

TO: CIOS Task Force Members

FROM: Dr. Tristan T. Utschig

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DATE: Friday, September 5, 2008

RE: PILOT Survey Summary Analysis and Comparison with CIOS

Dear Members of the CIOS Task Force,

In accordance with the recommendation of the Task Force, CETL has conducted a small PILOT survey to support ongoing investigations into means for improving the CIOS instrument.

Attached is a summary of the results gathered from the PILOT survey implementation which was carried out during the Summer 2008 semester. These results will support discussion at the September 12 CIOS Task Force meeting about how to move forward with a larger PILOT implementation in the Fall 2008 semester.

Respectfully submitted,

Tris Utschig

PILOT Survey Summary Analysis & Comparison with CIOS

Implementation

212 complete responses representing 15 courses and 3 student interest groups, 9 departments, and 14 instructors. Both surveys were anonymous and thus only an extremely limited comparative statistical analysis was possible.

Response Rate (see Figure 1)

Summer response rates are generally extremely low, averaging roughly 23% for the summer of 2008. Response rates for courses utilizing the PILOT ranged from 0 to 65%, with an average of roughly 30% for CIOS and 33% for the PILOT.

Item 10 (see Figure 2)

Item 10 on the CIOS instrument represents overall teaching effectiveness and was duplicated verbatim on the PILOT. Ratings were observed to be consistent between the two surveys though not equivalent. Possible explanations for differences include different students from a course completing the different surveys, the use of forced choice answers rather than continuous scales, and the influence of the content of the questions asked on the survey prior the Item 10 question.

Survey Preference (see Figure 3)

The majority (134 students) had no preference among the two surveys. However, of those with a preference (78 students), the PILOT was preferred by nearly 10:1 and with more students indicating a strong preference as opposed to a mild preference. This level of preference should be viewed with caution despite its strength since there is potential for a self-selection bias and many students may be less likely to prefer a longer survey when it is the default survey rather than a supplementary pilot.

Survey Utility (see Figure 4)

Students appeared slightly skeptical about the value of the survey results to other students and administrators, but nevertheless generally felt they would be somewhat useful on average. More notably, nearly 70% of respondents indicated that they felt the pilot survey results would be useful to instructors. This fraction is much larger than the student and administrator utility ratings.

PILOT design features

Instructions –

This section was reworded to emphasize how the survey would be used based on discussion with the Task Force. We asked: “Did the purpose and instructions at the very beginning of this PILOT survey make sense and appear sufficient?” The results are as follows:

- 113 stated YES (or some variation of YES)
- 84 did not respond to this question
- 7 gave detailed reasons about why they were sufficient
- 3 stated they did not read them

- 3 indicated they were confused and gave some details of why, but 2 of these referred to something other than the instructions
- 2 stated NO

Questions and Scales –

We asked: “Were the questions and their associated response scales clear in this PILOT survey?” The results are as follows:

- 122 stated YES (or some variation of YES)
- 80 did not respond to this question
- 6 gave detailed responses about why they liked some aspect of the questions and scales
- 2 gave detailed responses about redundancy or non-relevant questions for their class
- 1 stated NO

Overall Comparison to CIOS –

We asked for “Comments comparing this PILOT survey to the traditional CIOS survey?” The results are as follows:

- 160 did not respond to this question
- 22 comments praised aspects of the PILOT (about 50% of these related to the usefulness and targeted nature of the questions, about 40% of these related to its structure and ease of use, or clarity, others liked that there were more questions)
- 5 comments indicated dislikes regarding the PILOT (most of these were related to its length)
- 7 comments stated they are both valuable tools
- 7 comments praised aspects of CIOS (about half of these related to the many comments boxes on CIOS, one liked the questions about exams, two others felt it was a more broadly useful survey)
- 4 comments indicated dislikes regarding CIOS (CIOS was too short, CIOS was too long, comment box limit)
- 3 suggestions were offered for changes to the PILOT (add question about course content, add question about ease of contacting instructor, less overlap in comment boxes topics)

Comparison of Results for Similar Questions between CIOS/PILOT

Clarity – (see Figure 5a and/or Table 1)

3. Explained Complex Material Clearly
6. Clarity in discussing/presenting

Results for the questions on the two surveys appeared to quite consistent across the different courses.

