



General Education Committee
Assessment of Student Learning in
Designated Courses
FM, WC, PE, SB, SP, & LB

Presentation
Of
Assessment Data: Spring 2013
Prepared by the Office of Institutional Effectiveness

Interpretive notes

- The assessment of student learning outcomes associated with General Education designators is conducted annually by the Office of Institutional Effectiveness (OIE) as part of the SUNY Potsdam ***Institutional Effectiveness Assessment Plan***.
- Assessment data are collected electronically from faculty teaching courses with General Education designators on a three year cycle.
- Data are aggregated and reported anonymously to the Gen Ed committee annually and then made public through the OIE Website.
- Data are also analyzed by Gen Ed Subcommittees responsible for each designator for the purpose of planning and recommending action for the improvement of student achievement.

Interpretive notes...continued

- This year the Gen Ed Assessment Committee initiated a data-driven pilot of reworked student learning outcomes for WC, SB, SP and LB.
- As a result of the implementation of a new designator for Health and Wellness (HW), that will take over instruction and assessment of SLOs previously assessed in Physical Education (PE), the committee also piloted changes to the PE outcomes.

In late April or early May you will be asked to provide assessment data for each of these 5 outcomes as follows:

1. **The Student will demonstrate the ability to develop clear and focused thesis statements that are appropriate for the time allocated, the audience, and the occasion**

- Number of Students Exceeding _____
- Number of Students Meeting _____
- **Numbers of Students Approaching _____**
- Number of Students Not Meeting _____
- Outcome Not Assessed _____
- Outcome Not Taught _____

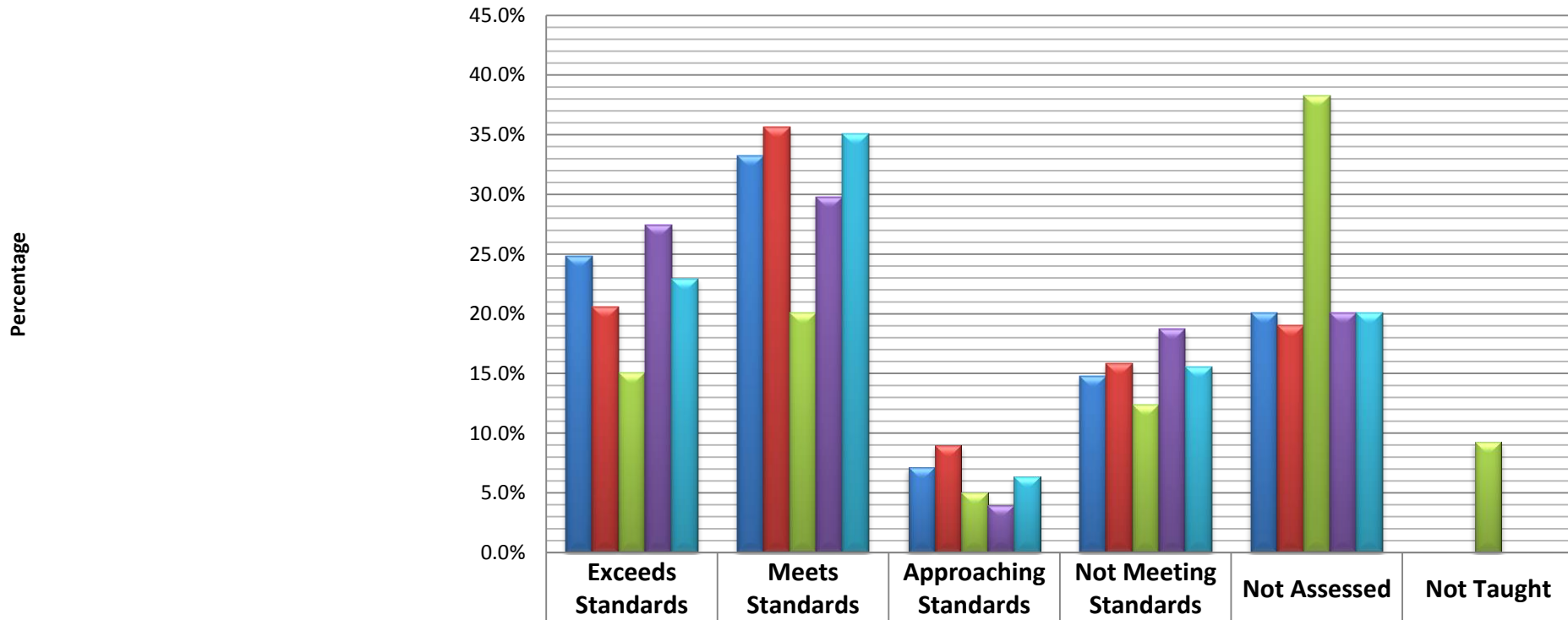
Note: The sum of these should equal the number of students in your FM course(s).

Clarification Note for:

