Standard No. 11: Teaching and Learning Methods: The college or school, throughout the curriculum and in all program pathways, must use and integrate teaching and learning methods that have been shown through curricular assessments to produce graduates who become competent pharmacists by ensuring the achievement of the stated outcomes, fostering the development and maturation of critical thinking and problem-solving skills, meeting the diverse learning needs of students, and enabling students to transition from dependent to active, self-directed, lifelong learners.

1) Documentation and Data:

Use a check ✓ to indicate the information provided by the college or school and used to self-assess this standard:

**Required Documentation and Data (Uploads):**

*(None required for this standard)*

**Required Documentation for On-Site Review:**

- ✓ Examples of instructional tools, such as portfolios, used by students to assist them in assuming responsibility for their own learning and for measuring their achievement
  
  Refer to E*value portfolios for examples from IPPE and APPE rotations

- ✓ Examples of instructional methods employed by faculty to stimulate higher order thinking and problem-solving skills in learners
  
  NDSU Faculty/Staff MTM project

- ✓ Examples of instructional methods employed by faculty to address/accommodate the various learning styles of students
  

**Data Views and Standardized Tables:**

- ✓ AACP Standardized Survey: Faculty – Questions 38, 39 *(Appendix 11B)*

- ✓ AACP Standardized Survey: Student – Questions 28, 29, 31 - 33

- ✓ AACP Standardized Survey: Alumni – Questions 21, 23

- ✓ AACP Standardized Survey: Preceptor – Question 23

**Optional Documentation and Data (Uploads):**

- ✓ Other documentation or data that provides supporting evidence of compliance with the standard. Examples could include data that link teaching-and-learning methods with curricular outcomes and extracts from minutes of meetings of the curriculum and/or assessment committees.

  *(Appendix 11A: Tegrity Survey)*
2) **College or School's Self-Assessment:** Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>S</th>
<th>N.I.</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>The program, throughout the curriculum and in all pathways, uses and integrates teaching and learning methods that have been shown through curricular assessments to meet the diverse learning needs of students and produce the desired professional competencies and outcomes, including the development and maturation of critical thinking, problem-solving, and self-directed, lifelong learning skills.</td>
<td>●</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Faculty members use a variety of teaching and learning techniques (e.g., active learning, case studies, etc.) that have been thoughtfully selected, designed, and/or tailored to help students achieve the learning outcomes articulated for their courses.</td>
<td>●</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The college or school evaluates the effectiveness of its curricular innovations through its assessment activities.</td>
<td>●</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The outcomes of the distance-learning activities are appropriate for the student population and achievable through distance study.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Teaching and learning methods used assure that learning experiences, opportunities, and outcomes are comparable for all pathways, branches or campuses.</td>
<td>N/A (single geographic location or no alternate pathways)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3) **College or School's Comments on the Standard:** The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ✓ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.

✓ A description of teaching and learning methods and strategies employed in the delivery of the curriculum, including nontraditional pathway(s) leading to the Doctor of Pharmacy degree (if applicable), and how those methods are expected to advance meaningful learning in the courses in which they are employed.

✓ Efforts of the college or school to address the diverse learning needs of students

✓ The formative and summative assessments used to evaluate teaching and learning methods used in the curriculum, including nontraditional pathway(s) leading to the Doctor of Pharmacy degree (if applicable)

✓ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

✓ Any other notable achievements, innovations or quality improvements

✓ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms
**Teaching and Learning Methods**

The Associate Dean for Academic Affairs and Assessment (ADAA&A) encourages and assists faculty to incorporate a variety of teaching and learning methods to meet the diverse learning needs of students in the pharmacy program. Specific strategies that have been adopted by the College to transform pharmacy education from “teacher-centered” to “student-centered” include:

1. Engaging students by name
2. Standardizing the syllabus throughout the curriculum
3. Aligning course objectives to course teaching and assessment methods
4. Incorporating active learning techniques
5. Coordinating exam dates among instructors
6. Use of technology
7. Peer review of teaching

All P1 and P2 students are required to attend an orientation for new and returning students on the first day of class each academic year. The dean, along with the associate deans and department chairs, extends a personal welcome to the students and encourages their participation in the College. Students are given the opportunity to meet the faculty and reconnect with their academic advisors. Time is also set aside to take a photo of each student. A class composite is created and uploaded onto the College shared drive, which can be accessed by the faculty and staff. Faculty will often download the class composite prior to the start of classes to learn student names. Calling students by name creates a welcoming environment, encourages learning, and participation.