Affect – (see Figure 5b and/or Table 1)

4. Was Approachable And Willing To Assist
7. Respect and concern for students

Results for these questions appeared similar but not equivalent between the two surveys.

Encouragement – (see Figure 5c and/or Table 1)

5. Encouraged Students To Consult With Him/Her
10. Encouraged active role in learning

Results for these questions appeared similar but not equivalent between the two surveys.

Work Load – (see Figure 5d and/or Table 1)

7. Number Of Course Assignments Was Appropriate.
1. Number of hours per week

Result here correlate # of hours per week with appropriate number of assignments. It would appear for this group of summer courses that a total of approximately 8 hrs/wk was viewed as fairly reasonable. Notably, outside of two lab courses with 1 or 2 respondents each, the courses with the lowest and highest reported hrs/wk were both rated significantly lower than other courses with more “normal” workloads”.

Relevance – (see Figure 5e and/or Table 1)

8. Exams Covered Course Content/Objectives
16. Activities/assignments facilitated learning

Results for these questions appeared similar but not equivalent between the two surveys. One course (with 16/18 respondents) showed very different results for this question area on the survey. One possible explanation for this may be the nature of the questions having emphasis on exams vs assignments with this course having a unique setup in that regard. Another possible explanation is that students do not view the assignment/exam coverage of course content/objectives as necessarily being related to assignments/exams facilitating learning.

Content Level – (see Figure 5f and/or Table 1)

9. Exams And Quizzes Were Of Appropriate Difficulty.
17. Exams/assignments measured knowledge/understanding

Results for these questions appeared somewhat similar but certainly not equivalent between the two surveys. One course (with 16/18 respondents) showed very different results for this question area on the survey. One possible explanation for this is that students do not view an appropriate level of difficulty as necessarily being related to the measurement of knowledge/understanding.

Student Comments –

The average numbers of characters provided by students on the surveys was nearly 30% higher on the PILOT as compared to the CIOS (average 306 characters/student vs 235). Part of the reason for this may be the limited number of characters allowed on the CIOS survey for individual questions.