Numbers of Students Approaching

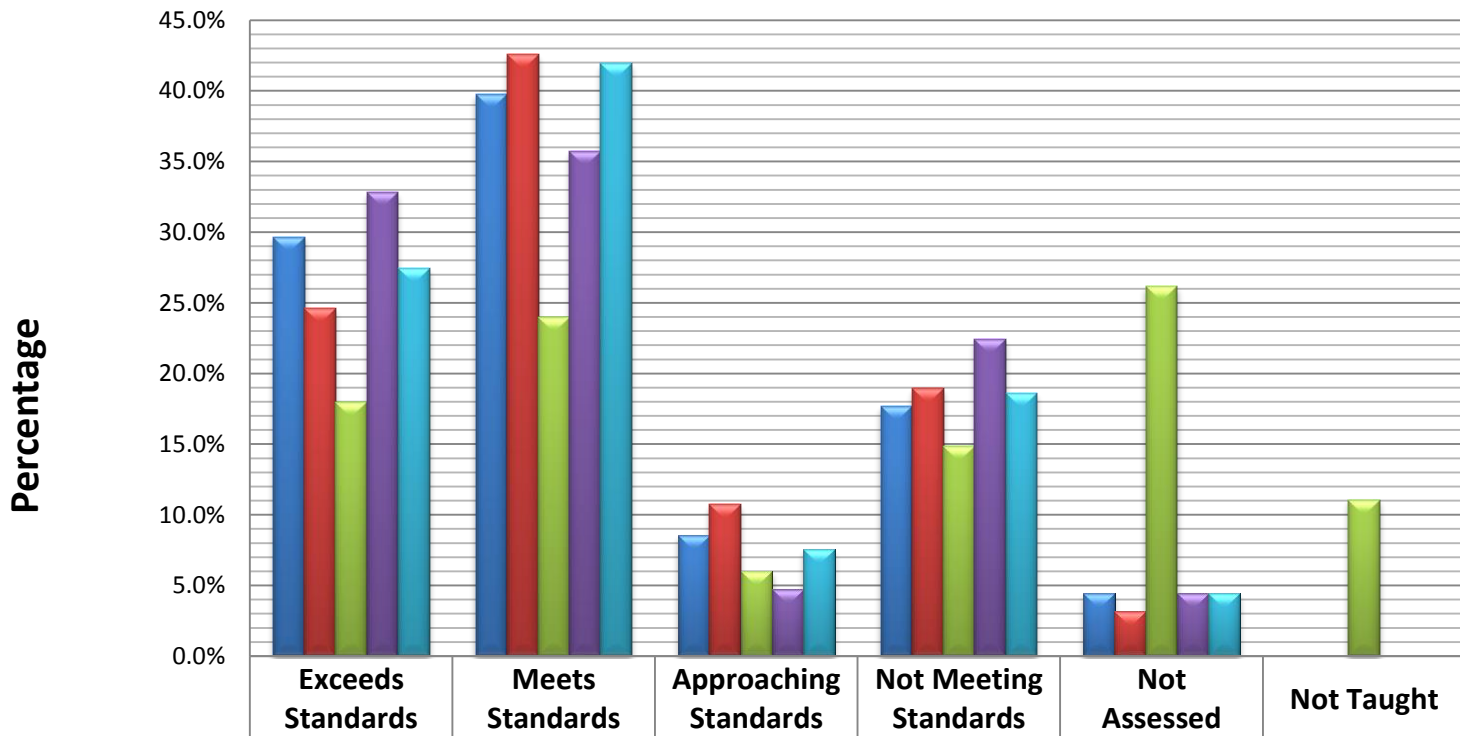
- “Approaching” is arguably subjective but should be viewed as some level of activity but definitely not developed enough to be considered a true demonstration of skill, ability, understanding, or knowledge. In other words an “F” for this particular outcome even though the student may be “meeting” or “exceeding” expectations for other outcomes.

Gen Ed FM Spring 2013 n=379/781 (n=48.5%) (with outlier)



■ Demonstrate ability to represent and interpret data and/or quantitative relationships through tables, graphs, and/or charts	24.8%	33.2%	7.1%	14.8%	20.1%	0.0%
■ Demonstrate ability to use and construct appropriate mathematical models, while being ware that mathematical models have limits	20.6%	35.6%	9.0%	15.8%	19.0%	0.0%
■ Demonstrate ability to evaluate the reasonableness of mathematical results	15.0%	20.1%	5.0%	12.4%	38.3%	9.2%
■ Demonstrate ability to perform symbolic computations	27.4%	29.8%	4.0%	18.7%	20.1%	0.0%
■ Demonstrate understanding of logical relationships	23.0%	35.1%	6.3%	15.6%	20.0%	0.0%

Gen Ed Mathematics (FM) Spring 2013 n=317/781 (40.6%)



■ Demonstrate ability to represent and interpret data and/or quantitative relationships through tables, graphs, and/or charts	29.7%	39.7%	8.5%	17.7%	4.4%	0.0%
■ Demonstrate ability to use and construct appropriate mathematical models, while being ware that mathematical models have limits	24.6%	42.6%	10.7%	18.9%	3.2%	0.0%
■ Demonstrate ability to evaluate the reasonableness of mathematical results	18.0%	24.0%	6.0%	14.8%	26.2%	11.0%
■ Demonstrate ability to perform symbolic computations	32.8%	35.7%	4.7%	22.4%	4.4%	0.0%
■ Demonstrate understanding of logical relationships	27.4%	42.0%	7.6%	18.6%	4.4%	0.0%

