TO: CIOS Task Force Members

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DATE: January 14, 2009

RE: **FA08 Expanded PILOT Survey Summary and Comparison with CIOS**

Dear Members of the CIOS Task Force,

In accordance with the recommendation of the Task Force, the Executive Board, and the Associate Dean's Council, CETL conducted an expanded PILOT survey in the fall of 2008 to support ongoing investigations into means for improving the CIOS instrument. This follow up PILOT was significantly larger than the summer 2008 PILOT and targeted specific curricula so that many students would need to complete the PILOT survey for multiple courses. Attached is a summary of the results gathered from the expanded PILOT survey. These results will support discussion at spring 2009 Task Force meetings about how to move forward with the CIOS instrument.

Respectfully submitted,
Dr. Tris Utschig & Sunni Newton

Revision 1 Aug 2009
Revision 2 Feb 2010

Fall 2008 Expanded PILOT Survey Summary, Analysis, & Comparison with CIOS

Executive Summary

1211 responses representing 25 different courses with 83 individual course sections, 15 departments, and 49 instructors are included in the analysis.

The majority of students preferred the PILOT to the CIOS, with those indicating strong preferences preferring the PILOT by more than 3:1. The majority of students believed that the PILOT responses would be useful to other students, instructors, and administrators as evidenced by both numerical ratings and supplementary comments. In addition, students responded positively to the instructions, questions, and response scales on the PILOT, indicating that they felt these items were clear.

The manner in which items functioned on the two instruments was assessed by comparing item responses for 6 sets of similar items and 1 identical item. The identical item (overall effetiveness) functioned similarly in the two instruments. Four of the six sets of similar items functioned similarly (clarity, affect, encouragement, content level), indicating that a switch to the PILOT would seem to provide similar data to the CIOS in these areas. Two sets functioned dissimilarly (workload and relevance). In these cases, differences in the nature of the PILOT and CIOS items should be considered, with particular concern to what might be lost upon moving to the PILOT.

One potential concern regarding PILOT is its length; a substantial number of students provided comments indicating that the PILOT is longer than CIOS. If the task force decided that reducing the length of the PILOT is an important goal, we recommend eliminating the following items:

- Overall Ratings, items 3 & 4 (how highly would the students recommend the instructor or course to others). These items are somewhat redundant with the overall ratings, and aggregated responses shown little difference between overall ratings and recommendation ratings.
- Quality of Course, item 5 (helpfulness of resources: text, electronic, and other). Many courses may not fit these resource categories nicely. This question received a substantial number of "N/A" responses in electronic resources and the other category.

If further reduction in length is required, then items relating to student effort (hours per week, homework completed, class attendance) might be eliminated. These items may be less useful than others and are not particularly common among the survey instruments used at peer institutions. However, these items were not present on the CIOS and so may provide new information to instructors if used. They also shape the mindset of survey respondants by indirectly pointing out that success depends upon the student in addition to the instructor.

A number of students asked for more opportunities to provide comments in the PILOT, and we recommend an "overall comment" box be added. In addition, students provided suggestions for new items. Several of these need to be considered:

- Design/nature of course; largely lecture vs. discussion based, use of PowerPoint, etc. (Could be helpful to students debating whether to take the course)
- Which aspect of the course (textbook, lecture, recitation, lab, etc.) was most useful in learning course material? (A version of this might replace PILOT Item: Course, #5)
- Was the instructor organized? (This item is on the CIOS)
- How important is attending class? (This item is on the CIOS)

Implementation
1211 responses representing 25 different courses with 83 individual course sections, 15 departments, and 49 instructors are included in the analysis. Both the CIOS and PILOT surveys were anonymous and thus only an extremely limited comparative analysis was possible. Distributions of student responses aggregated across all PILOT courses for each of the PILOT items are shown in Appendix A. The items from each survey are presented in Appendix B.

Response Rate
Historically, fall response rates average roughly 50% across the institute. Response rates for courses utilizing the PILOT ranged from 3% to 100%, with an average of roughly 27% for CIOS and 45% for the PILOT.

Survey Preference
Students generally preferred the PILOT to the CIOS; roughly half the students expressed a clear preference and among these students the PILOT was preferred over CIOS by a ratio of larger than 3:1.

Students were asked to respond to the question: "Which survey would you prefer to use in future courses?" The rating scale did not provide a "neutral" option, but ranged from "Strongly Prefer CIOS to "Strongly prefer PILOT". Over 97% of students taking the PILOT survey responded to this item. Approximately half of the students (53%) had no clear preference among the two surveys. However, among these relatively neutral responses, 60% chose a response slightly favoring the PILOT while the remaining 40% chose a response slightly favoring CIOS. Of those with a clear preference, the PILOT was preferred by a ratio greater than 3:1. This preference is consistent with but not as strong as that indicated in the summer version of the PILOT (a 10:1 preference for the PILOT was found in the summer administration). Please see Figure 1 for a graph of the fall, 2008 preference data.

