

Assessment Plan

School of Pharmacy, April 2003

(to be finalized, Fall 2003)

Description and Overview of the School

Mission and Faculty Divisions

The School of Pharmacy at the University of Wisconsin-Madison is the only pharmacy school, public or private, in the state. The mission of the faculty and staff of the School of Pharmacy of the University of Wisconsin-Madison is to educate, train, and maintain competency of pharmacy practitioners and scientists, and to create, transmit, and apply knowledge based on research in the basic and applied pharmaceutical sciences to enhance the quality of life through improved health. The School's faculty is specialized internally into three divisions: Pharmaceutical Sciences (PS), Pharmacy Practice (PPD), and Social/Administrative Sciences (SAS). Additionally, there is an Extension Services in Pharmacy arm of the School, carrying out the continuing education portion of our mission statement.

Doctor of Pharmacy Professional Program

Educating future pharmacy practitioners is accomplished via the Doctor of Pharmacy (Pharm.D.) professional degree program. This program, which began in 1997, consists of a minimum of two years of pre-pharmacy college course work and four years of study in the professional pharmacy curriculum within the School. Admission to the Pharm.D. program is highly competitive; students transfer into the program from colleges and universities throughout the state and typically about 10% of a Pharm.D. class are out-of-state residents. Graduates must pass external licensing examinations (mentioned under *Accrediting Body and External Assessments* heading, page 3) in order to practice pharmacy. Each of the three divisions are involved in delivering curriculum to the Pharm.D. program, making it the key interdisciplinary effort of the School. The professional curriculum includes course work in a variety of areas, including microbiology, drug action and delivery, physiology, statistics, pathology, drug literature evaluation, pharmaceutical biochemistry and biotechnology, medicinal chemistry, pharmacology, therapeutics, pharmacy law, pharmacy economics, communication in pharmacy practice, and clerkship experiences in community and hospital, managed care, long-term care, and other pharmacy settings. The School has a network of over 180 practice sites and more than 300 pharmacists and other health professionals who serve as volunteer clinical instructors for experiential courses or who provide selected lectures.

B.S.—Pharmacology/Toxicology

The School also offers an undergraduate degree, the B.S. Pharmacology and Toxicology. Taught chiefly by members of the School's PS division, this degree provides a strong academic background for careers in the pharmaceutical industry, in government agencies, or as preparation for graduate or professional study. Admission to the B.S.-Pharm/Tox is competitive and requires two years (60 credits) of pre-School of Pharmacy preparatory course work similar to that required for the Pharm.D. program. This four-semester program involves course work in pharmacology, toxicology, drug action and delivery, pharmaceutical biochemistry and physiology, with an opportunity for a wide range of electives and independent study.

Graduate Education Overview

The School of Pharmacy also offers graduate programs in a variety of areas. The Master of Science in Pharmacy degree emphasizes hospital pharmacy management and is a two-year, combined residency (with the University of Wisconsin Hospital and Clinics) and academic degree program; one must be eligible for licensure as a pharmacist in the state of Wisconsin to apply to the program. The Pharmaceutical Sciences division offers the M.S. and Ph.D. degrees; its unifying concept of study and research is the drug in three of its aspects: drug discovery, drug action, and drug delivery. Four specializations exist for M.S. and Ph.D. degrees offered by the Social and Administrative Science branch of the School: (1) continuing education in pharmacy, (2) history of pharmacy, (3) pharmacy administration, and (4) social and behavioral studies.

“Maintaining the Competency of Pharmacy Practitioners”

Believing that its role in pharmacy education extends beyond the boundaries of campus, and to serve Wisconsin’s continuing education requirements for renewal of pharmacist licensure, the School has an active continuing education and extension program. Several on-campus programs are conducted annually for state pharmacists. Other programs are taken directly to pharmacists to help them keep up with the changes occurring in the profession.

Administrative Structure for Assessment

Dean, Associate Dean, and Academic Planning Council

The School of Pharmacy is committed to continuing its tradition of excellence. Administratively, the Dean chairs the Academic Planning Council (APC), which is the formal body for school-wide assessment oversight and initiatives. Members of APC are elected by the faculty and consist of two members of each of the three divisions of the School. The APC shares assessment information with the School’s Educational Policy and Planning Committee, which is the primary curricular committee of the School. Since the 1996-97 academic year, Associate Dean Judith Thompson has served the School on the University’s Assessment Council and her responsibilities have included assessment of the professional and undergraduate programs. Many assessment activities are carried out by Assistant to the Dean Ken Niemeyer.