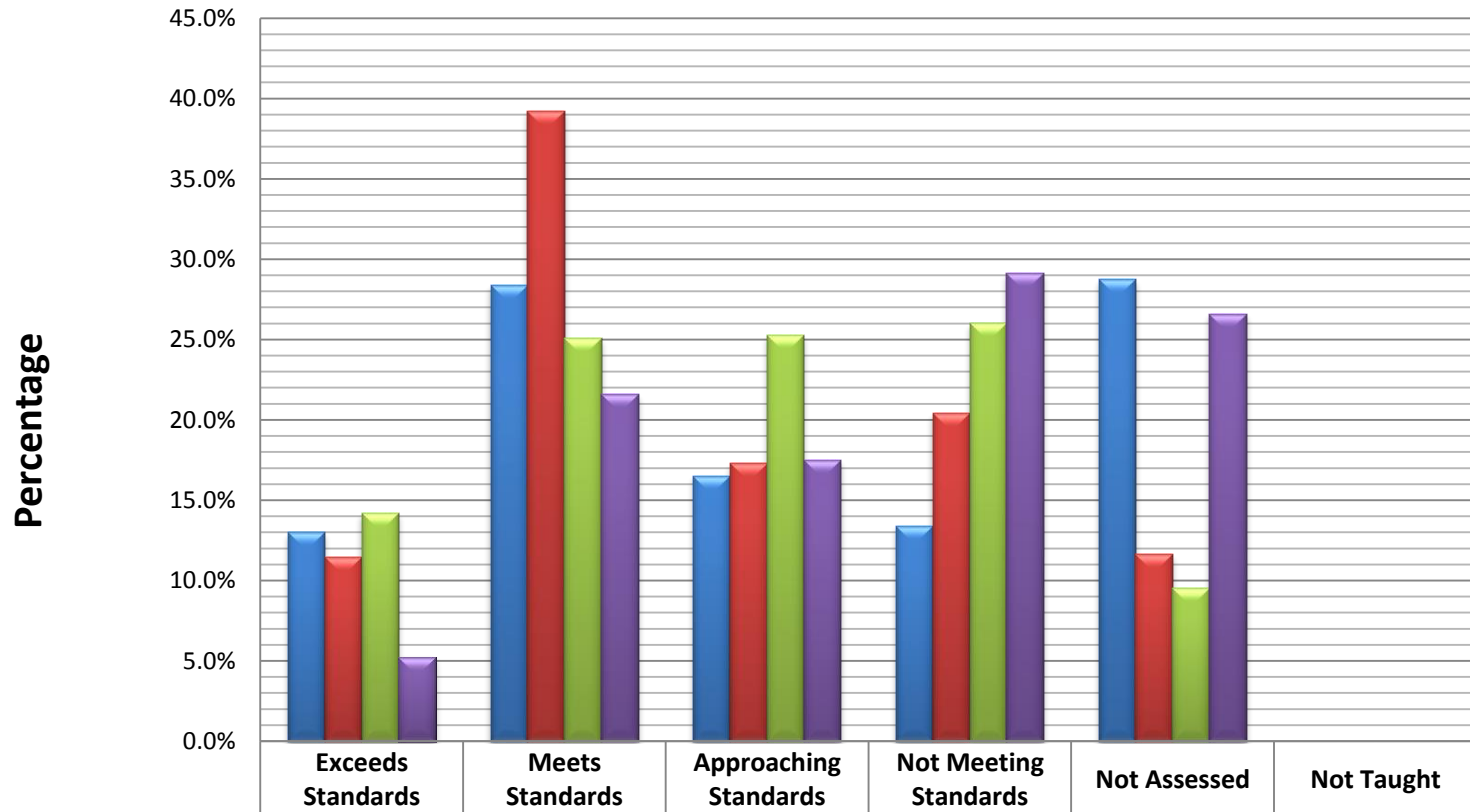
What assignments and/or assessment activities did you feel were most effective in generating assessment data to measure the percentage of students who were 'Exceeding', 'Meeting', 'Approaching', or 'Not Meeting' FM Outcomes?

- **exams, quizzes, and homework**
- **Scores on 6 tests. Items 5, 6 & 7 above are all based on the average of 3 tests. That's why the numbers are the same.**
- **Assignments 2, 5, and 6 and 8**
- **Labs 8 and 10**
- **Midterm II**
- **Exams and quizzes are most effective for us, because we allow collaboration on homework and projects**
- **Quizzes and tests**
- **Examinations**

Considering the assessment data from your course(s), what adjustments will you make in order to better fulfill requirements for the **FM designator** the next time you teach the course?

- **If possible (given room availability), I would like to move the course from a 2-hour lecture, 2-hour lab format, to a 4-hour combined lecture lab (studio approach). The class would have to be held in the lab, but it would allow me to have students test their understanding of concepts and try out ideas as we discuss them. Please note: I did not use the "Number of Students Exceeding" category. I was interested in those numbers of students who had met the stated FM learning outcome.**
- **1) Use of charts and graphs has been presented as an optional way to picture certain tasks. I intend to make them required, and to include them on exams and quizzes. 2) Programs are logical devices. I have in the past depended on the industry standard "does it work?" without requiring explicit descriptions of logical form. This can be emphasized more.**
- **More real world examples/applications**
- **None**
- **I do not think any adjustments need to be made for this course.**

Gen Ed WC Spring 2013 n=249/690 (36.1%)



	Exceeds Standards	Meets Standards	Approaching Standards	Not Meeting Standards	Not Assessed	Not Taught
■ Demonstrate knowledge and understanding of the historical development of some significant theme or aspect of Western Civilization, excluding the U.S.A.	13.0%	28.4%	16.5%	13.4%	28.7%	0.0%
■ Demonstrate ability to examine the development of the distinctive features of some significant theme or aspect of Western Civilization, placing them into the broader context of the development of Western Civilization (and other regions of the world)	11.5%	39.2%	17.3%	20.4%	11.6%	0.0%
■ Demonstrate skill in the critical use of primary sources and the evaluation of evidence	14.2%	25.1%	25.2%	26.0%	9.5%	0.0%
■ Demonstrate an understanding of the issues and methodologies laid out in the preceding outcomes	5.2%	21.6%	17.5%	29.1%	26.6%	0.0%

This year's Western Civilization (WC) Student Learning Outcomes represent a change from the student learning outcomes from three years ago. We are looking for feedback and/or comments regarding your experience(s) or difficulties with these student learning outcomes (i.e. being able to match appropriate activities or tools to assess the outcomes).

- **No problems.**
- **This is my first year teaching a western civilization class.**
- **I found these criteria to be quite "user friendly," although question 6 on issues and methodologies is a bit vague. I can't say that I spend a great deal of time discussing these as "stand-alone" concepts, just in context as we encounter them in the context of the various societies we study.**

What assignments and/or assessment activities did you feel were most effective in generating assessment data to measure the percentage of students who were 'Exceeding', 'Meeting', 'Approaching', or 'Not Meeting' WC Outcomes?