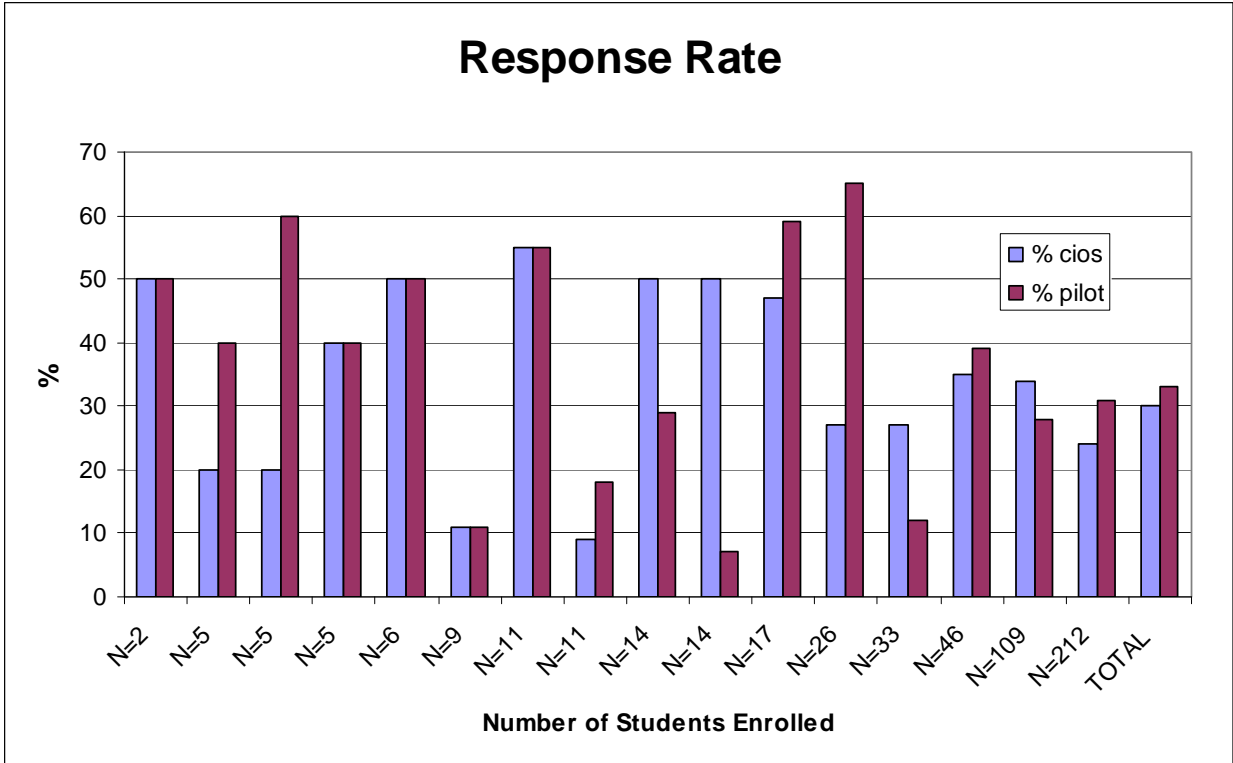


Figure 1

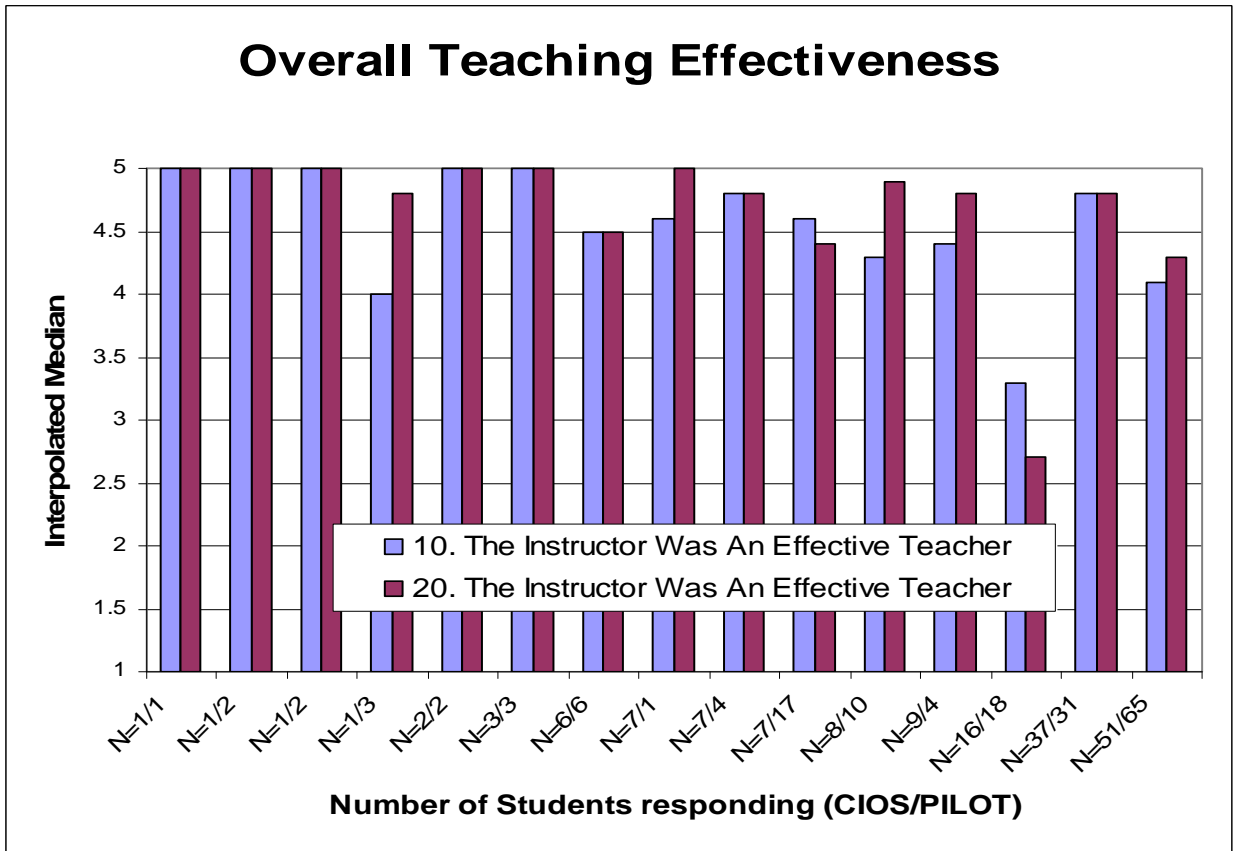