Figure 1 – Survey Preference
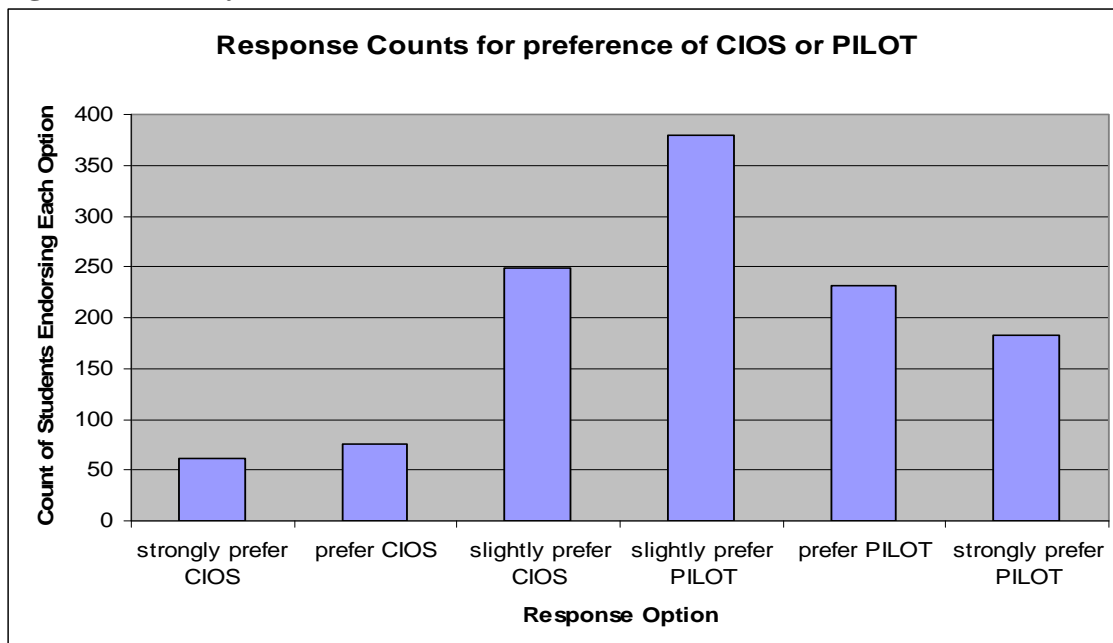
Survey Utility
The majority of students believed that the PILOT survey results would be useful to three groups of stakeholders: students (66% agreement rate), administrators (65% agreement rate), and instructors (80% agreement rate).

Students generally felt the results would be useful to each group with a stake in the survey. Ratings of survey usefulness in the expanded fall 2008 PILOT were slightly higher than those from the summer. The percent of students either agreeing or strongly agreeing that the PILOT survey results would be useful was 66%, 65%, and 80% for students, administrators, and instructors, respectively. Please see Figure 2 for a display of this data.

Figure 2 – Percieved Usefulness
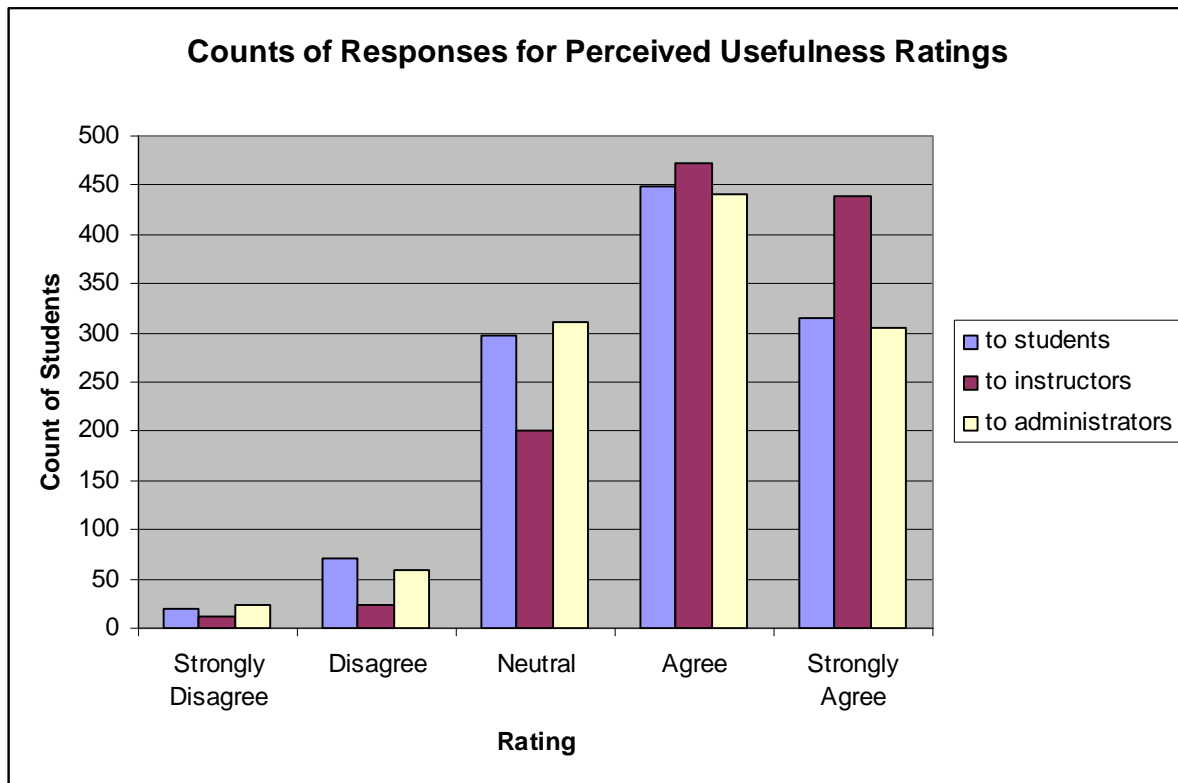
Comparison of Numerical Results for Similar Questions between CIOS/PILOT
One identical item and six sets of similar items were compared to investigate differences between these items on the two survey instruments. For the identical item (overall effectiveness) and four sets of the similar items (clarity, affect, encouragement, content level), the scores were reasonably comparable, indicating that these items seem to be functioning similarly on the PILOT and CIOS. Two sets of items (workload and relevance), did not reflect similar scores across the two surveys, indicating that they may be tapping into different student opinions. In these cases, differences in the nature of the PILOT and CIOS items should be considered, with particular concern to what might be lost if these items are eliminated from the CIOS.