- **Geography Assignments**
- **exams, research papers, in-class discussion, study assignments**
- **Written assignments**
- **class presentation**
- **Questions 1 and 2 were based on the research term paper Questions 3 and 4 were based on overall grade for course--4 exams plus research paper**
- **In the research paper, students were required to find a primary source and use it to support their research on a particular culture. Since all students who completed the class successfully had to include this in their papers, this seems to be an effective way of helping them to understand this concept.**

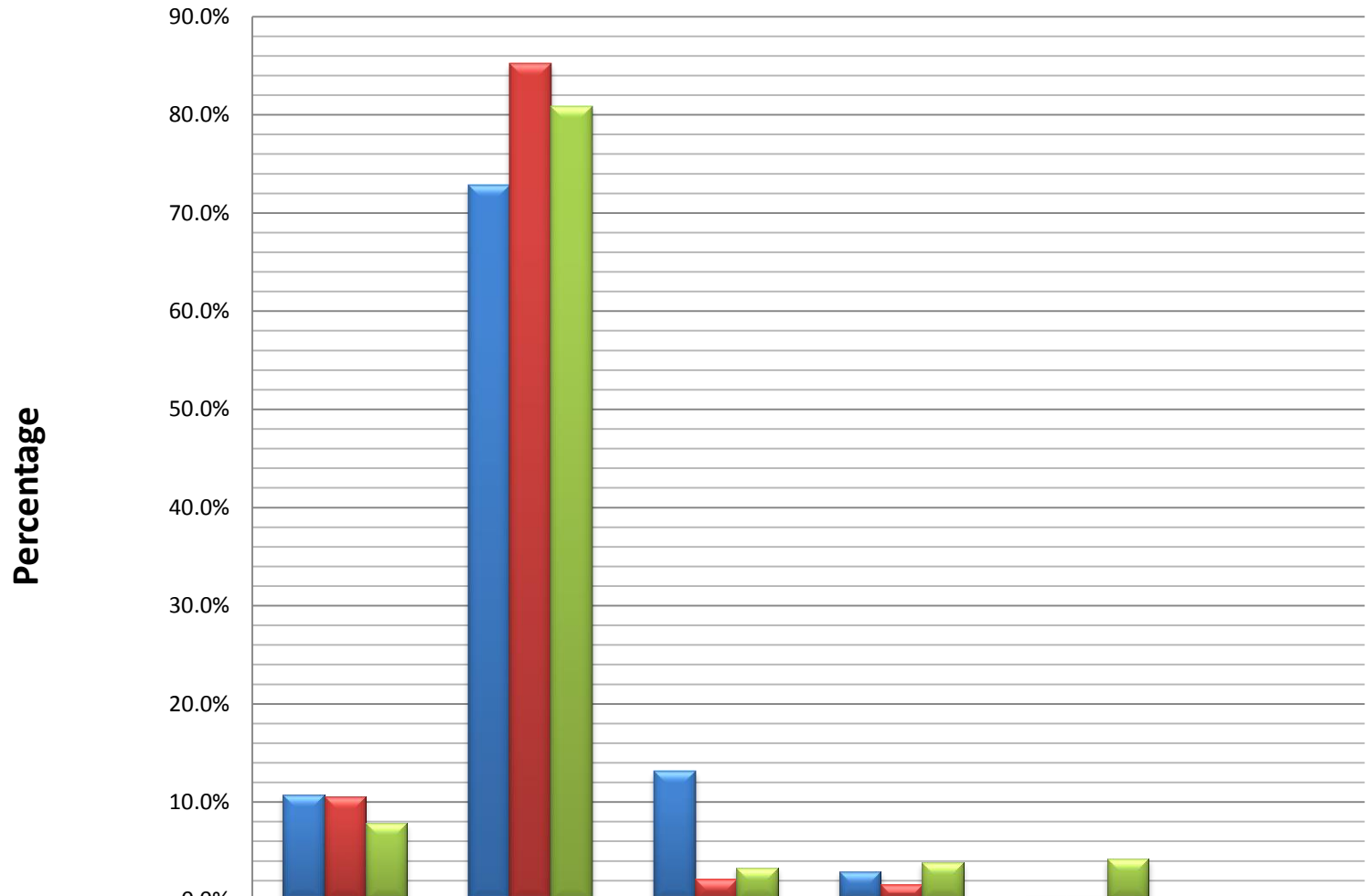
Considering the assessment data from your course(s), what adjustments will you make in order to better fulfill requirements for the **WC designator** the next time you teach the course?

- **A reallocation of course credit for work, increasing the stakes of individual assignments.**
- **Monitor students more rigorously for reading comprehension and confirm through discussion and writing exercises, to make sure they sufficiently understand the methodologies and philosophies involved in historical study.**
- **I will change my syllabus to more clearly define what is expected of the students in researching and applying their research to their class presentations and papers**
- **Many of the students who failed to meet expectations simply disappeared during the course of the semester. Students continue to fail the paper because they don't have citations. I actually added one class session and two outside class sessions on this, and it helped the best students, but it did no good for the weak students. Why are they not learning this in FW/FS? I haven't decided what to do next time.**
- **I plan to more fully develop the concept of cross-cultural borrowing between cultures, i.e. the idea that Western Culture has borrowed a great deal from other cultures, and vice versa. This is one of the themes of WC that I emphasize.**

Proposed change to WC SLO #4 – a closing the loop discussion.

- Currently: “Demonstrate an understanding of the issues and methodologies laid out in the preceding outcomes.”
- Proposed: “Effectively communicate an understanding of the issues and methodologies laid out in the preceding outcomes.”
- Or – eliminate this outcome.

Gen Ed PE Spring 2013 n=537/1361 (39.5%)



	Exceeds Standards	Meets Standards	Approaching Standards	Not Meeting Standards	Not Assessed	Not Taught
■ Demonstrate specific skills appropriate to the course activity area	10.7%	72.9%	13.1%	2.9%	0.4%	0.0%
■ Demonstrate understanding of safe practice of the course activity area	10.6%	85.2%	2.2%	1.6%	0.4%	0.0%
■ Demonstrate knowledge of the benefits of exercise of lifelong well-being	7.8%	80.9%	3.3%	3.8%	4.2%	0.0%

This year's Physical Education (PE) Student Learning Outcomes represent a change from the student learning outcomes from three years ago. We are looking for feedback or comments with your experience(s) and/or difficulties with these student learning outcomes (i.e. being able to match appropriate activities or tools to assess the outcomes).

- **No comment.**
- **This was a good change, and more easily monitored. Add an outcome that deals with attendance perhaps, as some students fail the course, but have acquired all the other outcomes. Thanks**
- **The outcomes seems appropriate for a range of physical education activities.**
- **no difficulties**

What assignments and/or assessment activities did you feel were most effective in generating assessment data to measure the percentage of students who where 'Exceeding', 'Meeting', 'Approaching', or 'Not Meeting' PE Outcomes?