The syllabus can be the first point of contact between the student and the faculty member. A well-written syllabus conveys messages that build rapport between faculty and students and helps to set the tone of engagement from the beginning. Therefore, the Curriculum Committee evaluates course syllabi every three years to ensure that the syllabus follows the guidelines established by the University and College. All syllabi must be written with appropriate grammar and spelling and contain a complete listing of instructors and contact information, bulletin description, course objectives, applicable program ABOs, instructional continuity plan, class schedule, evaluation procedures and criteria, disability and academic integrity statements. The student learning objectives must be clear, action oriented, achievable, measurable, and related to the course content, assignments, and assessments. Faculty are encouraged to write course objectives using multiple levels of Bloom’s Taxonomy, including higher order processes such as application, synthesis and evaluation.

A variety of active learning techniques appropriate for the nature of the course are used to enhance student learning. Although there are still some predominantly lecture-based classes, more faculty are
including active learning in their classroom instruction (Figure 11-1). This is confirmed when comparing alumni and graduating student 2011 surveys. One hundred percent of 2011 graduating students agreed with the statement, “I was provided opportunities to engage in active learning,” compared with 96.2% of alumni (Appendix 11B). Some examples of active learning techniques include audience response clickers, Socratic questioning, cooperative group work, case-based learning, think/pair/share, patient simulation, student presentations, class discussion, homework assignments, recitation sessions, embedded mini-cases, discussion board activities and self-reflection.

![Figure 11-1. Teaching and Learning Methods Employed by Instructors](image)

Although students do not enjoy being assessed, based on their feedback, they prefer more rather than fewer assessment opportunities per course. Therefore, on average, for every credit taught, there is typically one exam in addition to the final exam. For example, a two-credit course will have 2 exams plus a final exam, and a three-credit course will have 3 exams plus a final exam. This became problematic for students in that some weeks of the semester contained 4 to 5 exams with 2 to 3 on any given day that week. To alleviate this problem, the ADAA&A works with faculty every semester in scheduling their exams to limit the number to not more than 3 exams per week. The student exam schedule for the semester is available to students and faculty on the College pharmacy program Blackboard page.
Technology is used to assist in student learning. All courses are published on Blackboard, the University course management system, a media familiar and comfortable for students. Instructors use Blackboard to post announcements, handouts, assignments, quizzes, course documents, blogs and discussions. Blackboard is also used by instructors to provide timely feedback to students using the grade book feature. Personal Response Systems (PRS), or audience response clickers, are used by some faculty for formative assessment and as a method to engage students in their learning. When PRS first became available at NDSU, most of the College’s faculty employed it in the classroom. However, with each glitch, patch, and service update, more and more faculty discontinued its use until the system stabilizes. The College invested in Tegrity, a lecture capture technology and piloted its use on campus for Information Technology Services during spring semester 2011. Lecture capture is a relatively easy method to record lectures in real time, which are uploaded to a server and can be accessed by students. The software was installed in one classroom and 2 instructors routinely recorded their lectures using Tegrity. Both instructors were very satisfied with the ease of use and a student survey at the end of the pilot semester revealed very favorable comments, including that Tegrity improved the depth of their learning and effectiveness of studying (Appendix 11A). Based on this experience, the instructors recommended increasing the software license to include more instructors and more classrooms. Other forms of technology used to support student learning include Wimba, podcasting and video lectures to supplement in-class activities.

