

2005-06 Assessment Committee.

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Final report for 2005-2006.

The 2006 participation has been very good, with two classes giving over 80% participation. In total 242 students participated in the on-line survey.

After completion of the survey, four focus group meetings were organized in which the committee had the opportunity to meet with up to ten students from each class and discuss the results of the surveys.

This report summarizes the results of the 2006 assessment surveys done online. It is divided in three parts: in the **Summary**, a table summarizes the students' answers to the questions concerning the 13 competencies expected of an MUSC College of Pharmacy graduate. Here the students are asked to indicate whether they felt they had achieved (Ach), partially achieved (Part Ach) or not achieved (Not Ach) each competency. The number of questions on the competencies has been reduced for the first and second year students in keeping with the opportunity given by the curriculum of actually providing opportunity to achieve these competencies. The **Comments** section summarizes the comments found on the surveys and discussed during the smaller focus group meetings. This section is particularly useful for the questions that require a "Yes", "No", "Partially" kind of response and cannot conveniently be summarized in a table. In the **Suggestions** section, suggestions from students and/or members of the Committee are listed.

MUSC competency areas

1	▲ Values & Ethics	Formatted: Font: 11 pt, Not Bold
2	▲ Health Optimization & Preventive	Formatted: Font: 11 pt, Not Bold
3	▲ Advocate	Formatted: Font: 11 pt, Not Bold
4	▲ Lifelong learners	Formatted: Font: 11 pt, Not Bold
5	▲ Pharmacotherapeutic Knowledge	Formatted: Font: 11 pt, Not Bold
6	▲ Supervisory skills, drug admin/distributive functions	Formatted: Font: 11 pt, Not Bold
7	▲ Treatment guidelines	Formatted: Font: 11 pt, Not Bold
8	▲ Pharmacotherapeutic care plan	Formatted: Font: 11 pt, Not Bold
9	▲ Communicate & document	Formatted: Font: 11 pt, Not Bold
10	▲ Health care team	Formatted: Font: 11 pt, Not Bold
11	▲ Monitor & document outcomes	Formatted: Font: 11 pt, Not Bold
12	▲ Authoritative resource	Formatted: Font: 11 pt, Not Bold
13	▲ Medical literature & databases	Formatted: Font: 11 pt, Not Bold

Year 1

Summary

The class participation to the 2006 assessment survey was 66 % (56/85).

Table. Answers to the competency questions

Competency	% Ach	% Part Ach	% Not Ach
1	60.7	33.9	5.4
2	50.0	33.9	16.1
3	67.9	25.0	7.1
4	71.4	23.2	5.4
13	66.1	32.1	1.8

Comments

Online Survey

- Students had no problems with the online survey.

Class Attendance

- Class attendance tends to be lower when more detailed slides/handouts are provided.
- Active learning/classroom discussion helps keep the attendance higher.

Orientation

- Most students found orientation day overwhelming.
- They would like to see it spread in a few days.
- Finding the parking garage is a problem.
- One solution would be to have 2-3 “non-mandatory” days when students get acquainted with the campus, city, parking issues, etc. This would make things easier on the official orientation day. At the very least, the students suggested RECOMMENDING that new students get their student IDs and parking pass prior to orientation day.
- Although reviewed during orientation, the grading system was still not clear.

PEU Rotations

- Students complained about lack of communication between the College and preceptors. There are also differences in the quality of preceptors. Students felt a “check off list” would help ensure each student completed similar requirements/expectations with the experience.
- Some students found 4 hours/week to be too much, others found it adequate.
- Some students would have liked to be asked about their preference for a rotation site. It was suggested that a list of sites is given to students, they indicate their preference, and these are used as a guideline for assignments, when possible.

- It has also been suggested to send a letter or e-mail to all local pharmacists and ask for volunteers for the PEU program.

Tutors

- Students feel there are not enough tutors. Some students sign for tutors and they do not show up. The Center for Academic Excellence has a strict attendance policy, but it is not enforced.

Tests

- The students complained about too many tests in the first semester, especially in Medical Terminology and Pharmacy Calculations. The class of 2008 had the option to test out of it. Another proposed alternative is to make it a self study class.
- On the other hand, they would like to have more tests in Medicinal Chemistry.

Electives

- Students would like to have the possibility to take electives on the first year. Since the College does not offer any, they would like to be informed of electives offered in other Colleges, maybe get a list during orientation rather than having to go online and try to find them.

Courses

- Students suggested to make Biochemistry a prerequisite, to have more presentations in Drug Delivery, and reduce the histology component of Anatomy.

Year 2

Summary

The class participation to the 2006 assessment survey was 87% (69/79).