- **Live performances/ performance of activity.**
- **Students required to participate in "force-on-force" training scenarios. Students either "defend" themselves or drop the class.**
- **Students are required to engage in the structured kickboxing workout. Student effort varies with a majority exceeding or meeting what the instructor considers criteria for the class activities. Attendance issues are the main problem in this class.**
- **1 student withdrew from the class, so none of the objectives were met. The other had a physical problem and missed too many classes to complete the attendance requirement, but up to that time was meeting performance skills requirement as well as safety and life-long practice understanding. Performance and informal interviews were the method used.**
- **2 students stopped attending and didn't come consistently enough for me to judge some of the outcomes. 2 were competent in all outcomes but failed because of attendance issues.**
- **Homework worksheets based on readings in the text**
- **Movement/performance exams**
- **"The food logs were helpful because it indicated when they understood what changes were necessary for a health diet.**
- **The fitness assessment provided concrete pre and post test data to determine level of fitness acquired throughout the semester.**

What assignments and/or assessment activities did you feel were most effective in generating assessment data to measure the percentage of students who were 'Exceeding', 'Meeting', 'Approaching', or 'Not Meeting' PE Outcomes?

- **Skills Check -Off sheets for skills assessments**
- **Test Questions and Field observations for Safety Knowledge**
- **Benefits of exercise Quiz**
- **Participation by the student in class is the most effective assessment. It is not necessarily to be evaluated on the level of play but to see that they play the sport by the rules and understand how it should be played so that if they play recreationally they can participate or lead a group in the everyday world.**
- **their presentation and facilitation of games geared toward elementary school children. organization, clarification of rules, and overall energy were evaluated.**
- **Class participation allows the student to show that they understand basic rules and concepts of Soccer.**
- **Course Participation**

What assignments and/or assessment activities did you feel were most effective in generating assessment data to measure the percentage of students who were 'Exceeding', 'Meeting', 'Approaching', or 'Not Meeting' PE Outcomes?

- **Class discussions and journals**
- **We did a pre test on their fitness level at the beginning of the class segment. We re-assessed at the end of the class schedule. Most everyone improved their time or at least maintained. We also had discussions about fitness as well as tips for healthy lifestyles.**
- **This course is a peer teaching course, not made for lifetime fitness activities. It is for Elementary Education majors. They had to teach two activities that incorporate cooperation into the classroom as well as write up two lessons.**
- **Hands on skill demonstrations I feel are the most effective at regarding safety procedures.**
- **The exam questions appear to be a pretty good measure of student knowledge of the benefits of exercise**

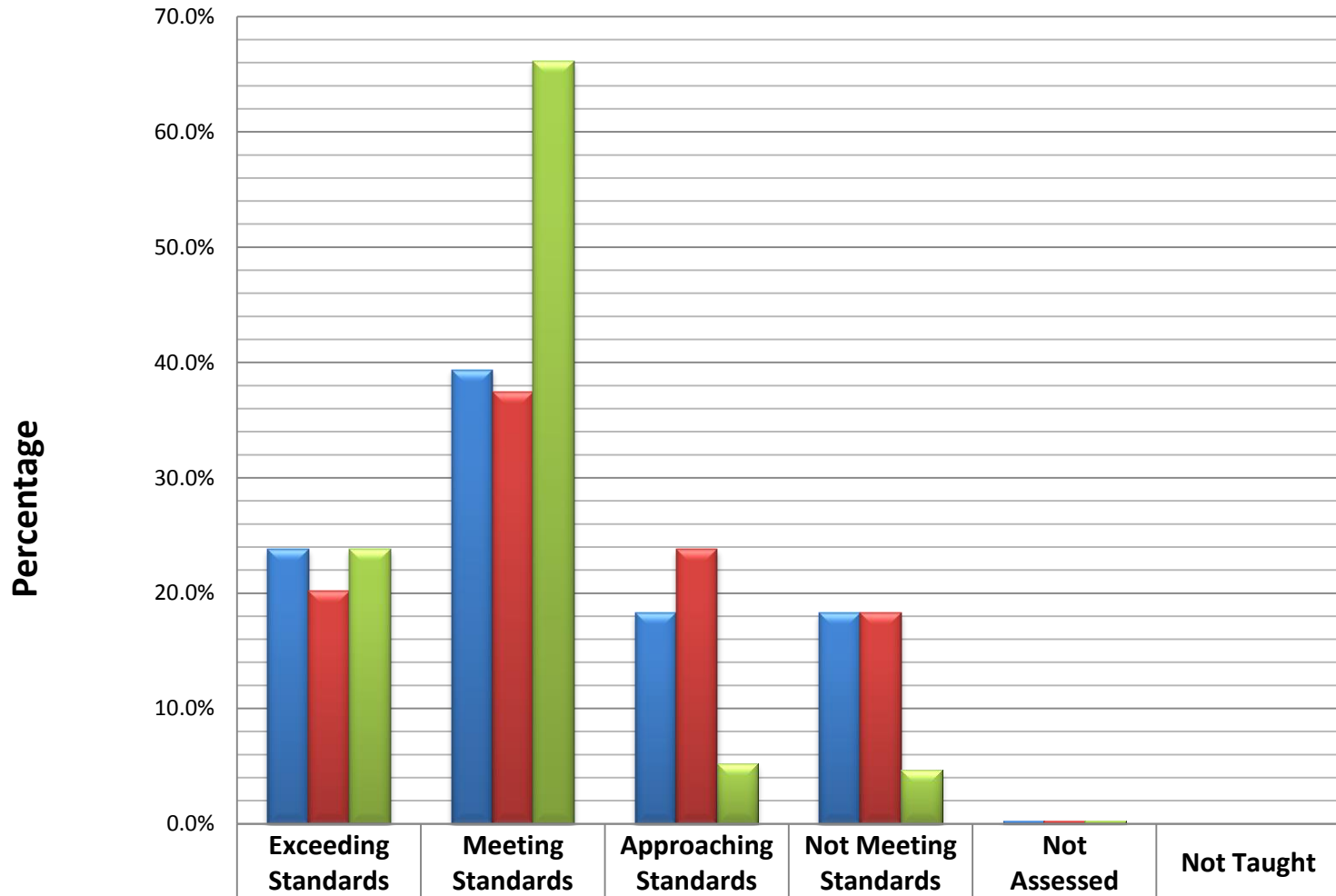
Considering the assessment data from your course(s), what adjustments will you make in order to better fulfill requirements for the **PE designator** the next time you teach the course?