Technology is also used to support teaching and assessment. The College uses curriculum mapping as an essential tool for curriculum assessment to capture teaching and learning methods across the pharmacy curriculum. Faculty members are trained to map their course using web-based curriculum mapping software (Atlas©), and are expected to update course information annually. The benefits of a web-based curriculum mapping system are three-fold:

1. It encourages faculty to review their courses on a yearly basis and reflect on their teaching methods
2. The system allows all faculty the ability to view each other’s courses in their entirety, including the objectives, content, assessment methods and pedagogy. This serves to increase communication among faculty and disciplines regarding the curriculum
3. The ADAA&A is able to pull data from the curriculum maps and use it for assessment purposes.

Instructors teaching in the Pharm.D. program are interested in improving their pedagogical skills and teaching effectiveness. The University provides a Peer Review of Teaching program, where faculty mentors are assigned to assess the teaching of individual instructors. Mentors typically sit in and
observe 2 to 3 actual classes and provide the instructor constructive feedback to improve teaching. The Peer Review of Teaching program is very popular on campus to the point where there are not enough mentors to fulfill demand. Consequently, the Associate Dean for Student Affairs and Faculty Development (ADSA&FD) recently organized an in-house peer review of teaching programs. Individual instructors request a peer reviewer and the ADSA&FD solicits senior faculty members from the College to serve as reviewers and mentors. Currently, there are 12 pharmacy faculty members participating as reviewers or being reviewed. Opportunities for students to evaluate effective delivery of instruction occur routinely at the end of each semester using student review of instruction forms available online. Students can also complete mid-term semester evaluations providing suggestions for course improvement that may be implemented immediately. Even though faculty participation in mid-term semester evaluations is voluntary, 100% of the faculty solicit students for mid-term feedback.

**Unique Learning Strategies**

Several faculty in the College have conducted unique learning strategies and assessed their effectiveness. In the cardiovascular/pulmonary pharmacotherapy course, instructors observed that students were having a difficult time answering case-based questions on exams. As a means to enhance student engagement in case-based learning, students were divided into groups and required to create a patient case that demonstrated application of assigned pharmacotherapy topics, along with a corresponding pharmaceutical care plan. Comparison of exam scores from 2008 to 2009 showed a statistically significant increase in exam scores between the two academic years (p=0.001). This additional learning assignment appears to have a positive effect on student ability to evaluate case-based questions on examinations. As a result, patient case preparation has become a permanent part of this pharmacotherapy course.

Papers highlighting the design and assessment of three unique teaching and learning strategies in the College have recently been published. The first paper by Eukel, Skoy, and Frenzel, describes third-year pharmacy student participation in a medication therapy management (MTM) project with the Thrifty White Concept Pharmacy laboratory faculty to provide face-to-face MTM sessions for NDSU faculty and staff.¹ Campus faculty and staff who were currently taking three or more prescription medications were encouraged to schedule an appointment at the lab for an MTM session. Students received training on the core elements of MTM, patient-centered communication and techniques for point-of-care testing prior to the encounters. A post-encounter survey from 2010 demonstrated students found this activity beneficial to prepare them to work with patients.

The second paper by Kelsch and Werremeyer discusses a current events project in an infectious disease course.² This project required third-year pharmacy students, in groups of two, to research,
present and prepare examination questions on a relevant infectious disease topic. After project completion, students were sent an anonymous electronic evaluation to obtain feedback on the project. Results indicated statistically significant increases in students’ awareness of infectious disease-related current events and understanding of the process to prepare and present information to a group. Capturing the ability of this active learning technique to produce responsible, self-directed pharmacists, one student commented in the open-ended question portion, “Now on the job if a patient asks a question about a particular current issue, I will have at least some knowledge on how to answer the question.”

Lastly, a unique teaching and learning innovation pioneered by Dr. Jeanne Frenzel examined the use of a simulated electronic medical record (EMR) in a third-year pharmaceutical care lab to enhance student abilities in disease state and medication therapy management, while also actively engaging students in the documentation process that will be required of them once they transition to independent practitioners.³ Pre- and post-course surveys were used to evaluate students’ perceptions on the use of the EMR. Overall, students rated their EMR experience positively, with a statistically significant increase on a Likert 5-point scale in agreement with statements such as, “It is important for pharmacists to gain access to a patient’s chart to document their role in the healthcare process,” and, “I feel that using an electronic medical record will benefit students in preparing for P4 professional year.” Dr. Frenzel received the Peltier Award by the University for this innovative teaching technique.

