Teaching and Learning Program with a Concentration in Pharmacy Education

The University of Tennessee College of Pharmacy

Memphis ● Nashville ● Knoxville

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BACKGROUND

The University of Tennessee College of Pharmacy has a long tradition of excellence in post-‑doctoral pharmacy education. There are a growing number of residency programs (PGY1 and PGY2) within the state, many of which have some interaction with the college. Historically, graduates of these residency programs have assumed a variety of positions within the profession. Ultimately, many of these become full-‑ or part-‑time faculty who present didactic lectures, facilitate small group discussions, and/or precept student pharmacist during experiential learning.

The American Society of Health-‑‑System Pharmacists (ASHP) residency accreditation standards, note that delivering effective education is one of the practice foundation skills that should be taught during a pharmacy practice residency program.[1] Although this is a laudable goal, general residency training programs may not always teach residents to teach. Unfortunately, residents are often given teaching responsibilities without any structured education or an identified mentor. Likewise, important formative and summative assessment of the resident's teaching performance is often lacking.

For more than a decade, the University of Tennessee College of Pharmacy has held a day long Residency Conference in August. The programming for this event has been multifaceted, attempting to address both the ability of the resident to not only educate student pharmacists but to conduct clinical research. Although this has been an extremely successful initiative, the college recognizes the need for a more formal effort; hence, the Teaching and Learning Program was created.

GOAL

The goal of this program is to provide pharmacy residents or preceptors with a structured educational program that can serve as the foundation for future development as a full, or part-time faculty member. Not only will participants (residents/preceptors) be given content information, they will be provided with opportunities to further develop and apply the knowledge and skills acquired during the program under the guidance and supervision of a mentor.

PRICE

The cost for the program is $75 per participant. This includes the annual symposium, seminars, workshops, and certificate of completion (upon completing the requirements).

OBJECTIVES

Through active participation in program seminars, workshops, individual mentoring activities and application exercises the participant will:

- Gain foundational knowledge in educational theory, principles of learning, and effective teaching techniques
- Develop proficiency in a variety of effective instructional methods
- Apply the knowledge and skills gained in the program, under supervision of a mentor
- Cultivate a mentor-mentee relationship to gain feedback throughout the program
- Identify goals for students' learning through the development of a written teaching philosophy
- Provide instruction, oversight, and assessment of the creation and maintenance of an educational portfolio that documents formal teaching activities

Residency Site Responsibilities – In order for the participant (resident) to meet the requirements of the teaching and learning program the residency site must agree to allow their participant to attend **all** **sessions** via live attendance or recording. **The on-site mentor must be given time to participate in the education and evaluation of the participant's teaching activities.**

Mentor Responsibilities – The mentor agrees to **meet with the participant at least monthly** to ensure that they are appropriately progressing on all activities. During each session they will review the participant's teaching portfolio. The mentor will formally review and complete an evaluation of the portfolio prior to the midpoint and final submission. They (or their designee) will attend and formally evaluate the participant during active learning (e.g., applied therapeutics, laboratory assistant, rotation) and didactic (i.e., lecture) sessions and will review all teaching evaluations with the participant. The mentor will also work closely with the participant during the month in which they precept students during experiential learning (i.e., rotation). The participant does not have to conduct their precepting month with their mentor, but the mentor must be informed of the participant's progress throughout the month. Mentors will not oversee more than two (2) participants, unless prior approval is granted by the program director. Ideally, mentors should have experience in both experiential and didactic teaching. Mentors that do not have this experience should encourage their mentee (participant) to seek additional guidance from a preceptor or lecturer with adequate experience. It is strongly encouraged that a mentor with limited experience in teaching should attend the seminars and workshops with their mentee.