- **Difficult to say. One cannot force people to work out hard. Some will have or will develop the intrinsic motivation to work hard and others are just in the class because it fits their schedule and will not put forth the effort.**
- **I will consider an in-class discussion on certain aspects of the text/worksheets to make certain all students are grasping the material.**
- **I think that I would have a demonstration as part of their final quiz to get the student to teach a certain rule or situation in badminton.**
- **more games taught by me, the instructor, geared toward educating children about fitness and food choices.**
- **I will put more time into teaching about the benefits of exercise for lifelong well being. Although students demonstrate knowledge of it, I think I can provide more information on it.**

Considering the assessment data from your course(s), what adjustments will you make in order to better fulfill requirements for the **PE designator** the next time you teach the course? (Continued)

- **Next semester I plan to have each student demonstrate/teach a skill that pertains to badminton to the class.**
- **None**
- **no adjustments**
- **Continue to incorporate lifetime fitness and understanding how to achieve this.**
- **I would continue with the course as taught.**
- **I may try to add more safety questions on quiz's and exams instead of only assessing through demonstration.**

Gen Ed SB Spring 2013 n=366/700 (52.3%)



■ Demonstrate an understanding of major scientific concepts relevant to the SB-designated course	23.8%	39.3%	18.3%	18.3%	0.3%	0.0%
■ Demonstrate knowledge of the scientific method	20.2%	37.4%	23.8%	18.3%	0.3%	0.0%
■ Demonstrate understanding that discoveries in science help us comprehend the natural world	23.8%	66.1%	5.2%	4.6%	0.3%	0.0%

This year's Scientific Inquiry - Biological Sciences (SB) Student Learning Outcomes represent a change from the student learning outcomes from three years ago. We are looking for feedback or comments with your experience(s) and difficulties with these student learning outcomes (i.e. being able to match appropriate activities or tools to assess the outcomes).

- **It's better this time. Fewer is better.**
- **The learning outcomes work fine**
- **The class has grown from 48 students each semester to 96 in the fall and 72 in spring. Without TAs to grade assignments (I would not ask them to grade exams) it is virtually impossible to get more in depth assessment information. Grading is the bottleneck. I do not use clickers, and although I see their usefulness, I do not feel they give the kind of feedback necessary to improve the course. I want these non-majors to THINK about how biology affects their lives and their world. This kind of information can't be readily ascertained through multiple choice questions on clickers. TAs that can grade simple exercises are the best way to go.**
- **Using formative assessment help me realize the areas to strengthen in teaching and learning. The results presented here are the direct assessment.**

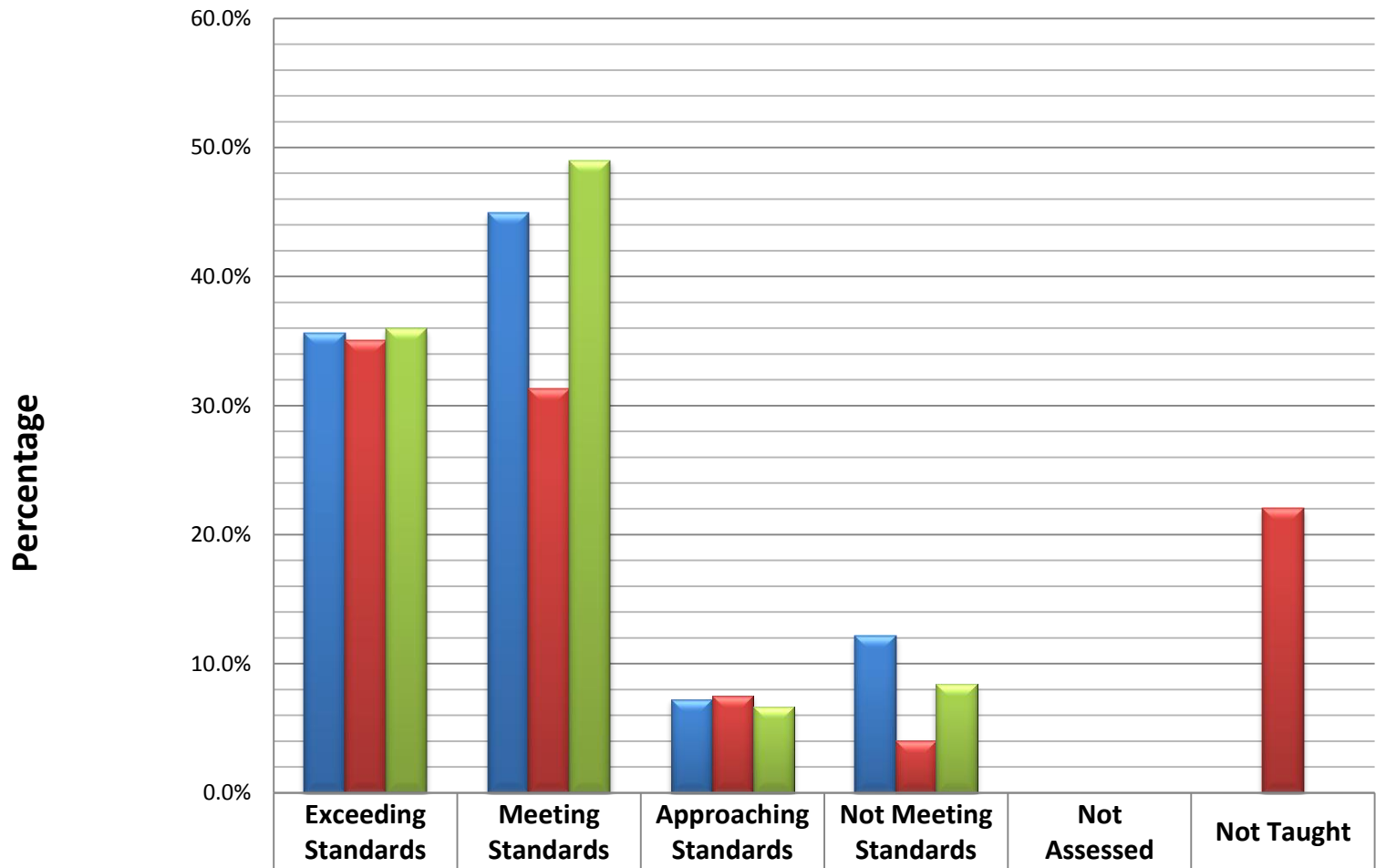
What assignments and/or assessment activities did you feel were most effective in generating assessment data to measure the percentage of students who were 'Exceeding', 'Meeting', 'Approaching', or 'Not Meeting' SB Outcomes?