References:
4) **College or School's Final Self-Evaluation**: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box.

<table>
<thead>
<tr>
<th>Compliant</th>
<th>Compliant with Monitoring</th>
<th>Partially Compliant</th>
<th>Non Compliant</th>
</tr>
</thead>
<tbody>
<tr>
<td>No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.</td>
<td>• No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance /or • Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</td>
<td>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.</td>
<td>• Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated /or • Adequate information was not provided to assess compliance</td>
</tr>
</tbody>
</table>

5) **Recommended Monitoring**: If applicable, briefly describe issues or elements of the standard that may require further monitoring.

**NA**

**Appendices**

**Appendix 11A: Tegrity Survey**

**Appendix 11B: AACP Survey Data**
# Appendix 11A: Tegrity Survey

## Summary

See complete responses

### Please select the phrase that best describes you

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time student, 18-24 years old</td>
<td>16</td>
<td>47%</td>
</tr>
<tr>
<td>Part-time student, full-time job, 18-24 years old</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Part-time student, part-time job, 18-24 years old</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Full-time student, 25 or older</td>
<td>10</td>
<td>29%</td>
</tr>
<tr>
<td>Part-time student, full-time job, 25 or older</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Part-time student, part-time job, 25 or older</td>
<td>1</td>
<td>3%</td>
</tr>
</tbody>
</table>

### What type of course was it - mostly an online course or mostly a classroom-based course?

<table>
<thead>
<tr>
<th>Description</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly taught face-to-face in the classroom</td>
<td>25</td>
<td>74%</td>
</tr>
<tr>
<td>Some classroom sessions, but much of the material was online, replacing what normally might have been classroom sessions</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>The course was primarily online - I rarely needed to come to campus</td>
<td>4</td>
<td>12%</td>
</tr>
</tbody>
</table>

### Please estimate the number of study sessions during which you reviewed a recorded class session using Tegrity for this course?

<table>
<thead>
<tr>
<th>Number of Sessions</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>1-5 times</td>
<td>18</td>
<td>53%</td>
</tr>
<tr>
<td>6-10 times</td>
<td>4</td>
<td>12%</td>
</tr>
<tr>
<td>11-20 times</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>More than 20 times</td>
<td>4</td>
<td>12%</td>
</tr>
</tbody>
</table>

### Please estimate the percentage of total class sessions of this course in which Tegrity was used by your instructor to record lectures or other interactions (for instance, if you had 10 class sessions during the term and Tegrity was used to record 5, the answer would be 50%, if this was a fully online course please select 100%)

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 % or less</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>25%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>50%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>75%</td>
<td>3</td>
<td>9%</td>
</tr>
<tr>
<td>90%</td>
<td>10</td>
<td>29%</td>
</tr>
<tr>
<td>100%</td>
<td>15</td>
<td>44%</td>
</tr>
</tbody>
</table>
During which class session did your instructor for this course mention or reference Tegrity?

- First: 26 (76%)
- Second: 0 (0%)
- Third: 2 (6%)
- Fourth (or after): 1 (3%)

How many of your courses this term were taught using Tegrity?

- One: 10 (29%)
- Two: 17 (50%)
- Three: 1 (3%)
- Four or more: 1 (3%)

How has the use of Tegrity impacted your course experience compared to other courses in which Tegrity was not used?

- Your overall satisfaction with the course:
  - Significantly reduced: 0 (0%)
  - Reduced somewhat: 0 (0%)
  - Had no impact: 7 (21%)
  - Increased somewhat: 14 (41%)
  - Significantly increased: 8 (24%)

- Your success in the course:
  - Significantly reduced: 0 (0%)
  - Reduced somewhat: 0 (0%)
  - Had no impact: 7 (21%)
  - Increased somewhat: 17 (50%)
  - Significantly increased: 5 (15%)

- Your grade in the course:
  - Significantly reduced: 0 (0%)
  - Reduced somewhat: 0 (0%)
  - Had no impact: 8 (24%)
  - Increased somewhat: 16 (47%)
  - Significantly increased: 4 (12%)
How has the use of Tegrity impacted your course experience compared to other courses in which Tegrity was not used?