Mentor Checklist:
- Meet with participant monthly (either in person or virtually)
- Formally review participant's portfolio prior to the midpoint submission
- Formally review participant's portfolio prior to the final submission
- Attend (either in person or virtually) and formally evaluate the participant's active learning sessions
- Attend (either in person or virtually) and formally evaluate the participant's didactic lecture session
- Review the student teaching evaluations with the participant
- Work closely with the participant during primary precepting month

Participant Responsibilities – In order to qualify for a certificate of completion in the Teaching and Learning Program, participants must successfully complete the following

Required:
- Attend (via live videoconferencing) the residency symposium
- View or attend a total of 8 topics/sessions in addition to the symposium programming
- Facilitate 4 hours of active teaching (small group education of students)
- Deliver 1 didactic lecture to healthcare professionals (e.g. CE for pharmacy, nursing, physicians)
- Serve as primary preceptor to PharmD students for 1 month
- Have mentor review participant's teaching philosophy (review to be included in portfolio)
- Have mentor review and complete an evaluation of the teaching portfolio prior to midpoint

and final submission (review to be included in portfolio)

- Evaluate 1 peer lecture (this can be a lecture given to pharmacy students and/or other healthcare professionals)
- Have at least 1 peer evaluate participant's didactic lecture (this can be a lecture given to pharmacy students and/or other healthcare professionals)
- Obtain student/learner evaluations of didactic lecture and active learning sessions. ***This is not the responsibility of the course director. It is the responsibility of the participant.***
- Submit a midpoint teaching portfolio (on time, usually due by the end of January)
- Submit a final teaching portfolio with revisions from the midpoint review (on time, usually due by the middle of May)
- Obtain a passing evaluation for both the midpoint and final teaching portfolio review by residency/fellowship committee member

Optional, but STRONLY encouraged if opportunities are available:
- Deliver 1, 50 minute, didactic lecture to pharmacy students (**once accepted, you are committed**)
  - Participants can provide these didactic lectures in the academic institution of their choice. It is highly ENCOURAGED that these are part of the UTCoP Pharm.D. curriculum for ease of access. Alternatives include another school of Pharmacy, the School of Nursing, or School for Pharmacy Technicians.

OPTIONAL: Announcements will be sent throughout the year if participants would like to volunteer to grade pharmacy students participating in Objective-Structured Clinical Examinations (OSCEs) as part of the IPECS course series (I thru V) in the UT curriculum. Some of these activities may involve live grading and the participant may be required to be in university premises 2 hours at a time.

THE PROGRAM

The University of Tennessee College of Pharmacy (UTCOP) Teaching and Learning Program (TLP) will commence in August of each residency year, beginning with the University of Tennessee College of Pharmacy Post-Doctoral Resident and Fellow Symposium. This will allow the participants to become acclimated to their training environment. Participants wishing to complete the program must enroll in the program by the end of the Symposium (August of each residency year), establish a mentor by the end of August of each residency year, and complete the requirements of the program by the end of May of each residency year. All participants who successfully complete the program will be awarded a Teaching and Learning Certificate in June of each residency year.

The program is divided into four distinct sections.

- Residency Symposium
- Seminars and workshops
- Application
- Assessment

Resident Symposium (August) – Participants attending this symposium will participate in programming that is dedicated to pedagogy. *Potential* topics include:

- General principles of assessment
- Creating a syllabus
- Creating learning objectives & exam questions
- Introduction to teaching methodologies (focus on active learning)
- Transitioning from student to preceptor
- Evaluating student achievement in experiential education – Formative and summative assessment; providing feedback; motivating learners; issues in experiential learning
- Preparing class materials
- Building teaching credentials – educational philosophy and compiling a teaching portfolio

Seminar and Workshop Series– This aspect of the program emphasizes teaching concepts, didactic and small---group lecture presentations, assessment strategies, and evaluation of student learning.

Potential topics include:

- Lecture presentation – skills including issues in distance education technology and course adaptation
- Evaluating student achievement in experiential education – Formative and summative assessment; providing feedback; motivating learners; issues in experiential learning
- Using technology in education – educational games; Turning Point Audience Response System, StudyMate, Wikis and Blogs
- How to properly grade OSCEs
- Developing and utilizing a patient case for teaching
- Course development and coordination
- How to be a good CE lecturer
- How to revise a lecture based on audience review/feedback
- Basics of statistics and study design
- How to write a manuscript
- Scholarship of teaching and learning
- Student---Teacher Relationships; Professionalism
- How to write learning objectives
- How to write exam questions & statistical item analysis
- Academic roles and responsibilities of a faculty member

Application Activities – The participant must develop a philosophy of teaching statement and create a teaching portfolio. Program participants must complete actual teaching sessions in order to earn a certificate. The participant must participate in teaching activity that involves active learning and must give one didactic lecture. The participant must also construct a syllabus for a mock Advanced Pharmacy Practice Experience (APPE) – experiential teaching on rotation.