Figure 2

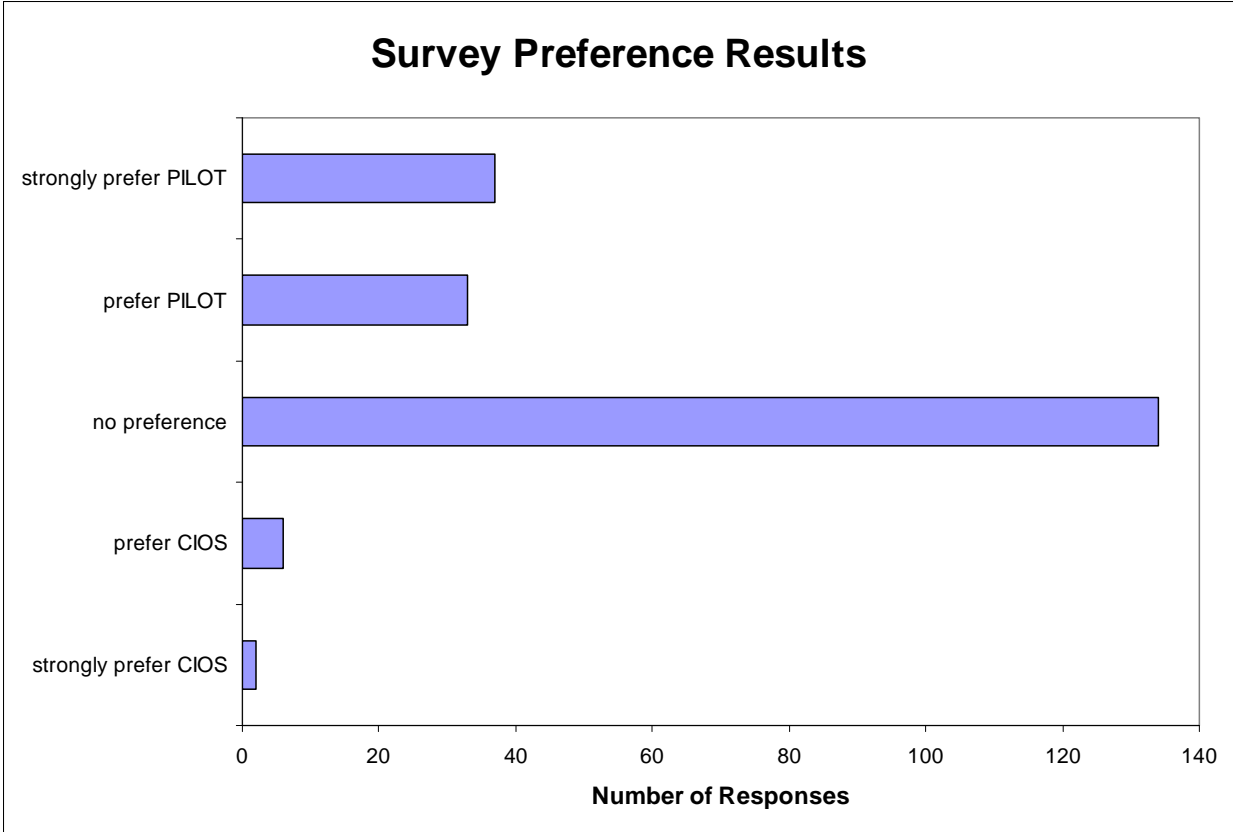


Figure 3

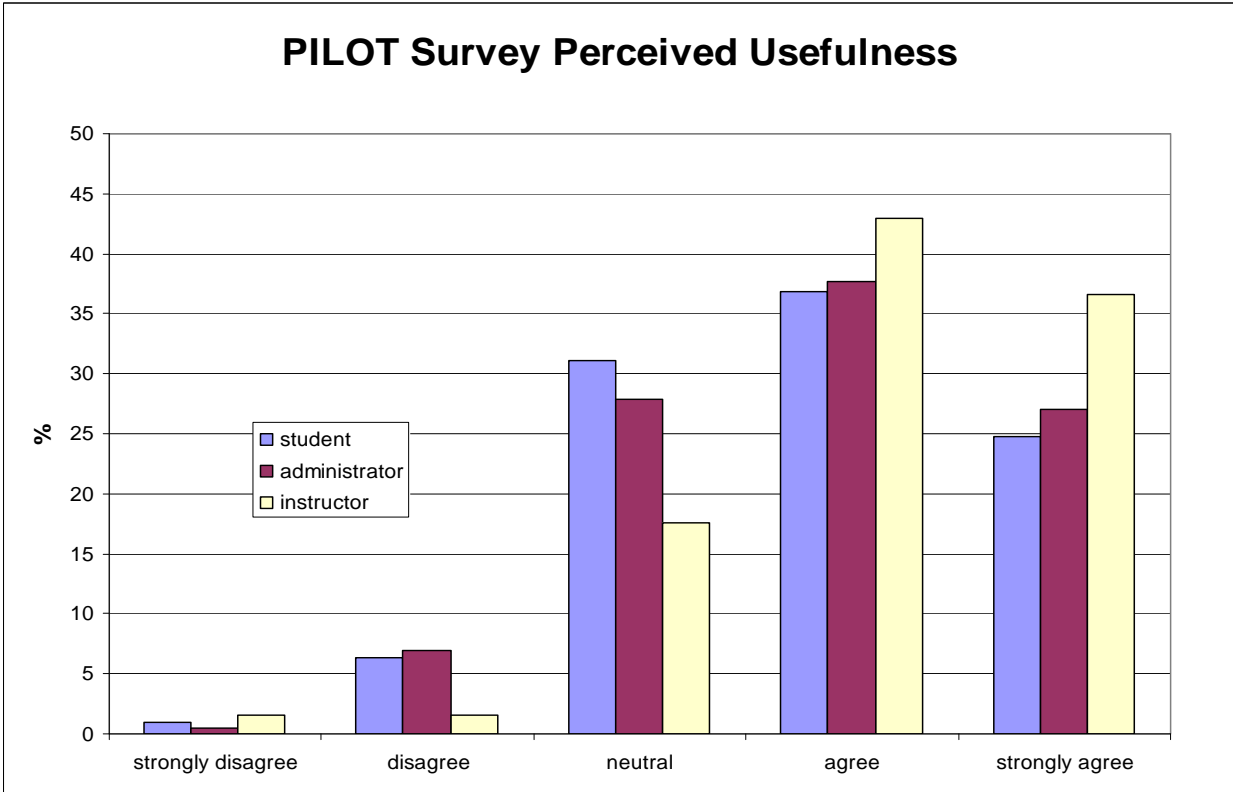
