.⁸

Viewing PIF through the paradigm of professionalism is one way of understanding our roles as educators.

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However, there is no consensus as to the definition of professionalism in pharmacy,⁸ and measuring it becomes even more difficult. Brown and colleagues examine professionalism and frame it around three domains – competence, connection, and character – which are exemplified by professional behaviors such as self-directed learning, applied skill, compassion, self-control, responsibility, and service (among others).⁹

PIF is influenced through academic coursework, extra- and co-curricular activities, experiential training, programmatic requirements, self-reflection, and mentoring. While academic experiences may not develop the personal identity of a student, they can be influential when integrated with the student's own personality, values, goals, and prior experience to create a molded and subjective professional identity. Further, academic experiences can help define the role and social identity of a pharmacist for the profession. However, additional approaches are necessary to instill in students a sense of professional identity.

There have been various strategies employed by programs to inculcate pharmacy students with professional attributes, with ambiguous effectiveness, perhaps due to the lack of a consensus-based definition of professionalism or a reliable measure to assess the effectiveness of the strategy.^{9,10} Pharmacy schools routinely use White Coat Ceremonies and dress codes, refer to professionalism in mission statements, handbooks, and outcome statements, and hold offices or committees on student professional development. A smaller number of programs offer stand-alone courses targeting professional development. For example, a humanities course has been used during the first professional year to enhance students' awareness of the importance of professionalism.¹¹ A professional development seminar series offered as an elective and spanning multiple years demonstrated a positive impact on the students' career development and their appreciation of their professional responsibility. Academic advisors played an important role in the seminar series, which demonstrated improvements in self-efficacy.^{12,13} To date, a required longitudinal course focused on student professional development has not been described in the literature.

It has been suggested that the “informal” or “hidden” curriculum delivered through tacit socialization and culture has a major influence on PIF.⁹ In an attempt to meld tacit and explicit learning and officially recognize the importance of personal and professional development of its learners, Western New England University College of Pharmacy has developed a course series entitled Professional Development I-IV. As a co-curricular component of the program, the course series was developed to

advance the learning that occurs within the formal didactic and experiential curricula, and implemented to sequentially and longitudinally impart the values, attributes, and characteristics of a professional pharmacist, thus supporting students' PIF.

METHODS

Early in the design of the curriculum, the college's assistant and associate deans developed a required course series, Professional Development I-IV. Each of the four courses in the series was designed to span a full academic year (two semesters). The course series was approved by the College of Pharmacy Academic Affairs Committee in June 2011, and by the full College of Pharmacy faculty in July 2011.

Through the first three years of the program, weekly classroom meetings were scheduled, either with the entire class or in small groups led by faculty advisors. A sample schedule is shown in Table 1 for Professional Development (PD) I. In the fourth year, while students were completing APPE rotations, the course was administered entirely online through our course management system. A theme-year approach was used for the course series, with one or two predominant themes anchoring programming during each year (Table 2). Each of the four assistant/associate deans serves as the instructor of record for one of the four courses on a permanent basis. Faculty advisors serve as instructors for the course in which his/her advisees are enrolled, and are responsible for evaluating some assignments and participating in regular roundtable discussions with their advisees. Although these courses carry no credit, they are progression requirements that are assessed on a pass/fail basis.

In addition to the theme-based, course-specific learning objectives shown in Table 2, several learning objectives are common to all four courses in the series, in an effort to longitudinally impart the values, attributes, and characteristics of a professional pharmacist. These are shown in Table 3, mapped to the assignments or activities that are used to assess them. Each of these assignments or activities is discussed below.

Goal planning is introduced during the course orientation meeting for PD I early in the fall semester. Students learn the importance of establishing personal and professional goals using a SMART framework.¹⁴ At the start of each of the first three academic years, students are required to create an annual goal plan, identifying at least three SMART goals for the coming academic year (one of which must be an academic goal), along with clear action steps for achieving these goals. At the close of the academic year, students complete a reflective writing assignment reviewing their performance on meeting their goals