> **Teaching Philosophy** – A philosophy of teaching statement expresses a person's belief and values about teaching. They are individualized and personal statements that introduce the teacher, to the learner. Each participant must develop a written teaching philosophy statement, which must be submitted to his or her mentor two weeks after the "writing a teaching philosophy" seminar. The mentor review must be included in the participant's teaching portfolio.

> *Teaching Philosophy Resources*
> https://academic.oup.com/ajhp/article/70/3/191/5112713
>
> https://teach.its.uiowa.edu/sites/teach.its.uiowa.edu/files/docs/docs/Components_of_a_Teaching_Philosophy_Statement_ed.pdf

Educator's Portfolio – Is a factual description of a participant's teaching strengths and accomplishments. It includes documents and materials that collectively represent the scope and quality of a participant's teaching performance. Each participant will submit a teaching portfolio to their mentor and oversight committee to verify completion of all elements of the program (see Appendix A for checklist). Portfolios will be due at two points during the certificate program. The first deadline is in January and the second deadline is in May. See schedule for specific dates. Portfolios must adhere to formatting guidelines to ensure ease and consistency of review.

Required portfolio elements include:
- Outline of portfolio documents (table of contents)
- Statement of teaching philosophy
- Documentation of TLP seminars and workshops attended/viewed (include dates of activities)
- Summary of teaching activities – didactic lectures and active learning **(e.g., course title and number, number of students, contact hours, teaching topic)**
- Examples of teaching work (e.g., handouts, learning objectives, examination questions)
- Documentation of a peer review of the participant's didactic lecture
- Documentation of a review of a peer's didactic lecture by the participant
- Documentation of mentor review of participant's portfolio at midpoint and final
- Documentation of teaching effectiveness **(e.g., student/learner evaluations, mentor evaluations)**
- Current CV

Teaching Portfolio Resources
https://cft.vanderbilt.edu/guides-sub-pages/teaching-portfolios/

Active Teaching Activities – Each participant must serve as a small group facilitator for the Applied Therapeutics, Elective course, or Foundations of Pharmacy course. If the resident is at a site that participates in Applied Therapeutics, it is preferred that the resident gain active teaching through this class. An alternative would be participation as a teaching assistant in Inter-Professional Education and Clinical Simulation (IPECS) course series, or student tutoring (through the UTHSC SASSI). Two (2) of

the four (4) hours must be completed within the University of Tennessee College of Pharmacy (unless prior permission is granted from the program directors). The TLP program co-directors will consider other experiences on an individual basis. Active teaching activities may be gained at any time over the residency year.

Experiential Teaching Activities – Each participant will assume primary precepting responsibility for one (1) month during the *final* six (6) months of their residency experience. The participant will work closely with a preceptor, but will be responsible for orientation, formative and summative assessment, exam construction and grading, grading for the final presentation and patient presentations and topic discussions.

Didactic Teaching Activities

- Each participant **mus**t deliver 1 didactic lecture to healthcare professionals (e.g. CE for pharmacy, nursing, physicians) that is accompanied by objectives, handout, slides, and assessment questions. This can be a CE presentation or other educational didactic session delivered by the resident.

- In addition to the previous bullet, it is STRONLY encouraged (but not required) that each participant give a 50-minute lecture within a PharmD curriculum that is accompanied by objectives, handout, slides, and examination questions. It is preferred, though not required, that the lecture is within the University of Tennessee College of Pharmacy curriculum. If the participant is interested, TLP program directors will assist in identifying opportunities. S**Not only must the participant's mentor oversee the preparation of the lecture and materials, they (or their designee) must attend and evaluate the presentation.** If possible, each lecture will be video-recorded so that the participant can review their seminar and self-assess their presentation. The participant and mentor will review the student evaluations of the session.