Systems in Place to Ensure Quality of Experiential Sites; Quality Review Council

All experiential sites (there are experiential elements in each year of the Pharm.D. curriculum, leading to three semesters of full-time clerkship experience in the last year of the sequence) are initially visited by School of Pharmacy faculty or staff for the purpose of viewing the pharmacy site, meeting with the clinical instructor, reviewing planned clerkship activities, and answering clinical instructor questions. Follow-up visits are also made periodically following the initial visit. All such visits are documented by the School’s Experiential Learning Program (ELP) office. Any pharmacist wishing to participate as a clinical instructor is required to attend training regarding the experiential curriculum, its organization, and objectives.

On behalf of the ELP, a Quality Review Council (QRC) focuses on ensuring that the experiential sites meet the appropriate standards and provide an environment in which student can develop their professional competencies. Membership on the QRC includes six pharmacists, a member of the Wisconsin Pharmacy Examining Board (PEB), two faculty members from the School’s PPD division, and two student members.

In addition, the School of Pharmacy clerkship sites are required to complete an action plan, which documents how the site will accomplish clerkship activities, as well as how it will provide students

with opportunities to develop competencies in 16 professional practice areas. Action plans are reviewed by the ELP office.

Accrediting Body and External Assessments

The School's Doctor of Pharmacy program is accredited nationally by the American Council on Pharmaceutical Education (ACPE); this level of external review is performed every six years. The last on-site review for accreditation purposes occurred in the 1999-2000 academic year; the next scheduled review is for 2005-2006.

All School of Pharmacy graduates seeking professional licensure in Wisconsin must complete national pharmacy board examinations and state licensure testing. The North American Pharmacist Licensure Examination (NAPLEX) and the Multistate Jurisprudence Exam (MPJE), which combines elements of federal pharmacy law and Wisconsin pharmacy jurisprudence, are required. Both the NAPLEX and the MPJE are administered in close proximity to a Pharm.D. student's graduation from the School. Further, the Wisconsin PEB administers the State Board Practical Examination. The exam assesses the candidate's ability to communicate medication information to patients or consumers. Candidates are required to provide two patient consultations; each consultation includes a new and a refill prescription order. Candidates are given six minutes to prepare for the consultations (with medication references) and then six minutes to provide each consultation. A minimum score of 75 must be achieved on both of the consults to pass the exam.

Overview of Current Assessment Practices

For an overview of what is currently assessed and how it is assessed within the School, please see the table at the conclusion of this report (pages 6 and 7) which summarizes this information, taken from the School's *Assessment Report, 2001-2002*.

Directions of Improvement, Further Development & Inquiry

Academic Performance Assessment

The School is in the process of examining factors associated with the academic performance of our Doctor of Pharmacy students. The purpose of this assessment, currently being led by one of the School's associate professors, is to better inform faculty and administration about key factors and sequences of events that contribute to academic success in that curriculum. This information will be useful in improving our advising of pre-pharmacy and pharmacy students and in better informing the admissions process in future years. Further, an improvement in the efficiency of progression of students through that program should be achievable by being better able to recognize possible "at risk" students via the predictive model that will be built; early intervention and academic support for such students may improve efficiency and retention rates.

Climate and Satisfaction

The results of the Survey of 2002 Graduates of the Doctor of Pharmacy program exposed some concerns in terms of School climate and satisfaction levels that may need to be explored in greater detail by future assessments. The results of the 2003 edition of this same survey will help pinpoint which, if any, of these type of issues need further exploration. Such future projects might be conducted earlier in that curriculum and/or work to follow up in a more qualitative way (focus groups, interviewing, etc.) to help get to the root of what specifically needs improvement in this arena.

Alumni Surveys

A discussion with APC began in January 2003 about reinstating alumni surveys, which the School has not administered since 1997 (the year the School transitioned from a B.S.-Pharmacy to an entry-level Pharm.D. program). Among the various alumni populations, it has been the recommendation of that group that the School should first seek feedback from the Pharm.D. classes of 2001 and 2002. Assistant to the Dean Ken Niemeyer is working to develop a draft instrument for piloting by the end of 2003.

Other potential populations for alumni surveys include pharmacology/toxicology graduates, graduates of the School's nontraditional Pharm.D. program, pharmacists engaged in continuing education through the School, and those that have achieved graduate degrees at the School.

Employer Surveys

Also emerging through discussions about alumni surveys is the desire, especially from the Pharmacy Practice Division, to interview current employers of the School's Pharm.D. graduates. Faculty seem eager to learn employers' perspectives on how the workplace has changed or is changing due to the way the UWSOP currently trains its Pharm.D. students and whether employers feel the School is "over training", "under training" or is right on the mark in its preparation of Pharm.D.s for the current and future employment environment and employment opportunities. Currently the QRC is developing an employer survey that will incorporate these questions as well as ask employers how adequately our former students perform on the domains covered by the School's 16-point Pharm.D. competency evaluation tool (such an instrument is expected to be used 2 and 5 years post-graduation).