Table 1. Sample Schedule for PHAR 580 Professional Development I

Week #	Session
Fall Semester: Professional and Ethical Expectations of Pharmacists	
1	Orientation to Professional Development
2	Orientation to Goal Setting
3	Orientation to Core Comps Passport; Written Reflection (Goal Plan) due
4	Speaker: Social Media Awareness
5	Developing the MyCred e-Portfolio
6	Speaker: What does it mean to be a Pharmacist?
7	Panel discussion: Code of Ethics for Pharmacists
8	Written Reflection (White Paper on Pharmacy Student Professionalism) due
9	Speaker: Values and Ethics of a Pharmacist
10	
11	Attendance to Dean's Seminar
12	Speaker: Life as a Professional; MyCred e-Portfolio due
13	
14	Roundtable discussion with advisor: Classroom connection: Professional Attitudes and Behaviors; Self-Assessment (Contribution to Roundtable discussion) due
15	Professional Meeting and Service documentation due
Week #	Session
Spring Semester: Service to the Community and Advocacy for the Patient and the Profession	
1	
2	Speaker: Patient Advocacy: Industry Perspective
3	Speaker: Residency Advisory Committee: Overview: The benefits to residency
4	
5	
6	Speaker: Patient Advocacy: Pain Management: The Pharmacist Role
7	
8	Written Reflection (Community Service) due
9	Roundtable discussion with advisor: Classroom connection/IPPE rotation
10	Written Reflection (Goal Review) due
11	Self-Assessment (Contribution to Roundtable discussion) due
12	Speaker: Advocacy for the Profession: Massachusetts Pharmacists Association
13	
14	
15	Professional Meeting and Service documentation due

for the year, explaining why they believe their goals were or were not met, and what they might do differently in the future. For the fourth academic year, students are required to create a goal plan preceding each APPE rotation and a goal review evaluation in collaboration with APPE preceptors. The goal planning and goal review assignments are evaluated by the student's faculty advisor at the end of each rotation using a rubric that assesses the relevance of the student's goals, connections of plan to future goals, and style/convention.

Additional reflective assignments, 1-2 written assignments per semester, are required during the first three years of PD. These assignments are based on topics relevant to the theme of the course. Examples include: connections of IPPE activities and concurrent classroom learning, reflections on community service initiatives, career plans, and a reflection on a published article entitled "White Paper on Pharmacy Student Professionalism."¹⁵

Submission of "Best Works" is required at the end of each academic semester during the first three academic years. Students select one assignment, activity, or achievement from the semester that best demonstrates their progress in achieving one or more of the five general ability core competencies (thinking and learning, social and cultural awareness, active citizenship and leadership, personal judgment, and communication). Students are required to provide a brief reflective statement (5-7 sentences minimum) identifying why the selection was chosen and how it aligns with the core competency/competencies where personal or professional growth has occurred. During the fourth academic year, students are required to submit a Best Works artifact following the completion of each APPE rotation. Best Works assignments are evaluated by the student's faculty advisor or the course Instructor of Record (IOR). Evaluation is based on how well the student demonstrates the connection between the artifact and their growth and development within the competency.

Attendance at professional meetings, two during each academic year, is required of all students. These meetings serve to introduce students to local, regional, and national pharmacy organizations, allow students to begin the process of networking and developing relationships with their future peers in health care, and become familiarized with the process of documentation of continuing pharmacy education. At least one of the professional meetings per year must be a live, in-person, off-campus event. Online meetings are required to be pre-approved by the IOR, and can only fulfill the meeting requirement if the meeting is live (synchronous), includes an interactive session where the audience can interact with and/or ask questions of the presenter(s), and the student can demonstrate

Table 2. Themes for Programming Within Professional Development Course Series

Academic Year	Themes and Theme-Specific Learning Objectives	
	Fall Semester	Spring Semester
PY-1	Professional Values and Ethics	Service and Advocacy
	Describe what positive influences in the didactic and practice settings are necessary for the development of the professional practitioner.	
	Demonstrate an understanding of the principles of the Code of Ethics for Pharmacists and how they guide pharmacists in relationships with patients, health professionals, and society.	
PY-2	Teamwork and the Workplace	Interprofessional Education (IPE) and Collaboration
	Describe the process of team development and the roles and practices of effective teams.	
	Effectively communicate instructive feedback to others while responding respectfully to feedback from others.	
PY-3	Career Goals and Marketability	Cultural Competency and Awareness
	Reconcile pharmacy employer expectations for skills, attitudes, and behaviors with your personal progress toward meeting these expectations.	
	Develop an action plan for attaining the personal and professional growth necessary for a candidate for an entry-level pharmacist within your goal practice setting.	
PY-4	Licensure Preparation	
	Demonstrate preparedness for the North American Pharmacist Licensure Examination (NAPLEX).	

the value in his/her participation. Students cannot use more than two online meetings to fulfill professional meeting attendance requirements throughout the entire four-year PD course series. Students must maintain a log of meeting attendance and submit evidence if they are chosen by a random audit performed by the IOR (10% of each class per year), simulating future pharmacist license renewals.

Completion of service hours, 20 per academic year, is also required. The service provided can be to the college of pharmacy, the university, the profession of pharmacy, or to the community at large. A minimum of 10 of the 20 service hours each year must be completed in an off-campus setting. Service in excess of 20 hours per year cannot be carried over into the next academic year. Similar to professional meeting attendance, students must maintain documentation of service hours in case of potential audits.