ASSESSMENT

Simply having experience with teaching does not necessarily make one a good teacher. It is only through continuous reflection and evaluation that any individual can identify their own strengths and areas for improvement.

Portfolio– A component of successful completion of the certificate program involves submission of a teaching portfolio for review. The teaching portfolio should contain all elements noted above (see Educator's Portfolio section). The teaching portfolio must be reviewed by mentor and submitted at two time points prior to the completion of the residency year. Feedback will be given from the oversight committee at each review.

Active Teaching Activity – the student pharmacist and faculty group facilitator in evaluation of the participant will use an evaluation form specifically designed for this type teaching activity.

Experiential Teaching Activity – An evaluation from the participant's mentor describing the participant's performance during the month must be completed.

Didactic Teaching Activity – In order for a didactic teaching experience to be acceptable, it must be a structured, supervised presentation with written feedback and evaluation by both students,

mentor/course director and a peer. Hopefully, this will ensure that each experience was constructive and allowed for future improvement and skill building. A specific assessment tool will be used in the evaluation of participant teaching. **Each participant must identify another participant to view his or her lecture and complete a peer---evaluation.** When possible the participant will do a peer---evaluation before they present their lecture. **Once the participant has agreed to present the lecture, they must complete the lecture regardless of their status in the TLP.**

Program Assessment – Each participant may be asked to complete program assessments that determine the participant's perceived proficiency in several domain areas. The participants may be asked to evaluate presentations associated with the symposium, seminar, and workshops activities and may be asked to evaluate the program as a whole. Upon completion of the program the participant may be asked to evaluate his/her respective mentor.

Appendix A – Portfolio Checklist

Category	Suggested Completion Date	Plan for Completion/Notes	Completed
Portfolio Outline (Table of Contents)	Midpoint & Final portfolios		☐
Teaching Philosophy	Aug/Sept/Oct		☐
Goals and values for the teacher and students			☐
Approaches and methods for teaching activities			☐
Justification of style of teaching			☐
Assessment of teaching effectiveness			☐
List of REQUIRED TLP Seminars and Workshops attended/completed (separate page)			☐
Symposium	August		☐
FERPA training	August/September		☐
Creating learning objectives	August		☐
Writing meaningful assessment questions	September		☐
Qualities of a good preceptor	October		☐
Evaluating experiential learning	November		☐
Active learning in didactic setting	January		☐
Technology in education	February		☐
Additional seminar	August through April		☐
Additional seminar	August through April		☐
Monthly Mentor meetings			☐
	August		☐
	September		☐
	October		☐
	November		☐

	December		☐
	January		☐
	February		☐
	March		☐
	April		☐
Summary of Active Teaching (for all sessions) **(if participated in OSCEs, include those here)**	Sept through April		☐
Course title/number			☐
Number of students			☐
Contact hours			☐
Topic(s)			☐
OSCE information			☐
Didactic Teaching	Sept through April		☐
Lecture objectives (list on a separate page)			☐
Didactic Lecture Handout(s) (6 slides per page)			☐
Assessment Questions - Didactic Lecture (on a separate page)			☐
Learner Evaluations of Teaching (summary using composite form)	Sept through April	**YOUR responsibility to arrange for these to happen and to collect them**	☐
Didactic lecture			☐
Active teaching			☐
Peer Evaluations	Sept through April	**YOUR responsibility to arrange for these to happen and to collect them**	☐
Evaluation of peer lecture			☐
Peer evaluation of *your* lecture presented			☐
Mentor (or designee) Evaluations	(specific dates below)	**YOUR responsibility to arrange for these to happen and to collect them**	☐
Mentor midpoint review of portfolio	Dec/January		☐

	*Midpoint portfolio due 1/21***		
Mentor final review of portfolio	April *Midpoint portfolio due 5/2***		☐
Primary preceptor month	Sept through April		☐
Didactic lecture	Sept through April		☐
Active teaching	Sept through April		☐
Curriculum Vitae	Midpoint & Final portfolios		☐