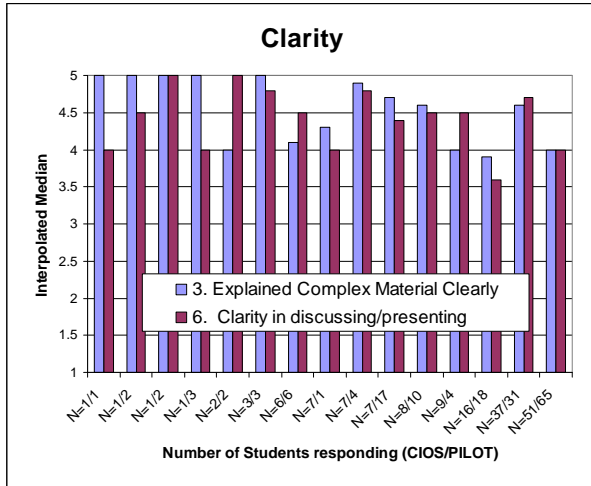
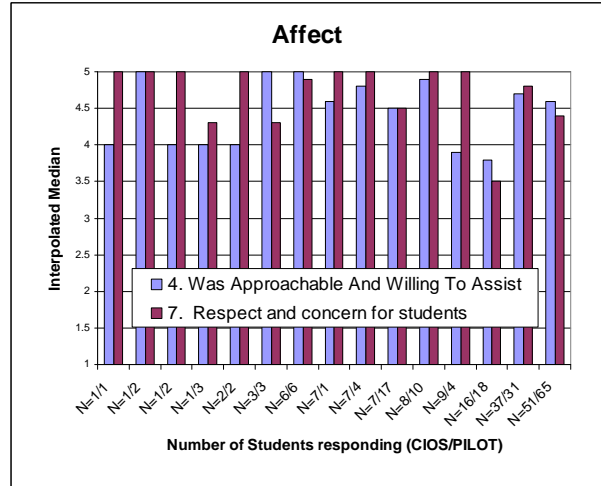