Table. Answers to the competency questions

Competency	% Ach	% Part Ach	% Not Ach
1	74.7	25.3	0
2	69.3	21.3	1.3
3	69.3	22.7	1.3
4	72	20	1.3
6*	29.3	53.3	9.3
9	36.0	48	9.3
13	34.7	50.7	8

*Competency 6: Possess the basic knowledge of supervisory skills, drug administration, and distributive functions, including compounding, in order to practice in various areas, including community, hospital, and clinic settings.

Comments

- Overall, students commented positively during the focus group on related topics in the curriculum “coming together” in the 2nd semester of the P2 year, specifically related to Therapeutics, patient assessment and pharmacology. Numerous comments on the survey regarding scheduling – in general, students would prefer to have class on Friday as an alternate to a long day of classes on Monday.
- **Electives**
 - Students would like more options for courses, specifically those related to community practice
 - Strong interest in Medical Spanish course
- **PEU experience**
 - Positive feedback on PEU1 experience, particularly for students without pharmacy experience
 - Concern re: variability of assignments completed with different preceptors
 - Students were not taught how to do SOAP notes until January, after PEU experience in the fall. Experience with sample charts, how to find information for medication histories and SOAP notes, would be helpful prior to this experience
- **Patient Assessment Lab**
 - This was a good opportunity for verbal presentations; however, the students requested more practical topics for this assignment. For example, the students suggested using a patient case (question concerning an OTC product, glucometer, BP cuff, etc) and their presentation could contain the answer. Many students recommended decreasing the credit hours or

replace open time with practical topics like IV preparation and common products compounded in community pharmacy.

- **Medicinal Chemistry**
 - Students appreciate the timing of topics in med chem and pharmacology and would like to see a similar overlap with Therapeutics topics
 - Concern expressed regarding low average exam grades – students do not feel they are mastering concepts if averages are in the 60s
- **Management**
 - Significant concern was expressed on the survey and during focus group on topic selection and subjectivity of writing assignment and grading in this course.
 - Students recognize importance of this course in the curriculum and would like to see greater emphasis on topics such as supervision of technicians, performance evaluations, using IT in practice
- **Ambulatory and Self Care Therapeutics**
 - Students would like more practical application in this course as well, concerns regarding exams requiring memorization of products compared to application of self care recommendations and minimal focus on pediatric dosing recommendations. With existing exam structure, students requested an additional exam, (currently 2 + 1 final).
- **Pharmacokinetics**
 - Overlap between introductory and clinical course – positive feedback regarding clinical application and students would like to see consistent terminology and more case/problem examples throughout this sequence

Suggestions

- Expand elective options where possible and make students aware of opportunities in other colleges on campus
- Add exposure to sample patient charts and writing progress notes prior to PEU-2
- Continue verbal presentation during lab but focus on more practical topics
- Incorporate practical compounding experiences into lab course
- Reevaluate pharmacy management for topics related to managing personnel and practice settings (consider utilizing topics/concepts from Health System elective and inviting practicing pharmacy managers/directors to participate) and establish objective grading criteria for writing assignments
- Reevaluate exam topics and testing mechanism and include community practice-based scenarios in Ambulatory and Self Care class

Year 3

Summary

The class participation to the 2006 assessment survey was 70% (53/76).

Table. Answers to the competency questions

Competency	% Ach	% Part Ach	% Not Ach
1	73.6	22.6	1.9
2	84.9	11.3	1.9
3	64.2	30.2	1.9
4	81.1	15.1	0
5	58.5	35.8	3.8
6*	17.0	62.3	17
7	73.6	24.5	0
8	67.9	28.3	1.9
9*	39.6	49.1	7.5
10	54.7	39.6	3.8
11	79.2	17.0	1.9

*Competency 6: Possess the basic knowledge of supervisory skills, during administration, and distributive functions, including compounding, in order to practice in various areas, including community, hospital, and clinic settings.

*Competency 9: Communicate and document the pharmacotherapeutic care plan to all relevant parties, including physicians, nurses, health care professionals and patients.

Comments

Therapeutics

- They do not all feel like they are prepared for fourth year rotations. They need more cumulative material and even suggested some sort of cumulative therapeutics exam.
- Students feel residents teaching any of the classes within the course should be more prepared. Students feel residents, for the most part, read their slides to them. This lecture style is not looked upon favorably by the students. Residents need to practice prior to the lecture. Faculty should be more involved in working to get residents ready to teach the lecture. Resident test questions can also be distinguished from faculty. Test questions should be more uniform.

IV Admixture and compounding

- They do not feel competent in ability to make IV admixture upon completion of our program. They do not think they need more class room experience. Students feel they need more hands on experience when on their hospital rotation. The OR pharmacy was mentioned as a good experience; however, other hospital

experiences were mentioned where the students just watched someone make an IV but were not allowed to do it themselves.