The Pharmacy Professionalism Instrument (PPI), an 18-question validated survey for measuring professionalism among pharmacy students and recent graduates, is administered to all students during new learner orientation and at the end of each academic year.^{16,17} All learners are required to complete the PPI, but the survey is anonymous to reduce social desirability bias.

Attendance at Dean's Seminar is required once per semester. A guest presenter of regional or national renown is invited to speak to the students, faculty members,

and staff on a contemporary pharmacy or health care topic of interest to the college. Recent topics have included substance abuse among pharmacists, supply chain protection, pharmacy advocacy, leadership opportunities, and interprofessional collaboration and teamwork. The seminar is scheduled when classes and laboratories are not in session; attendance is required for all first-, second-, and third-year students and is documented by the assistant/associate dean for student affairs; attendance at Dean's Seminar is not required for fourth-year students.

Participation in roundtable discussions is required. Once per semester, first-, second-, and third-year students are required to meet with their academic advisors (10-11 students per advisor) for a facilitated 1-hour roundtable discussion on a topic related to the semester's program theme. Academic advisors are presented with an outline of the discussion topic, starter questions, and talking points; students are expected to participate and share experiences. Students are required to complete a self-evaluation of their preparation, participation, and attention in the roundtable session via rubric; faculty advisors evaluate student performance by completing the same rubric.

Maintenance of an electronic portfolio (MedCred) is required for all students throughout the course series. The portfolio includes a current resume and is aligned to the instructions provided by the IOR. Additional portfolio pieces may include demonstration of community service

Table 3. Common Learning Objectives and Assignments or Activities by Which They Are Assessed

Learning Objective	Goal Planning	Reflection	Best Works	Professional Meetings	Professionalism Service	Professionalism Instrument	Dean's Seminar	Roundtable Discussion	Portfolio
Assume responsibility and accountability for acquiring and documenting new knowledge.	X	X	X	X			X	X	X
Relate how knowledge learned within the classroom is applied in pharmacy practice experiences.		X	X					X	X
Reflect on one's self or experiences to identify learning needs, goals and opportunities.	X	X	X	X	X	X	X	X	X
Develop an action plan to accomplish learning needs, goals, and opportunities.	X	X							
Evaluate personal progress at meeting learning goals.	X	X				X			

or professional organizational activities, certifications, awards, personal goals, etc. Students are encouraged to be creative with their portfolios with aesthetic enhancements (photos, videos, etc.). Students must maintain an up-to-date portfolio and submit it annually as part of

Professional Development I-III. During the fourth year, the portfolio must be updated after each APPE rotation; updated portfolios are made available to preceptors prior to the next rotation. Feedback is given to the students by the IOR or the faculty advisor.

All assignments within the PD course series must be complete – and completed in a satisfactory manner with a passing grade – for a learner to be eligible to progress from one PD course to the next; and as a consequence, to be eligible to progress from one academic year to the next. Missing and late assignments are tracked cumulatively over a student's four years of enrollment using a system of progressive penalties designed to mimic the progressive sanctions imposed by a state board of pharmacy for violations. A first missing/late assignment triggers an Early Advisory Report notification to the student and their faculty advisor. Following a second late/missing assignment, students are asked to purchase a book designed to increase personal accountability, read the book, and write a 500-word reflective essay on how the learnings from the reading will better help the student adhere to the college's academic policies.¹⁸ Following a third late/missing assignment, the student must meet with the college's Academic Standards Committee (ASC, the standing committee responsible for assessing learner progress in achieving curricular outcomes) at the end of the semester to determine the reasons for the continued non-adherence with the course expectations. The ASC has discretion to impose a variety of sanctions, including remedial assignments, implementation of a formal academic plan, mandated workshop participation, or course failure. Course failures due to a third late/missing assignment may be removed from the student's transcript at the discretion of the ASC, following successful completion of a remediation plan developed by the committee. Following a fourth late/missing assignment, the student receives a failing course grade that cannot be removed from the student's transcript. Students who fail a PD course are required to meet with the ASC, which performs a holistic evaluation of the student and may impose a suspension (resulting in a graduation delay) or dismissal. Students who fail to complete the professional meeting attendance and/or service hour requirements, or fail to submit electronic documentation of completing the requirements by the submission deadline, are treated as having a third late/missing assignment. Students who are determined to have falsely claimed to have completed the requirements via electronic attestation may be subject to disciplinary proceedings for violating the college's code of conduct for academic integrity.

Throughout the PD course series, individual assignments are graded by either the IOR or a student's academic advisor using assignment-specific rubrics. Most assignments are graded on a three-point scale, with a score of 2.0 (proficient) or higher considered to be a passing grade for the assignment. Following the fall semester, the student's overall performance for the semester is reviewed by the IOR, and formative feedback is provided

through a rating of excellent progress, acceptable progress, or unacceptable progress. Following the spring semester, the student's performance for both the fall and spring semesters is reviewed, and the student receives summative evaluation and is assigned a grade of pass ("P") or fail ("F").