- **Quizzes and exams**
- **Exams and Oral Presentations**
- **exams**
- **Exams that required them to consider multiple concepts to correctly answer questions and the group project where students had to present what they had learned about a topic to other students in the class. They also had to complete a "conundrum of the week assignment" in class (which was not graded). This is a simple question for them to answer in a group of four students.**
- **Writing sample with a rubric**

Considering the assessment data from your course(s), what adjustments will you make in order to better fulfill requirements for the **SB designator** the next time you teach the course?

- Not much. They don't fully understand the scientific method, but that is not a focus for this non-majors course. For bio majors I'd be much more concerned.
- Additional assignment on scientific method
- I could keep track of how students did on certain questions related to the above criteria.
- I will try to have more in class (5 min) assignments that get the students to think about the concepts presented in class, rather than have them regurgitate factoids. I use my exams to do this. Even though I use multiple choice questions on exams, I write many questions that require them to combine more than one concept. Not always popular with the students, but it gets them to think.
- I will be using more rubrics for written work, I noted that work improved greatly when the same question was initially answered without a rubric.

Gen Ed SP Spring 2013 n=345/924 (37.3%)



	Exceeding Standards	Meeting Standards	Approaching Standards	Not Meeting Standards	Not Assessed	Not Taught
■ Demonstrate an understanding of major scientific concepts relevant to the SP-designated course	35.7%	44.9%	7.2%	12.2%	0.0%	0.0%
■ Demonstrate effective use of quantitative measures, analyses, and models to present and evaluate data	35.1%	31.3%	7.5%	4.1%	0.0%	22.0%
■ Demonstrate understanding of the impact of scientific investigations upon human existence	35.9%	49.0%	6.7%	8.4%	0.0%	0.0%

This year's Scientific Inquiry - Physical Sciences (SP) Student Learning Outcomes represent a change from the student learning outcomes from three years ago. We are looking for feedback and/or comments regarding your experience(s) or difficulties with these student learning outcomes (i.e. being able to match appropriate activities or tools to assess the outcomes).

- **Do you mean the ones phrased above or the ones in the Gen Ed manual for faculty????**
- **I have been emphasizing these concepts all along it is just a matter of finding many and different ways to introduce them to the students. It is part of the interesting challenge of teaching.**
- **Much better!**

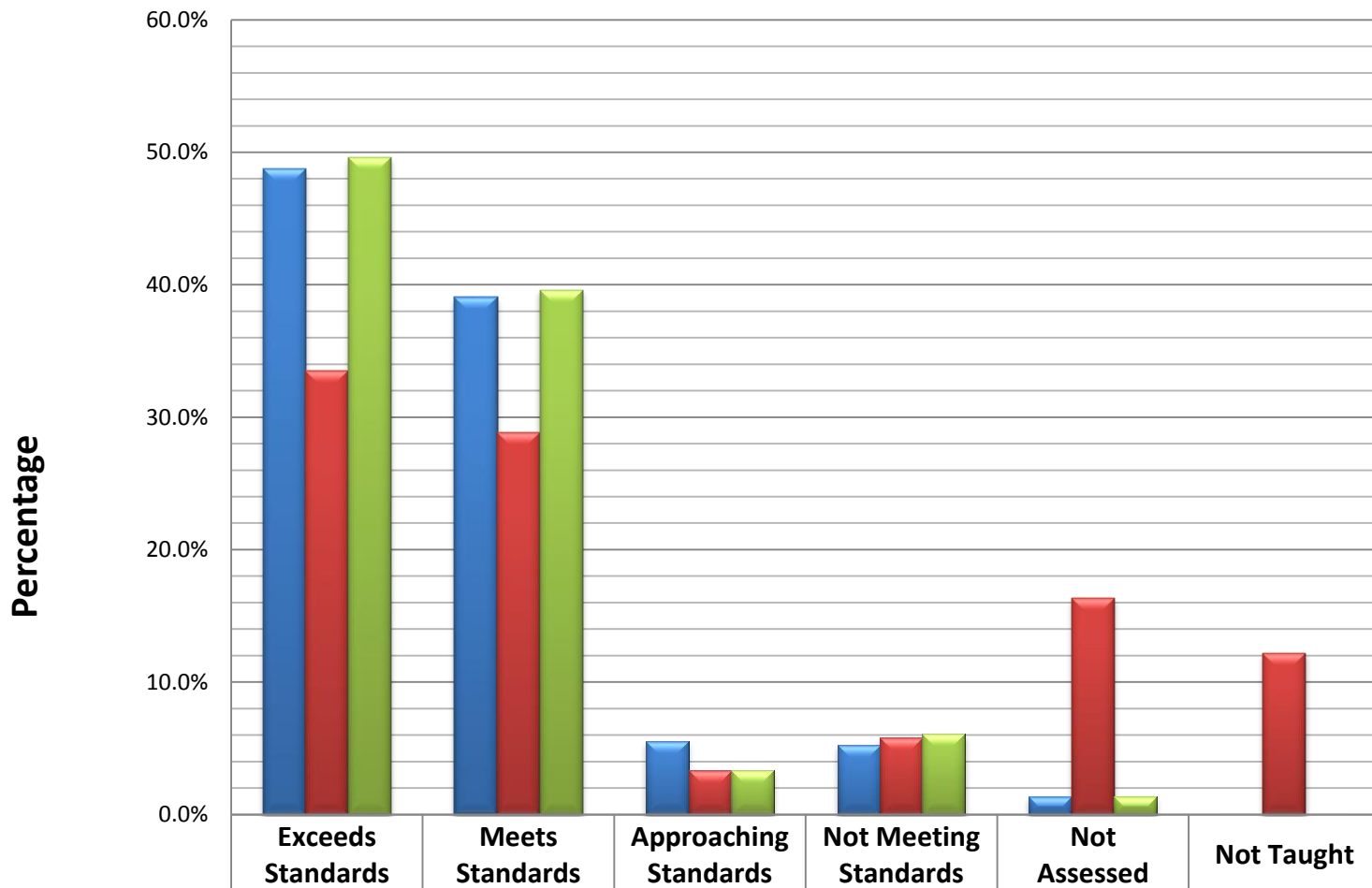
What assignments and/or assessment activities did you feel were most effective in generating assessment data to measure the percentage of students who were 'Exceeding', 'Meeting', 'Approaching', or 'Not Meeting' SP Outcomes?