Assessment Agenda for the Future; 5-Year Time-Line

At this time, there is no five-year time line in place for assessment activities at the School of Pharmacy. The goal of the Dean and the Academic Planning Council is to have such in place by the fall of 2003.

Overview of Current Assessment Practice— *What is assessed and How we assess it*

Title of Assessment	Target Group of Assessment	Frequency of Assessment	Comments
Quantitative Assessment of Math Skills	All first-year Pharm.D. students and first-year Pharmacology/Toxicology students	Every August at orientation	This written, paper and pencil assessment began in 2000. Done in coordination with UW Math Dept.
Course/Teaching Evaluations	Faculty, as applicable	At the conclusion of every required Pharm.D. and Pharmacology- Toxicology course, as well as some larger undergraduate/professional electives. Optional at the graduate level.	A uniform student course/teaching evaluation instrument has been in use in the SOP since Fall 1998.
Town Meetings with the Dean	Sample (self-selected) group of 1 st -Year, 2 nd -Year, and 3 rd -Year Doctor of Pharmacy Students; sample group of Pharmacology-Toxicology students	One town meeting is held annually with each of the first three Pharm.D. classes and with the Pharmacology- Toxicology class	The town meeting format was initiated in 1999 to gather student opinions and suggestions and to respond to student questions and concerns. Serves as an informal School “climate” assessment.
Objective Structured Clinical Exams (OSCEs)	All 2 nd , 3 rd , and 4 th -Year Doctor of Pharmacy students	An OSCE is held each semester of the second and third year in conjunction with the pharmacotherapy course. Fourth-year Pharm.D.s are administered a capstone OSCE between their 4 th and 5 th clerkship blocks	OSCEs began in 1998; this tool assesses students’ clinical skills. An OSCE is composed of a series of stations that students move through, solving pharmacy-related problems or performing pharmacy-related activities.
Forums with clinical instructors in each clerkship region	Pharmacists who serve as clinical instructors	Annually in each clerkship region	Held to discuss clerkship issues and seek suggestions for improving the clerkship experience.
Student evaluations of each 3 rd and 4 th -Year clerkship rotation	Clerkship locations	At the conclusion of each rotation by each Pharm.D. student	Evaluations are reviewed by the experiential course coordinators. These clerkship evaluations are used to help determine a site’s continued viability in the program.
Student Portfolios	4 th -Year Doctor of Pharmacy students	Annually; Fourth-year of Doctor of Pharmacy program	Portfolios have been in use since 1996; used during the fourth-year clerkship courses to measure and track student progress toward meeting 16 professional practice competencies. The clinical instructor also evaluates the student on these same competencies.
Clinical Instructors On-Line Survey	Clinical instructors involved in 4 th -Year Doctor of Pharmacy clerkships (only administered to that population for which we have electronic address information)	Annually	Administered via the UW Survey Center. This 10-question survey asks instructors to rate the appropriateness of stated clerkship objectives, the objectives of required assignments, the efficiency of the School’s administration of clerkships, the helpfulness of clerkship manuals, and the availability of clerkship coordinators. Open-ended questions allow instructors to describe the major strengths and weaknesses of his/her assigned student(s).

Title of Assessment	Target Group of Assessment	Frequency of Assessment	Comments
Doctor of Pharmacy Fourth-Year On-Line Survey	All 4 th -Year Doctor of Pharmacy students	Annually, April-May of last Pharm.D. year	Administered via the UW -Survey Center. The survey asks overall satisfaction with the academic program, and satisfaction with academic advising, quality of instruction, professional electives, etc. Satisfaction with each clerkship year is asked, as well as with the components that make up the fourth-year clerkship experience. There are a few questions that are School-climate focused, and others that ask the outgoing students to give feedback on their pre-pharmacy program and its preparation value. Students are asked where they plan to work in their first pharmacy job, and where they would like to be working ten years post-graduation. Further, eleven competencies are listed and students are asked to rate how well the Pharm.D. program helped in self-development in each of those areas. Students are asked to comment regarding any <i>required</i> courses that they think should be changed to electives, and vice versa, and whether any current elective courses should be requirements. Information is gathered regarding courses not offered by the SOP that students think should be offered. A small amount of demographic information is collected, including pre-pharmacy gpa and SOP gpa, as well as how much and what types of employment the student experienced while enrolled.
Exit Interviews—Pharm.D. and Pharm/Tox	A random sample of graduating Pharm.D. students; all Pharmacology/Toxicology students	Annually, in April and May	Allows for qualitative feedback not achievable with on-line survey tool; interviews cover wide topics to encompass all aspects of the SOP student experience.