RESULTS

As the common assignments/components of the PD course series were developed to assess a set of common learning outcomes, course pass rates are indicative of the extent to which students are achieving those outcomes. Professional Development pass rates in the 2015-2016 academic year for all four classes were PD I, 99%; PD II, 100%; PD III, 99%; PD IV, 100%. Since the inception of the program, there have been only five failures among three individuals, suggesting the majority of our students take the PD course series seriously and are achieving the intended outcomes of the courses.

CONCLUSION

AACP and ACPE have called upon institutions to support the personal and professional development of students through curricular and co-curricular initiatives.^{3,4} Programs have been challenged to assess and define the domains, use literature, and share in the experiences of implementation and assessment.⁵ As a new program, we had the luxury of developing a curriculum in which we could embed a co-curricular required course series dedicated to professional development from the inception. As such, the PD course series has become an integral part of our program's culture for learners and faculty members alike. The Professional Development course series at Western New England University College of Pharmacy was designed to enhance professional identity formation and to fill the curricular deficit in the development of the affective domains as described in the CAPE 2013 Outcomes and ACPE Standard 4 elements.

REFERENCES

1. Bloom TJ. Back to the future: using an old mindset to teach our students professionalism. *Am J Pharm Educ.* 2015;79(9):Article 143.
2. Jungnickel PW, Kelley KW, Hammer DP, Haines ST, Marlowe KF. Addressing competencies for the future in the professional curriculum. *Am J Pharm Educ.* 2009;73(8):Article 156.
3. Center for the Advancement of Pharmacy Education. CAPE Educational Outcomes 2013. Washington, DC: American Association of Colleges of Pharmacy; 2015. <https://www.aacp.org/resource/cape-educational-outcomes>. Accessed August 9, 2016.
4. Accreditation standards and key elements for the professional program in pharmacy leading to the doctor of pharmacy degree. Standards 2016. Chicago, IL: Accreditation Council for Pharmacy Education; 2015. <https://www.acpe-accredit.org/pdf/Standards2016FINAL.pdf>.

5. Fjortoft N. The challenge of the accreditation council for pharmacy education's standard four: identifying, teaching, and measuring. *Am J Pharm Educ.* 2016;80(5):Article 73.
6. Crismon ML, Allen D, DiPiro JT, Brazeau G, Meyer SM, Lau V. Council of Deans Report, July 2014. *Am J Pharm Educ.* 2014;78(9): Article S17.
7. Mylrea MF, Gupta TS, Glass BD. Professionalization in pharmacy education as a matter of identity. *Am J Pharm Educ.* 2015;79(9): Article 142.
8. Holden M, Buck E, Clark M, Szauter K, Trumble J. Professional identity formation in medical education: the convergence of multiple domains. *HEC Forum.* 2012;24(4):244-255.
9. Brown D, Ferrill MJ. The taxonomy of professionalism: reframing the academic pursuit of professional development. *Am J Pharm Educ.* 2009;73(4):Article 68.
10. Sylvia LM. Enhancing professionalism of pharmacy students: results of a national survey. *Am J Pharm Educ.* 2004;68(4):Article 104.
11. Bumgarner GW, Spies AR, Asbill CS, Prince VT. Using the humanities to strengthen the concept of professionalism among first-professional year pharmacy students. *Am J Pharm Educ.* 2007;71(2): Article 28.
12. Zorek JA, Katz NL, Popovich NG. Guest speakers in a professional development seminar series. *Am J Pharm Educ.* 2011;75(2):Article 28.
13. Popovich NG, Katz NL, Iramaneerat C, Smith EV. Assessing the self-efficacy development in doctor of pharmacy students enrolled in a professional development seminar series. *J Pharm Teach.* 2007;14(2):55-75.
14. Bogue R. Use S.M.A.R.T. goals to launch management by objectives plan. TechRepublic Web site. Published April 25, 2005. <http://www.techrepublic.com/article/use-smart-goals-to-launch-management-by-objectives-plan/>. Accessed June 10, 2016.
15. Benner J, Beardsley R. White paper on pharmacy student professionalism. *J Am Pharm Assoc.* 2000;40(1):96-102.
16. Chisholm MA, Cobb H, Duke L, McDuffie C, Kennedy WK. Development of an instrument to measure professionalism. *Am J Pharm Educ.* 2006;70(4):Article 85.
17. Poirier TI, Gupchup GV. Assessment of pharmacy student professionalism across a curriculum. *Am J Pharm Educ.* 2010;74(4): Article 62.
18. Miller JG. *QBQ! The Question Behind the Question*. London, UK: Penguin Books; 2001.