The workload item results (PILOT: Student Effort, item 1; CIOS: item 7) indicating that they students are interpreting them differently. We feel that the CIOS item, which asks for the student's belief about the appropriateness of the number of assignments, is different from the PILOT item, which asks for an estimate of hours per week spent on the course. The task force will need to decide which piece(s) of information is/are desired, and select one or both of these items accordingly.

The relevance items (PILOT: Quality of Course, item 3; CIOS: item 8) also did not yield comparable responses across the two instruments. Here, the CIOS item asks about exams and quizzes while the PILOT item asks about activities and assignments. In this case, the subject matter of the CIOS item appears to be covered fairly well in a separate PILOT item (Quality of Course, item 4), so eliminating this CIOS item should not result in a loss of information.

One identical item (CIOS Item 10) and six sets of comparable items were included on the CIOS and PILOT surveys. A comparison of the numerical values for the interpolated medians on these items is displayed in Figure 3. For each item, course sections are categorized based on the magnitude of the difference between interpolated median ratings on the PILOT and CIOS (Difference = $|IM_{Pilot} - IM_{CIOS}|$). Course counts in the following categories are reported.
- No difference
- Difference of 0.1 to 0.2 points
- Difference of 0.3 to 0.5 points
- Difference of 0.6 to 1.0 points
- Difference of greater than 1.0 point

Note: All comparisons for sets of items include 50 course sections, with the exception of the Content Level comparison, which includes 49 course sections (1 was eliminated due to missing data for the PILOT item).

Figure 3 – PILOT and CIOS Similar Item Comparison

PILOT vs. CIOS Item Comparisons
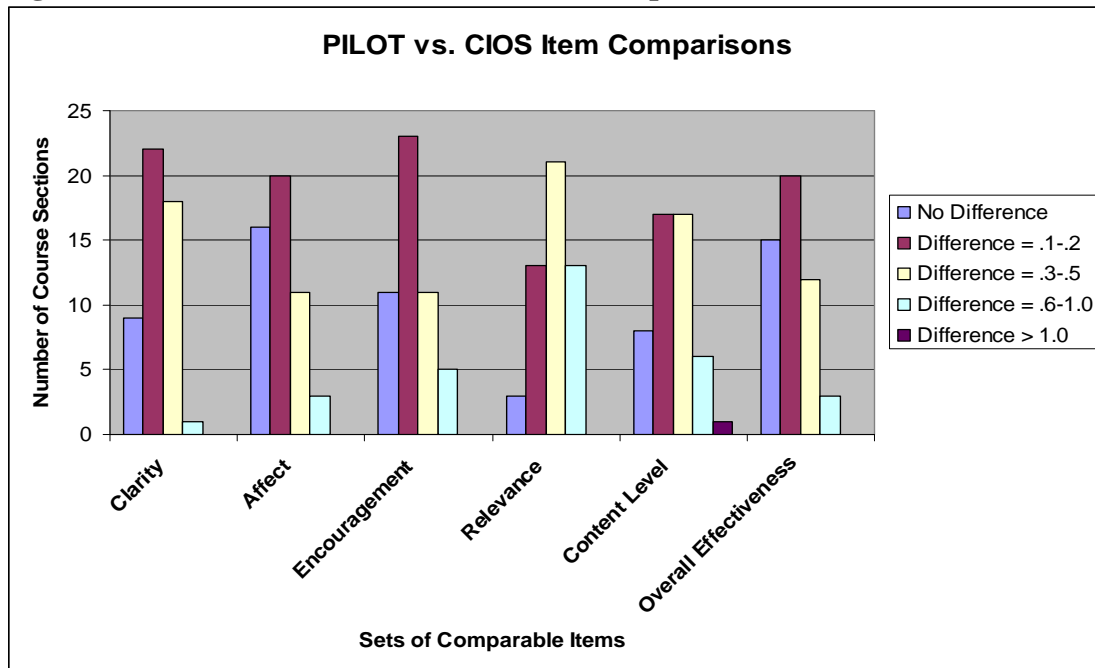
Identical Item Comparison: Overall Effectiveness (CIOS item 10)

"Considering everything the instructor was an effective teacher."

This question, commonly referred to as "Item 10" on the CIOS instrument, was duplicated verbatim on the PILOT (Overall Ratings, Item 1).