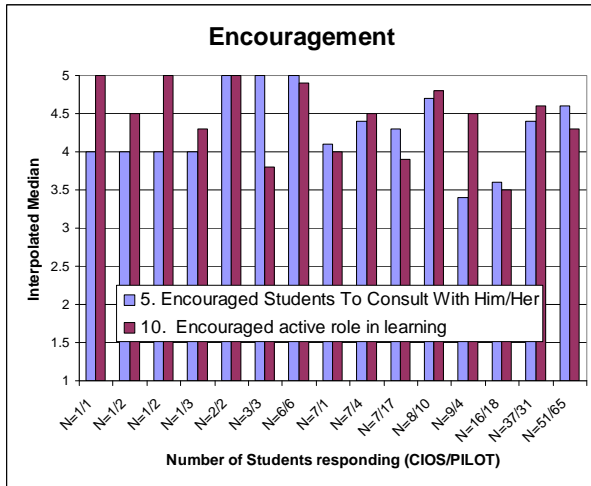
Figure 4



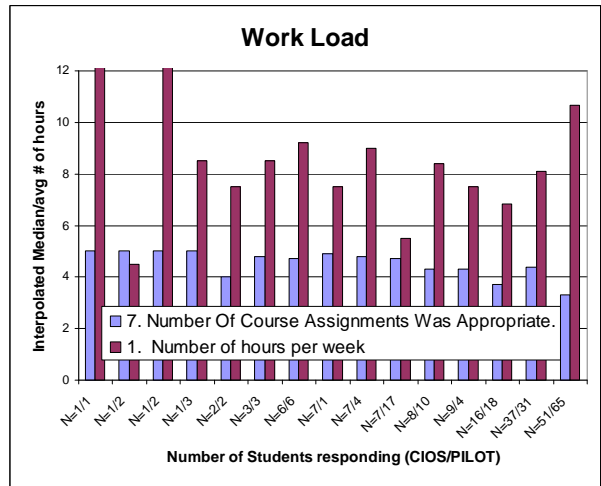
a.



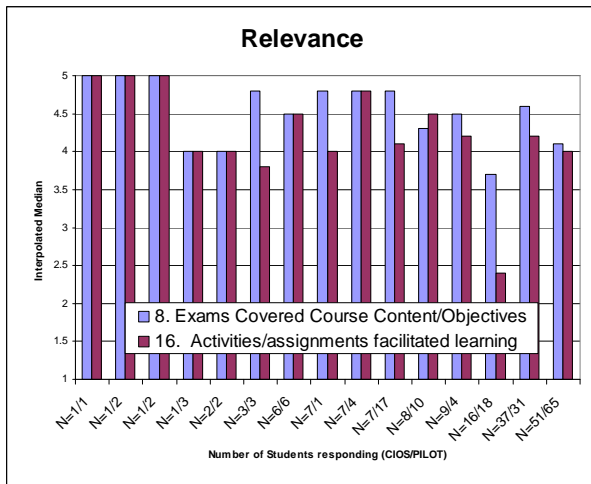
b.