- The amount of material covered

- Significantly reduced: 0%
- Reduced somewhat: 0%
- Had no impact: 47%
- Increased somewhat: 32%
- Significantly increased: 6%

- The amount of material learned

- Significantly reduced: 0%
- Reduced somewhat: 0%
- Had no impact: 29%
- Increased somewhat: 44%
- Significantly increased: 12%

- The time it took you to study effectively

- Significantly reduced: 0%
- Reduced somewhat: 12%
- Had no impact: 35%
- Increased somewhat: 35%
- Significantly increased: 3%

- The number of office visits with faculty

- Significantly reduced: 6%
- Reduced somewhat: 0%
- Had no impact: 65%
- Increased somewhat: 12%
- Significantly increased: 3%

- The degree of collaboration with other students

https://spreadsheets.google.com/spreadsheet/gform?key=0AixPjSRck9ZFdG9tJlU0YThmcmo0a1BtWj86UTBKSkeE&hl=en_US&gridId=0#chart
How has the use of Tegrity impacted your course experience compared to other courses in which Tegrity was not used?

- Depth of learning
  - Significantly reduced: 1 (3%)
  - Reduced somewhat: 0 (0%)
  - Had no impact: 23 (68%)
  - Increased somewhat: 5 (15%)
  - Significantly increased: 0 (0%)

- Ability to focus on the most important learning objectives
  - Significantly reduced: 0 (0%)
  - Reduced somewhat: 0 (0%)
  - Had no impact: 12 (35%)
  - Increased somewhat: 11 (32%)
  - Significantly increased: 6 (18%)

- Motivation to study
  - Significantly reduced: 0 (0%)
  - Reduced somewhat: 0 (0%)
  - Had no impact: 13 (38%)
  - Increased somewhat: 14 (41%)
  - Significantly increased: 2 (6%)

- The effectiveness of your studying
  - Significantly reduced: 0 (0%)
  - Reduced somewhat: 0 (0%)
  - Had no impact: 10 (29%)
  - Increased somewhat: 15 (44%)
  - Significantly increased: 4 (12%)
How has the use of Tegrity impacted your course experience compared to other courses in which Tegrity was not used? - How often you came to class

- Significantly reduced: 1 (3%)
- Reduced somewhat: 3 (9%)
- Had no impact: 19 (56%)
- Increased somewhat: 6 (18%)
- Significantly increased: 0 (0%)

After your experience using Tegrity this term, please indicate how important it is to you to see Tegrity used in your future courses.

- Would not want to use Tegrity in other courses: 0 (0%)
- Tegrity would enhance some of my courses: 7 (21%)
- Tegrity would enhance most of my courses: 12 (35%)
- Tegrity is essential - I want it in all of my courses: 6 (18%)

Overall, how would you rate the ease of use of the Tegrity system?

- Very Difficult: 0 (0%)
- Not Easy: 0 (0%)
- Acceptable: 7 (21%)
- Easy: 11 (32%)
- Very Easy: 10 (29%)

Overall, what was the impact of Tegrity on your learning in this course?

- A distraction to my learning: 0 (0%)
- Did not contribute to my learning: 1 (3%)
- Contributed somewhat to my learning: 19 (56%)
- A significant contribution to my learning: 9 (26%)
- A very substantial contribution to my learning: 0 (0%)

Overall, what was the impact of Tegrity on your use of time in this course?

https://spreadsheets.google.com/spreadsheet/gform?key=0AixPjSRck92FdG9tbI0YTnmcmo0a1BwJ86UTBKSke&hl=en_US&gridId=0#chart
Took me more time than I would normally spend 5 15%
Took me the same time 7 21%
Saved me some time 14 41%
Saved me significant time 2 6%
Saved me a very substantial amount of time 0 0%

My experience with Tegrity would have been better if (please type none if nothing comes to mind)
none none none it didn’t freeze up the computers some days. nothing My instructor had not awarded points to only those who were in class. professors did not accidentally mute the recording. none the pop up ...