Data Analysis
- Ratings were observed to be somewhat consistent between the two surveys, though not equivalent.
- There was no clear trend toward higher responses on this item in one survey or the other; for the 35 classes in which responses differed between the two surveys, 16 (46%) favored higher responses on the CIOS and 19 (54%) favored higher responses on the PILOT.
- The largest difference between interpolated medians on this item for any section was 0.7.
- Of the 50 classes for which a direct comparison was possible, the categorization of course sections based on size differences in the interpolated medians for the two items is as follows:

Item Comparison for Overall Effectiveness		
Difference Size Category:	**Count:**	**Percent:**
No difference:	15	30%
Difference = 0.1 – 0.2:	20	40%
Difference = 0.3 – 0.5:	12	24%
Difference = 0.6 – 1.0:	3	6%
Difference > 1.0:	0	0%

- Possible explanations for these 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.

Similar Item Comparison: Clarity

CIOS item 3:	"The instructor explained complex material clearly."
PILOT item Quality of Teaching 1:	"Instructor's clarity in discussing or presenting course material"

Data Analysis:
- In general, scores on these items were fairly comparable, although not equivalent.
- Of the 50 classes for which a direct comparison was possible, the categorization of course sections based on size differences in the interpolated medians for the two items is as follows:

Item Comparison for Clarity		
Difference Size Category:	**Count:**	**Percent:**
No difference:	9	18%
Difference = 0.1 – 0.2:	22	44%
Difference = 0.3 – 0.5:	18	36%
Difference = 0.6 – 1.0:	1	2%
Difference > 1.0:	0	0%

- The largest difference between interpolated medians on these items for any section was 0.6.
- There was a fairly strong trend towards higher scores on the PILOT item as compared to the CIOS item; for the 41 classes in which responses differed between the two surveys, 28 (68%) showed a higher interpolated median response on the PILOT item and 13 (32%) showed a higher interpolated median response on the CIOS item.

Similar Item Comparison: Affect

CIOS item 4:	"The instructor was approachable and willing to assist individual students."
PILOT item Quality of Teaching 3:	"Instructor's respect and concern for students"

Data Analysis:
- In general, scores on these items were fairly comparable, although not equivalent.
- Of the 50 classes for which a direct comparison was possible, the categorization of course sections based on size differences in the interpolated medians for the two items is as follows:

Item Comparison for Affect		
Difference Size Category:	**Count:**	**Percent:**
No difference:	16	32%
Difference = 0.1 – 0.2:	20	40%
Difference = 0.3 – 0.5:	11	22%
Difference = 0.6 – 1.0:	3	6%
Difference > 1.0:	0	0%

- The largest difference between interpolated medians on these items for any section was 0.8.
- There was a possible trend towards higher scores on the PILOT item as compared to the CIOS item; for the 34 classes in which responses differed between the two surveys, 21 (62%) showed a higher interpolated median response on the PILOT item and 13 (38%) showed a higher interpolated median response on the CIOS item.

Similar Item Comparison: Encouragement

CIOS item 5:	"The instructor encouraged students to consult with him or her."
PILOT item Quality of Teaching 6:	"The instructor was readily available for consultation."

Data Analysis:
- In general, scores on these items were fairly comparable, although not equivalent.
- Of the 50 classes for which a direct comparison was possible, the categorization of course sections based on size differences in the interpolated medians for the two items is as follows:

Item Comparison for Encouragement		
Difference Size Category:	**Count:**	**Percent:**
No difference:	11	22%
Difference = 0.1 – 0.2:	23	46%
Difference = 0.3 – 0.5:	11	22%
Difference = 0.6 – 1.0:	5	10%
Difference > 1.0:	0	0%

- The largest difference between interpolated medians on these items for any section was 0.7.
- There was no clear trend toward higher responses on this item in one survey or the other; for the 39 classes in which responses differed between the two surveys, 21 (54%) showed a higher interpolated median response on the PILOT item and 18 (46%) showed a higher interpolated median response on the CIOS item.
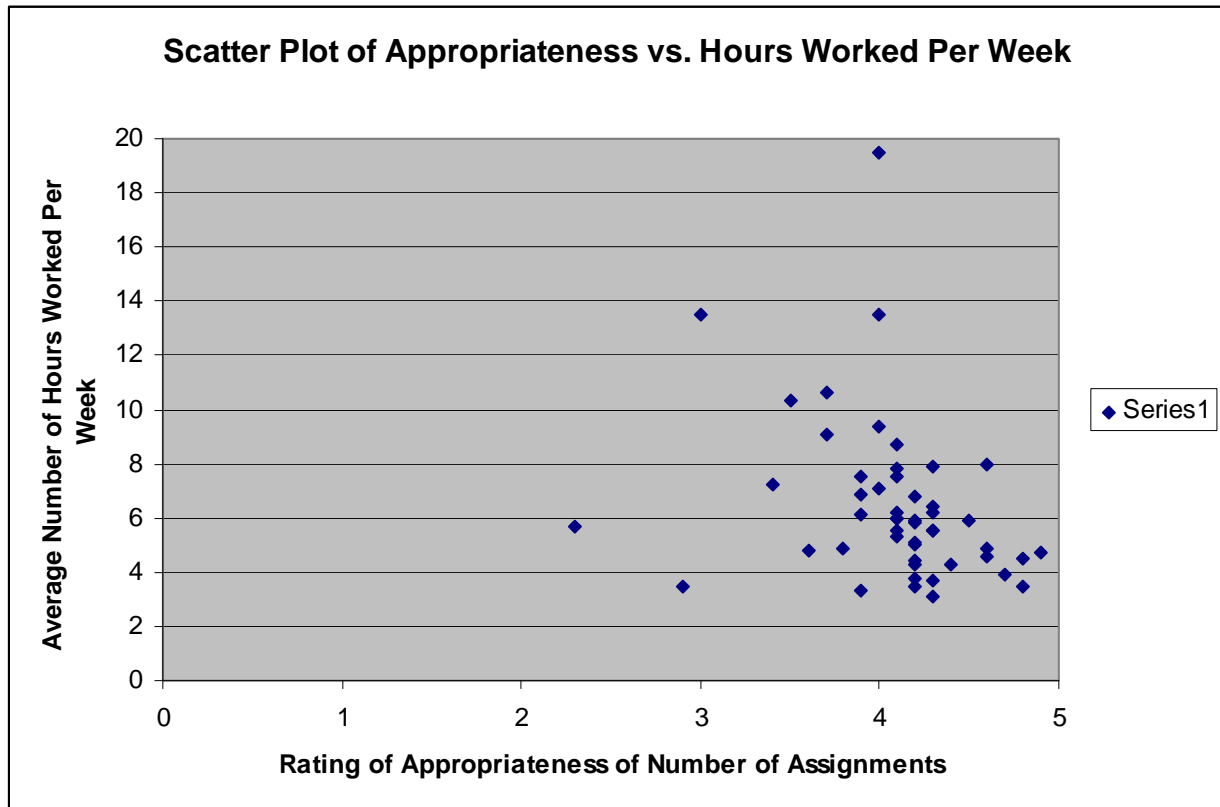
Similar Item Comparison: Work Load