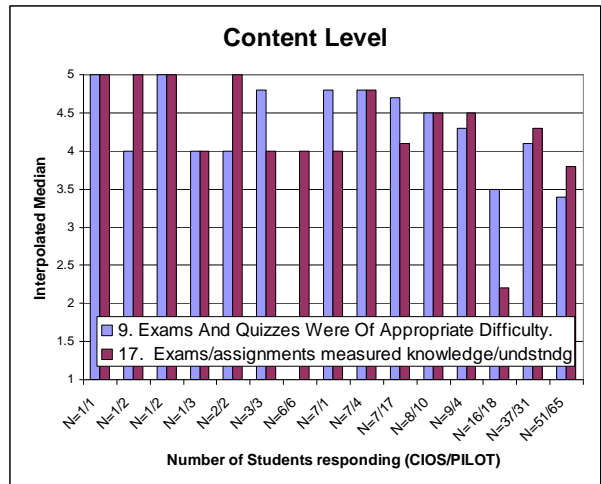
c.



d.



e.



f.

Figure 5 a-f

RELATED QUESTION COMPARISON																
Core Questions																
Item (CIOS/PILOT)	N=1/1	N=1/1	N=1/2	N=1/2	N=1/3	N=2/2	N=3/3	N=6/6	N=7/1	N=7/4	N=7/17	N=8/10	N=9/4	N=16/18	N=37/31	N=51/65
1. Course Seemed Well Planned And Organized	4	5	5	4	4	4.5	5	4.2	4.8	4.8	4.8	4.5	4.6	3.8	4.9	4
2. Good Job Covering Course Objectives/Content	4	5	5	5	4	4.5	5	4.1	4.6	4.6	4.7	4.7	3.9	3.7	4.7	4.1
3. Explained Complex Material Clearly	4	5	5	5	5	4	5	4.1	4.3	4.9	4.7	4.6	4	3.9	4.6	4
6. Clarity in discussing/presenting	5	4	4.5	5	4	5	4.8	4.5	4	4.8	4.4	4.5	4.5	3.6	4.7	4
4. Was Approachable And Willing To Assist	4	4	5	4	4	4	5	5	4.6	4.8	4.5	4.9	3.9	3.8	4.7	4.6
7. Respect and concern for students	5	5	5	5	4.3	5	4.3	4.9	5	5	4.5	5	5	3.5	4.8	4.4
5. Encouraged Students To Consult With Him/Her	3	4	4	4	4	5	5	5	4.1	4.4	4.3	4.7	3.4	3.6	4.4	4.6
10. Encouraged active role in learning	3	5	4.5	5	4.3	5	3.8	4.9	4	4.5	3.9	4.8	4.5	3.5	4.6	4.3
6. Class Attendance Important In Promoting Learning Of Material	4	5	5	5	5	5	5	4.2	4.3	4.3	4.5	4.9	4.6	3.4	4.9	4.4
7. Number Of Course Assignments Was Appropriate.	4	5	5	5	5	4	4.8	4.7	4.9	4.8	4.7	4.3	4.3	3.7	4.4	3.3
1. Number of hours per week	7.5	20	4.5	20	8.5	7.5	8.5	9.2143	7.5	9	5.5	8.4	7.5	6.8333	8.0806	10.664
8. Exams Covered Course Content/Objectives	-	5	5	5	4	4	4.8	4.5	4.8	4.8	4.8	4.3	4.5	3.7	4.6	4.1
16. Activities/assignments facilitated learning	4	5	5	5	4	4	3.8	4.5	4	4.8	4.1	4.5	4.2	2.4	4.2	4
9. Exams And Quizzes Were Of Appropriate Difficulty.	-	5	4	5	4	4	4.8	-	4.8	4.8	4.7	4.5	4.3	3.5	4.1	3.4
17. Exams/assignments measured knowledge/undstndg	5	5	5	5	4	5	4	4	4	4.8	4.1	4.5	4.5	2.2	4.3	3.8
10. The Instructor Was An Effective Teacher	4	5	5	5	4	5	5	4.5	4.6	4.8	4.6	4.3	4.4	3.3	4.8	4.1
20. The Instructor Was An Effective Teacher	5	5	5	5	4.8	5	5	4.5	5	4.8	4.4	4.9	4.8	2.7	4.8	4.3

Table 1