1) Pretest was given to all students. Average grade was 42% (160 students)
2) Exam 1 had 10 questions on it related to the 10 pretest questions. Average grade for these 10 questions was 81%.
3) End of semester: I gave a post test to 20 students selected at random. This was the same as the pretest they all took on day one of class except on 8 and 9 they had to define those two organs. Average score was 66%.

Conclusion: Students study well for the exam, and have good short term memory. They do not retain this knowledge very well (66% vs 81%)

Action Plan: Part of the next section of the class is pregnancy. During this section anatomy and physiology of male and female reproductive systems will again be taught. On the next exam there will again be 10 questions related to anatomy and physiology and homologous organs. Following the exam there will also be a post test (as part of the final) to assess retention.

SLO 1 Pretest

An organ in the female that resembles and comes from the same part of the fetus as an organ in the male is called a HOMOLOGOUS organ.

1) In the following list, pick a female organ that is homologous to the penis in the male.
   a) uterus
   b) vagina
   c) labia
   d) clitoris

2) The testicles of the male are where the sperm are made. From the list below choose the name of the female organ in which the eggs are.
   a) uterus
   b) vagina
   c) ovaries
   d) Fallopian tube

3) Circumcision is a process in which a flap of skin covering the end of the penis is removed. This flap is called the foreskin. Is there such a flap of skin on a female organ that is removed by some cultures
   a) yes
   b) no

4) The penis of the male has thousands of nerve endings and is a part of the male that is very sensitive. The sensitive end of the penis is about 3 square centimeters in area. The homologous organ of the female has the same number of nerve endings but its end is only 1/10 as big in area as the end of the penis. Which is more sensitive--a) the male organ or b) its homolog in the female

5) Which female organ listed below is the homolog of the prostate in the male?
   a) uterus
   b) cervix
c)vagina
d)ovary
6) What is the scrotum
   a) the end of the vagina
   b) the shaft of the penis
   c) the opening of the vagina
   d) the "sac" that holds the man’s testicles
7) Some cultures think this part of the female is a male organ grafted onto the female. That part is
   a) uterus
   b) clitoris
   c) Fallopian tube
   d) labia
8) I know what the prepuce is and could define it if I had to a) yes b) no
9) I know what the epididymis is and could define it if I had to a) yes b) no
10) A sperm cell made by the father unites with an egg cell from the mother in which part of the female listed below
    a) uterus
    b) ovary
    c) labia
    d) Fallopian tube
    e) cervix

SLO #1 Analysis for BIO109 SP13
Demonstrate knowledge of anatomy and physiology of the major parts of the male and female reproductive systems and compare fetal development of the male and female.

1) PRETEST: Ten questions related to above. All students tested. Correct answers 42%
2) first POSTTEST immediately after teaching this topic. Correct answers 82%
3) second post test 5 weeks after teaching the material. Correct answers 66%
4) final post test (at time of last exam and after all teaching is done) Correct ans. 50%
Conclusion: Definitely learning drops off with time.
Action Plan: The same analysis will be done in the next session (summer session). This is a smaller class. Anatomy and physiology will be emphasized in each section of the course. A greater use of models, pictures, and emphasis on anatomical and physiological terms will be used. These will be detailed in the analysis of next term’s results. The goal will be to increase student's real learning of this material.

SLO Analyses for Summer BIO109 2013
SLO #2 was analyzed for the first time. Evaluate how biological and sexual aspects of sexual identity form in the fetus and the growing child.
The analysis consisted of a pretest given before any material was discussed and then, at final exam time, a post-test on the same material as the pretest. As a control, the same analysis was repeated for SLO#1 (Demonstrate knowlege of the anatomy and physiology of the major parts of the male and female reproductive systems and compare fetal development of the male and female)
Results:
SLO#1 pretest 47%. Post test 78%
SLO#2 pretest 30% Post test 80%

In the Spring Class comparable findings were
SLO#1 pretest 42%. Post test at final time 50%
The same pre and post tests were used in summer as in spring. The improved scores on the post test in summer may indicate the advantages of the concentrated summer course (6weeks) rather than 15 weeks or may indicate the smaller class is conducive to more discussion and better learning.
Similar analyses will take place in the large Fall class on the main campus and also in the small Fall class at the Newark campus. In addition SLO#3 will be analyzed for the first time in the Fall.

as I have been doing, in each semester I do one SLO (out of 5). This semester I did SLO 3.
SLO 3 reads "Summarize variations of fetal and psychological development as they influence sexual identity and behavior"
A pretest was given before we began discussing the matter.
A posttest was incorporated into the second exam.
Each question dealt with a different aspect of the material enabling me to pinpoint areas of weakness.
RESULTS (% correct ) pre vs post
1. Origin of homosexuality Pretest 10% posttest 88%
2. the 3 axes of sexual identity (chapter 4 in the Blonna text) Pretest 25%
   Posttest 60%
3)transgender vs gay  pretest 58; posttest 60
4)time of sexual differentiation of the fetus  pretest 0; posttest 100
5)TV vs TS pre 36 post 88
6)Klinefelters pre 0 post 100
7)N/A
8)XYY pre 44 post 70
9)Turners (XO) pre 11 post 59
10) frequency of homosexuality in all cultures pre 61 post 100.

Conclusions:Most material shows about the same as SLO 1 and 2. Pretest about 25% and post 80%
but distinguishing between gay and transgender (#3) was the area of most difficulty(pre 58 vs post 60) and I need to spend more time on this. Student prejudice overcame their learning the facts here.