CIOS item 7:	"The number of course assignments (or projects or papers) was appropriate."
PILOT Item Student Effort 1:	"On average, how many hours did you spend on this course per week (total per week in class, on homework, etc.)?"

Data Analysis:
- Because one of these items generated a number in hours rather than a rating scale response, interpolated medians could not be compared. Instead, a correlation between average hours spent on the course per week and ratings of appropriateness of number of course assignments was calculated. This calculation yielded a small, negative correlation of $r = -.29$, suggesting that the relationship between number of hours worked and ratings of appropriateness was in the negative direction.
- Please see Figure 4 for a plot of these data.

Figure 4 – Work Load Item Comparison

Scatter Plot of Appropriateness vs. Hours Worked Per Week

(x-axis: Rating of Appropriateness of Number of Assignments; y-axis: Average Number of Hours Worked Per Week; legend: Series1)

- Correlations were calculated in an effort to see how estimates of workloads for the two surveys related to ratings of overall instructor effectiveness:
    o For CIOS, the correlation between responses to the workload item ("The number of course assignments (or projects or papers) was appropriate") and Item 10 ("Considering everything, the instructor was an effective teacher") was moderately strong, $r = .60$.
    o For PILOT, the correlation between responses to the workload item ("On average, how many hours did you spend on this course per week (total per week in class, on homework, etc.)?") and Item 10 ("Considering everything, the instructor was an effective teacher") was negligible, $r = -.06$.
    o This analysis indicates that the student opinions about overall effectiveness and appropriateness of workload are related, whereas opinions about overall effectiveness and actual estimated workload (count of hours) are unrelated.
- Workload as measured in the PILOT (# hours worked per week) was averaged separately for each of the colleges (please see Figure 5 for a visual representation of these data):
    o The highest workload was reported by students in the College of Computing, with an average response of 8.7 hours per week (based on data from 23 students in two sections).
    o The next highest workload was reported by students in the College of Sciences and in the College of Engineering, with an average response of 6.8 hours per week for both groups (based on data from 425 students in 17 sections for College of Sciences and based on data from 386 students in 22 sections for College of Engineering).

o Students in the Ivan Allen College of Liberal Arts reported an average workload of 5.0 hours per week (based on data from 242 students in 9 sections)
o Students in the College of Management reported the lowest workload, with an average of 3.7 hours per week (based on data from 135 students in 1 section). This figure should be interpreted cautiously, as it is based on only one section.