- The homework more accurately reflects what the students learned.
- I felt that "big picture" standardized tests allowed me to assess the objectives several weeks after the students completed the hands-on assignments ... that told me whether the concepts really sunk in.
- Associated weekly lab work.
- Clicker responses to quizzes in power point slides
- Course being available in Moodle with class notes and course materials
- Exams
- Exams, Quizzes, Projects, Presentations, and Writing
- Quizzes because students help each other on homework and are sometimes intimidated by exams
- Exams

Considering the assessment data from your course(s), what adjustments will you make in order to better fulfill requirements for the **SP designator** the next time you teach the course?

- The questions I used from the mid-term exam to generate the data for #3 above require a thorough understanding of my learning outcomes. Achievement on the over-all exam was much higher.
- With regards to "Students will demonstrate an understanding of the impact of scientific investigations upon human existence." I will continue to emphasize how our understanding of the planet's past impacts out understanding of what lies ahead.
- Some more "drill work" early on in order to try to get students better skilled in certain quantitative calculations and analyses.
- Cover the requirements in more detail and add activities that emphasis the concepts.
- None

Gen Ed LB Spring 2013 n=361/908 (39.8%)



Demonstrate understanding of major scientific concepts through laboratory inquiry	48.7%	39.1%	5.5%	5.3%	1.4%	0.0%
Demonstrate skill in using discipline specific technology to discover, address a problem, or test a hypothesis	33.5%	28.8%	3.3%	5.8%	16.4%	12.2%
Demonstrate skill in the interpretation of data sets using quantitative measures, models, and other forms of analysis	49.6%	39.6%	3.3%	6.1%	1.4%	0.0%

This year's Scientific Inquiry - Laboratory (LB) Student Learning Outcomes represent a change from the student learning outcomes from three years ago. We are looking for feedback or comments with your experience(s) and/or difficulties with these Student Learning Outcomes (i.e. being able to match appropriate activities or tools to assess the outcomes).

- **none**
- **It is difficult to get students to improve student learning outcomes when the miss class. Having make up times is difficult and student often do not show up.**
- **Much, much better!**
- **I will test my instruments in a formative fashion to see the results.**

What assignments and/or assessment activities did you feel were most effective in generating assessment data to measure the percentage of students who were 'Exceeding', 'Meeting', 'Approaching', or 'Not Meeting' LB Outcomes?

- **Cumulative lab exam**
- **Working with hands on experiments with equipment, computer programs to link experiments**
- **Mineral and Rock Labs, On line labs on locating Epicenters. Astronomy Labs on classification of stars.**
- **"Grades on lab reports**
- **Quality of student developed procedures**
- **Accuracy of data analysis "**
- **Lab Reports**
- **Our assessment for this Gen Chem lab is based on students grades using a number of assessment tools such as a final lab exam, prelab or journals and lab reports.**
- **Lab project involving interpretation of population data.**

Considering the assessment data from your course(s), what adjustments will you make in order to better fulfill requirements for the **LB designator** the next time you teach the course?

- Considering that this is an introductory course, I have problems with students who don't hand in assignments. This skews the data to seem lower than they would be if I only considered assignments that were completed.
- Regarding "Students will demonstrate an understanding of major scientific concepts through laboratory inquiry." I will try to develop labs that allow present the students with original/primary data to try and emphasize that science provides the best explanations for what we see.
- Add additional instruction in the methodology required to complete the labs.
- Introduce a lab which requires students to use appropriate technology
- None.
- I'd consider a rubric and put more emphasis on the clear hypothesis testing.

Assessment Concerns

- PE – One instructor indicated that he would not supply assessment data due to the fact that the course is on-line and students create their own individual work-outs.
- FM -- The professor could/did not assess any of the FM student learning outcomes. Although this course is designated FM, question as to whether it should be.
- Spring 2014 will include IL. Have we ratified these SLOs?

Infused into FS, FW and FC are the following ***Information Literacy*** Student Learning Outcomes.

The Student will:

1. Demonstrate ability to draft research questions from a broad initial topic and derive suitable search vocabulary.
- 2. Identify and access appropriate information resources, such as library catalog (FS); library subscription data bases (FW); and the free web (FC).**
3. Demonstrate knowledge of search strategies suitable for a variety of search tools as listed in outcome #2.
4. Evaluate search results, select and acquire the most appropriate information source(s).
5. Read, analyze, synthesize, cite and report back relevant information or data obtained from the sources gathered.

Spring 2014

- **Spring 2014 Assessment of Gen Ed SLOs for Designators: (FC/IL), (FS/IL),(SI/IL), (XC) & (AH) Discussion of timing for Best Practices Workshops**