Principles of Graduate and Professional Learning

The following language describes the general expectations for graduate education at IUPUI and can be broadly applied to any program:

"**Principles of Graduate and Professional Learning**

The principles below form a conceptual framework that describes expectations of all graduate/professional students at IUPUI. More specific expectations are determined by the faculty in a student's field of study. Together, these expectations identify knowledge, skills, and abilities graduates will have demonstrated upon completing their specific degrees.

***Demonstrating mastery of the knowledge and skills expected for the degree and for professionalism and success in the field**
***Thinking critically, applying good judgment in professional and personal situations**
***Communicating effectively to others in the field and to the general public**
***Behaving in an ethical way both professionally and personally"**

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The Principles of Graduate and Professional Learning can be made more specific for individual degrees, based upon the mission and goals of the faculty in the program, e.g.:

"**Graduate students earning an Indiana University or Purdue University Ph.D. on the IUPUI campus will demonstrate the following abilities related to the research focus of the degree:**
*Demonstrate the knowledge and skills necessary to identify and conduct original research, scholarship or other creative endeavors appropriate to the field
*Communicate effectively high level information from their field of study
*Think critically and creatively to solve problems in their field of study
*Conduct research in an ethical and responsible manner"

Or, **"Graduate students in academically-based master's level programs on the IUPUI campus will demonstrate the following abilities:**
*Demonstrate the knowledge and skills needed to conduct original research within the discipline or to enter a program to earn a more advanced degree
*Communicate effectively information from their field of study
*Think critically and creatively to evaluate literature in their field of study
*Apply ethics within their field"

Or, "**Graduate students in professional graduate level programs on the IUPUI campus will demonstrate the following abilities:**
*Demonstrate the knowledge and skills needed to meet disciplinary standards of performance, as stated for each individual degree
*Communicate effectively with their peers, their clientele, and the general public
*Think critically and creatively to improve practice in their field
*Meet all ethical standards established for the discipline"

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To illustrate how these Principles might be used in assessing individual programs, consider the following example for an IU PhD degree in one of the STEM disciplines:

"Graduate students earning the PhD from Indiana University in X on the IUPUI campus will demonstrate the following abilities related to the research focus of the degree:

***Demonstrate the knowledge and skills necessary to identify and conduct original research in X**

Method of acquisition: Didactic course work, journal clubs, attendance at research seminars, direct mentoring by faculty, studying grant proposals

Assessment of learning: Grades in course work, ability to pass cumulative preliminary examinations in the field, ability to pass the oral and written qualifying examination, direct laboratory assessment by the research mentor, direct assessment of progress by the research committee for the dissertation

***Communicate effectively high level information in X**

Method of acquisition: Attendance required at seminars by faculty and peers, presentation at informal laboratory meetings and at formal seminars, mentored writing of grant proposals and manuscripts

Assessment of learning: Successful completion of the oral and written portions of the qualifying examinations, grades on formal seminar presentations based on outcomes rubrics, publication of manuscripts, awarding of grants

***Think critically and creatively to solve problems in X**

Method of acquisition: Attendance required at seminars by faculty and peers, presentation at informal laboratory meetings and at formal seminars, writing pre-proposal for dissertation, writing dissertation proposal

Assessment of learning: Grades on formal seminar presentations based on outcomes rubrics, direct assessment by faculty on pre-proposal and dissertation proposal, publication of research manuscripts, success in getting grant proposals funded.

***Conduct research in an ethical and responsible manner**

Method of acquisition: Required classes in research ethics, modeling of appropriate behavior in seminars by faculty and peers, direct mentoring by research director, mentoring by the dissertation research committee

Assessment of learning: Grades in ethics classes based on outcomes rubrics, direct observation of data handling by research mentor, direct oversight by dissertation research committee on issues of research compliance and ethics

The graduate faculty of the Department of X will conduct a yearly review of the progress of students through the program to determine if the program is meeting its goals to prepare students in each of these areas. Changes that might be made include replacing faculty in certain courses, adopting new methods to present material, offering additional options for training (e.g., making a writing consultant available), or engaging students in external training in other laboratories or institution (e.g.,ethics seminar at IUB, laboratory placement for short term training in research technique)."

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The Graduate Affairs Committee recommends the principles above need not be translated down to the level of individual courses. Acquisition of information is demonstrated in grading for course work and long-term retention is demonstrated by cumulative preliminary examinations or in capstone activities; however, the bulk of critical learning in graduate degree programs takes place in settings where discrete information is integrated by the engaged student and put to use in solving problems in the field. It is the integration of the knowledge that must be assessed in graduate programs; these more complex assessments take place in regular committee meetings with the student, in oral and written examinations, and in the collaborative writing of research publications, and grant proposals.