Figure 5 – Work Load By College
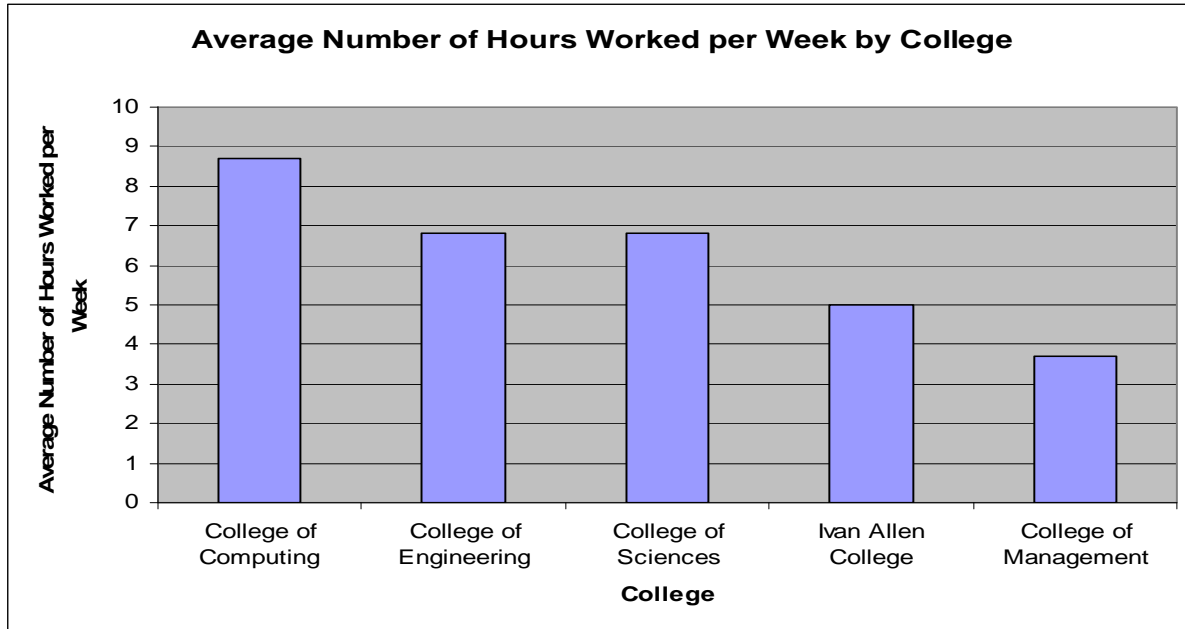
- In general, these figures (with the exception of the one section from the College of Management) support the common adage of spending 2-3 hours out of class for each hour in class in order to do well in classes at the university level. Assuming that most of these courses are 3.0 hour courses, and ignoring any lab or recitation requirements, the range of average workloads reported (5.0 to 8.7) corresponds roughly to the range you would get from multiplying the number of hours in class by 2-3 hours per week outside of class (2-3 times 3.0 equals 6 to 9 hours per week).

Similar Item Comparison: Relevance

CIOS item 8:	"The examinations and quizzes (or other evaluations) covered the course content and objectives."
PILOT item Quality of Course 3:	"Degree to which activities and assignments facilitated learning."

Data Analysis:
- Results on these two items were slightly inconsistent for a sizeable portion of the course sections.
- Of the 50 classes for which a direct comparison was possible, the categorization of course sections based on size differences in the interpolated medians for the two items is as follows:

Item Comparison for Relevance		
Difference Size Category:	**Count:**	**Percent:**
No difference:	3	6%
Difference = 0.1 – 0.2:	13	26%
Difference = 0.3 – 0.5:	21	42%
Difference = 0.6 – 1.0:	13	26%
Difference > 1.0:	0	0%

- The largest difference between interpolated medians on these items for any section was 1.0.
- This set of items has lower consistency than the previous sets of items. A likely explanation for this difference is that this set of items is less equivalent than the previous sets. One of these items pertains to exams and quizzes while the other deals with assignments and activities. It seems reasonable that some students may feel quite differently about the assignments and the evaluations they were given in a course. Furthermore, one item asks about covering course objectives and contents while the other asks about facilitating learning. Although a strong relationship between these two ideas should be expected, it is possible that students conceptualized these two evaluative components differently.
- There was a very strong trend towards higher scores on the CIOS item as compared to the PILOT item; for the 47 classes in which responses differed between the two surveys, 7 (15%) showed a higher interpolated median response on the PILOT item and 40 (85%) showed a higher interpolated median response on the CIOS item. This finding also lends support to the idea that students interpreted these two items differently.

Similar Item Comparison: Content Level

CIOS item 9:	"The examinations and quizzes (or other evaluations) were of appropriate difficulty."
PILOT item Quality of Course 4:	"Degree to which exams, quizzes, homework (or other evaluated assignments) measured your knowledge and understanding"

Data Analysis:
- In general, scores on these items were fairly comparable, although not equivalent.
- Of the 49 classes for which a direct comparison was possible, the categorization of course sections based on size differences in the interpolated medians for the two items is as follows:

Item Comparison for Content Level		
Difference Size Category:	**Count:**	**Percent:**
No difference:	8	16%
Difference = 0.1 – 0.2:	17	35%
Difference = 0.3 – 0.5:	17	35%
Difference = 0.6 – 1.0:	6	12%
Difference > 1.0:	1	2%

- The largest difference between interpolated medians on these two items for any section was 1.3. This is a larger difference than was seen with any other set of items and seems to represent an outlier. Aside from this one large difference, the 2nd largest was 0.8, which is more in line with what was seen with the other sets of items.
- There was no clear trend toward higher responses on this item in one survey or the other; for the 41 classes in which responses differed between the two surveys, 22 (54%) showed a higher interpolated median response on the PILOT item and 19 (46%) showed a higher interpolated median response on the CIOS item.

PILOT design features

Instructions:
Student responses indicate that they thought the PILOT survey instructions were complete and readily understood.

Based on discussions with the Task Force, this section of the survey was reworded to emphasize how the survey would be used. 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:
- 857 students responded to this item
- 794 stated YES (of these, 55 students included a positive comment about the instructions)
- 17 students stated they did not read the instructions
- 21 students indicated that they thought the instructions were too long
- 5 students stated a belief that instructions should not be necessary for this type of survey
- 7 students indicated a neutral response, such as "somewhat"
- 6 students stated NO
- 7 students provided comments which were not relevant to the question

Questions and Scales:
Student responses indicate that they thought the PILOT questions and response scales were clear.