- Student feel they need more compounding experience

Verbal presentations

- Most students would like more presentation opportunities throughout the curriculum. If in the MBA program or taking the geriatric elective then students felt the opportunities were sufficient. Students also like the presentation in outcomes because they felt it prepared them for grand rounds. Students would like to be taught how to use powerpoint.

Rotations

- Students would like to have the preceptors come and talk to them as a group about their specific rotation. Students felt the website information is OK. The idea of having other students come talk about specific rotation experiences may help. Students asked that rotations the meet criteria for clinical track be specifically listed or highlighted in some manner.

Books

- DI books were found not helpful to students. The law book was good and students felt they really needed this book for the class.

Grade inflation

- Students were concerned about hearing that if they have a lot of clinical rotations in the 4th year their academic standing will drop.

Outcomes and drug information

- Some overlap still occurring. This is mostly during the first month of class per student comments. Still some overlap with herbal information, but they are all teaching the same information. This is improved over last year's comments.

Soap notes

- Only students involved in track conference feel prepared to write a soap note. Need more practice throughout the curriculum.

Suggestions

- Create more opportunities for presentations
- Add more cumulative material to therapeutics and more cases to be better prepared for 4th year rotations
- More patient counseling opportunities needed
- More interaction between the classes within the COP
- Big brother/ Big sister idea, this may help with teaching students about their professional responsibilities

Year 4

Summary

The class participation to the 2006 assessment survey was 88% (64/73).

Table. Answers to the competency questions

Competency	% Ach	% Part Ach	% Not Ach
1	95.3	3.1	0
2	90.6	7.8	0
3	87.5	10.9	0
4	93.8	4.7	0
5	76.6	21.9	0
6	65.6*	31.3	0
7	84.4	14.1	0
8	90.6	7.8	0
9	89.1	9.4	0
10	89.1	9.4	0
11	87.5	10.9	0
12	68.8	26.6	3.1
13	92.2	6.3	0

*Competency 6: Possess the basic knowledge of supervisory skills, drug administration, and distributive functions, including compounding, in order to practice in various areas, including community, hospital, and clinic settings.

Focus Group Comments

Grand Rounds

- They feel this is an important experience
- Do not feel the grading is consistent
- They think they need more presentation experience throughout the curriculum
 - We discussed possibilities for group presentations in other classes. They perform group presentation in outcomes, but they do not think this is enough. The students suggested presentations on disease state management or drug therapy. This would serve two purposes: 1) presentation experience and 2) teach classmates something. The possible venues we discussed were 1) during self care, maybe the students could present on OTC drugs or 2) during 4th year rotations, present reviews of disease state management guidelines.
- The students felt they could still get a good experience if the length of presentations were decreased. They may not be able to analyze clinical trials as well but feel they get enough of this during drug info and outcomes.

OSCE

- Students really liked this experience!
- They would like more real life, case examples in curriculum

Therapeutics

- They do not feel like they are prepared for fourth year rotations. They need more cumulative material and even suggested some sort of cumulative therapeutics exam.

Tracks

- The students would like a community track for those interested in entering community pharmacy
- The students would like clinical track to begin earlier (they think all tracks should begin early like nuclear does).
 - This would allow them to be better prepared for clinical practice/residency training. One example was an elective on verbal presentation skills.

IV Admixture and compounding

- They do not feel competent in ability to make IV admixture upon completion of our program. They do not think they need more classroom experience. They would like more structure to the fourth year rotations to ensure that everyone would get experience regardless of the rotation site. The OR pharmacy was mentioned as a good experience; however, other hospital experiences were mentioned where the students just watched someone make an IV but were not allowed to do it themselves.
- They would like to compound more realistic items (things they would likely have to do while working in the community setting). For example, the students suggested Miles Magic Mouthwash. They do not think what they make is very practical. They also think the compounding elective should be offered in the new curriculum.

4th year days off

- The students think it is hard to interview for residency positions/jobs when they are only allowed to take 4 days off a year. They also said preceptors were inconsistent. Some just let them take days off for interviews where others required that they make the time up somehow (and this was not always easy because not all preceptors work on the weekends)

Suggestions

- Create a more specific grading form for grand rounds
- Create more opportunities for verbal presentations throughout the curriculum
- Add more cumulative material to therapeutics and more cases to be better prepared for 4th year rotations
- Create a community track
- Start tracks earlier
- Create a more consistent structure to 4th year hospital rotations to ensure everyone gets exposure to all important areas (including IV admixture)
- Create more practical compounding opportunities

- Create a consistent approach for dealing with 4th year students who need more than 4 days off a year for interview purposes.