If you could add one product feature, what would it be? Why?
none none Live classes It should allow a link to download and save the recorded lecture in my PC. So, I can also review the lecture in the future during my professional clinical practice. Video recordi ...

If you could remove one product feature, what would it be? Why?
none none none None nothing ? none none none I wouldn’t remove anything None none

Please complete the following. The training I received on Tegrity was:
Not helpful 1 3%
Somewhat helpful 2 6%
I did not receive any training but wish that i did 2 6%
I didn’t get any training - but I did fine anyway 21 62%
Very helpful 1 3%
The training was fine, but it was very easy to use so it was really unnecessary 2 6%

Which of the following devices do you own? (select all that apply)
Classic iPod or other MP3 Player 16 55%
iPhone or iPod Touch 10 34%
iPad 0 0%
Android phone 11 38%
Blackberry 4 14%
Other Smart Phone 2 7%
None of the above 1 3%
People may select more than one checkbox, so percentages may add up to more than 100%.

Which of the following apply?
I downloaded Tegrity recordings as podcasts 4 15%
I streamed Tegrity recordings to my iPhone or iPod Touch or iPad 1 4%
I did not view Tegrity on my mobile device 19 70%
People may select more than one checkbox, so percentages may add up to
How would you rate the value of accessing recordings on your mobile device in terms of what it added above and beyond the basic use of Tegrity (use of Tegrity without downloading to the mobile device)?

- It detracted in value: 0 (0%)
- It did not add any value: 11 (32%)
- It added some value: 7 (21%)
- It added significant value: 2 (6%)
- It was essential - it added enormous value: 1 (3%)

Number of daily responses

Number of responses without dates: 5
Graduating Student Survey

Question: 28. The Pharm.D. Program prepared me to reflect critically on personal skills and actions and make plans to improve when necessary.
Graduating Student Survey

Question: 29. The Pharm.D. Program prepared me to accept and respond to constructive feedback.
Graduating Student Survey

Question: 31. I developed the skills needed to prepare me for continued learning after graduation.
Graduating Student Survey

Question: 32. I was provided opportunities to engage in active learning (e.g., laboratories, recitations, student portfolios, problem-based learning, in-class activities).

Please note that in 2008, some questions had only the options Agree, Disagree and No Comment. However, these graphs are based on latest survey specifications.
Graduating Student Survey

Question: 33. I was encouraged to ask questions in class.
Appendix 11B: AACP Surveys

Faculty Survey

Question: 38. Overall, faculty encourage students to assume responsibility for their own learning.
Faculty Survey

Question: 39. Laboratories and other non-classroom environments are conducive to learning.
Preceptor Survey

**Question:** 23. Students at my site are encouraged to assume responsibility for their own learning.

![Graph showing longitudinal data for Q23, Curriculum, Preceptor Survey from North Dakota State University/College of Pharmacy, Nursing, and Allied Sciences.](image)

*Note: Question 23: Students at my site are encouraged to assume responsibility for their own learning. Please note that in 2008, some questions had only the options of Agree, Disagree and No Comment. However, these graphs are based on latest survey specifications.*

![Comparison with National and Cohort Data 2010 (School, n=179; National, n=8179; Cohort, n=1088).](image)

*Note: Question 5: Students at my site are encouraged to assume responsibility for their own learning. Cohort: Creighton University, Idaho State University, Oregon State University, South Dakota State University, The University of Iowa, University of Colorado, University of Kansas, University of Nebraska, University of Wyoming.*
Alumni Survey

Question: 21. When I was a student the curriculum provided opportunities to engage in active learning (e.g., laboratories, recitations, student portfolios, problem-based learning).

Please note that in 2008, some questions had only the options of Agree, Disagree, and No Comment. However, these graphs are based on latest survey specifications.
Alumni Survey

Question: 23. When I was a student I was encouraged to assume responsibility for my own learning.

Appendix 11B: AACP Surveys

Question 23: When I was a student I was encouraged to assume responsibility for my own learning. Please note that in 2008, some questions had only the options of Agree, Disagree and No Comment. However, these graphs are based on latest survey specifications.