We asked: "Were the questions and their associated response scales clear in this PILOT survey?" The results are as follows:
- 864 students responded to this item
- 832 stated YES (of these, 26 students included a positive comment about the questions and/or the response scales and 15 gave suggestions for improvement)
- 3 students stated NO (of these, two students gave a negative comment)
- 15 students indicated a neutral response (of these, three students gave suggestions for improvement)
- 7 students did not indicate Y/N, but gave suggestions for improvement
- 1 student did not indicate Y/N, but gave a positive comment
- 3 students did not indicate Y/N, but gave negative comments
- 3 students provided comments which were not relevant to the question
- Nature of suggestions for improvements to questions and scales:
  - 16 comments were related to the scales:

- 6 students wanted a larger range of options on the scale, suggesting a 7 or a 10 point response scale; 1 student thought the 5 point scale had too many options
- 1 student suggested reversing the numbers so that 1 = strongly agree and 5 = strongly disagree
- 1 student suggested reversing the order in which the scale appears
- 2 students wanted the N/A response option relocated on the scale
- 1 student had a problem with the scale changing between items
- 1 student thought some items should have a Y/N response option instead of the scales
- 1 student thought the response options made it too easy for students to avoid giving a strong opinion
  - o 8 comments were related to the questions:
    - 4 students wanted either more questions or a more thorough explanation of the existing questions.
    - 1 student suggested having separate ratings for the instructor and the TA.
    - 2 students wanted more comment boxes throughout the survey.
    - 1 student wanted there to be no limit on the length of the comment boxes.

Comments Comparing PILOT to CIOS:
A large number of student comments comparing the PILOT and the CIOS indicated that they felt the PILOT items were useful. Some students also commented on the ease of use of the PILOT. A substantial number of students commented about the PILOT being longer than the CIOS, but quite a few commented the opposite: that the CIOS was longer than the PILOT. Finally, a substantial number of students remarked that the PILOT and CIOS were essentially the same. We asked for "Comments comparing this PILOT survey to the traditional CIOS survey". 400 students provided relevant comments; many of these students provided multiple comments. Please see Table 1 for a summary of the comments and corresponding counts of students providing each comment type. The results are as follows:
- Survey items in general:
  - o 144 students thought the PILOT items were useful (items more detailed, results of items more likely to benefit future students, items allow for differentiation between aspects of course and instructor)
  - o 5 students thought the PILOT items were not useful (items are vague)
  - o 10 students thought the CIOS items were useful (items target specific aspects of course)
  - o 3 students thought the CIOS items were not useful (items too broad)
  - o 5 students liked a specific PILOT item
  - o 3 students disliked a specific PILOT item
  - o 5 students thought the CIOS items were redundant
- Comment sections in surveys:
  - o 18 students thought PILOT allowed for more comments
  - o 19 students thought CIOS allowed for more comments
  - o 8 students thought PILOT should be changed to allow for more comments
  - o 7 students liked some aspect of the comment boxes in PILOT (no character limit, felt more directed in what type of comment was wanted)
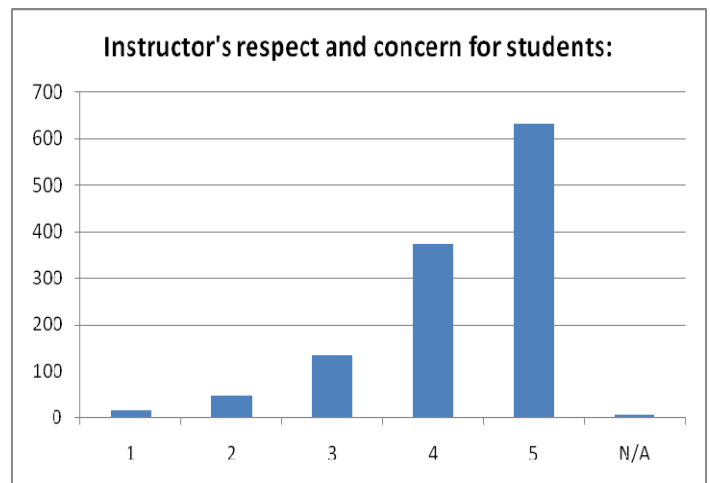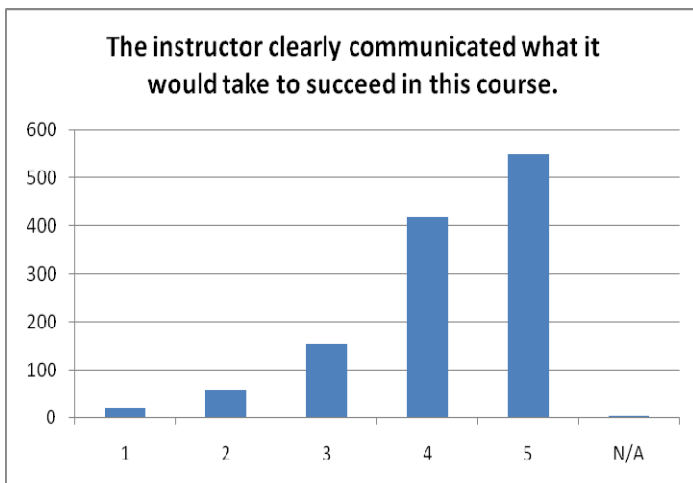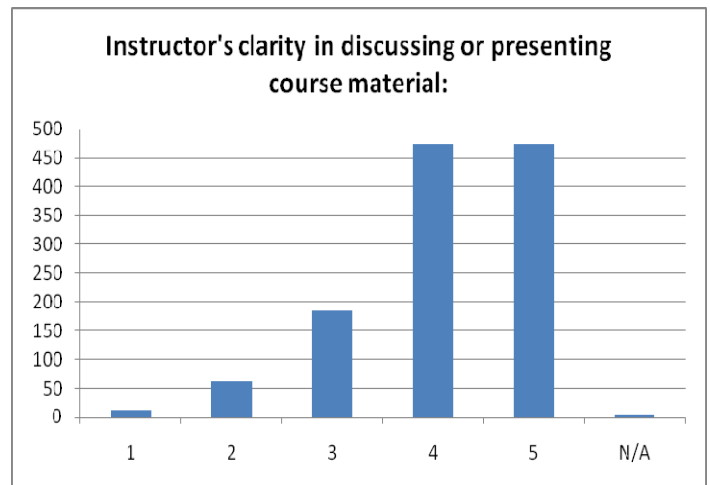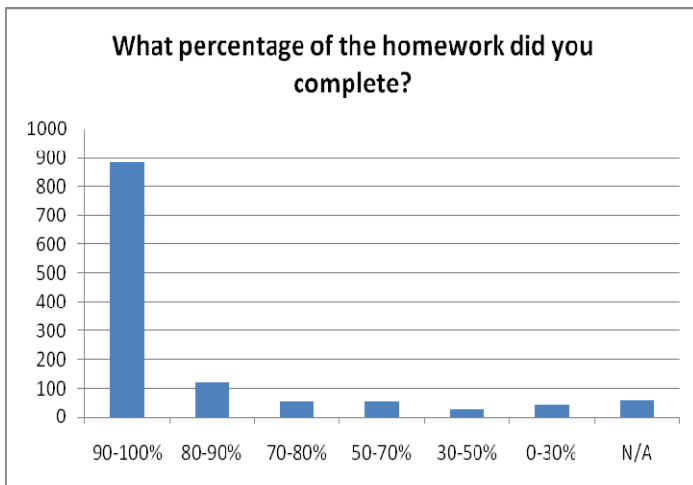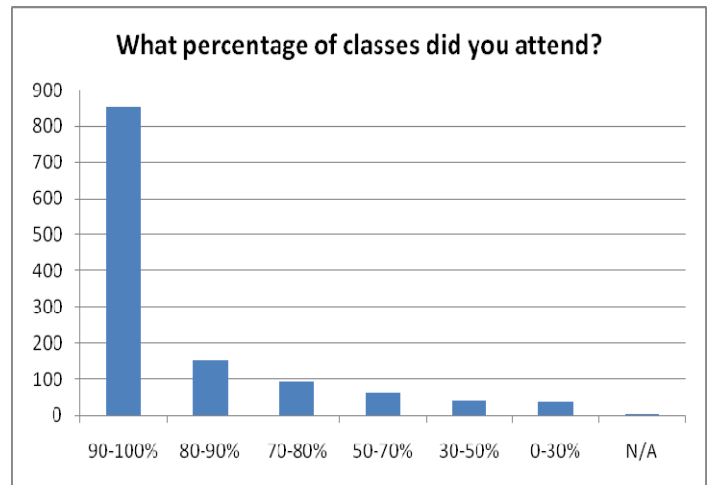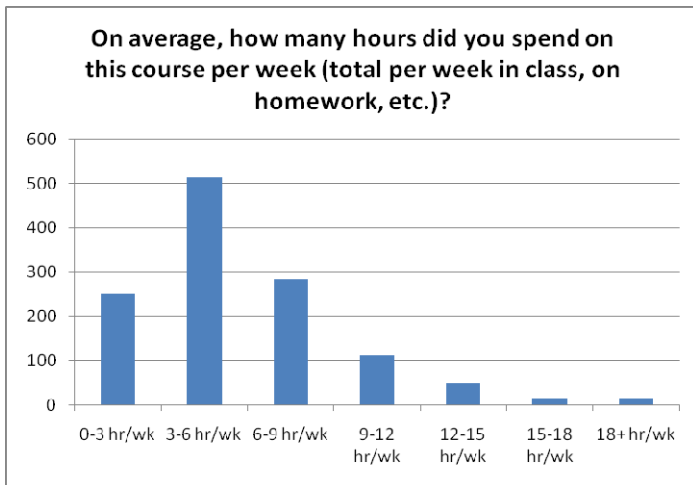
- o 2 students disliked some aspect of the comment boxes in PILOT
- Layouts of surveys (Please note that these layout comments refer to the version of PILOT that was in Survey Monkey, and if/when the PILOT replaces CIOS it will no longer be presented in Survey Monkey):
    - o 21 students liked the layout/formatting of PILOT (aesthetically pleasing, section divisions work well, more organized)
    - o 17 students liked the layout/formatting of CIOS; of these, 13 cited a preference for the one-page layout of CIOS over the multi-page layout of PILOT
    - o 7 students disliked the layout/formatting of PILOT (bad color combination, page length too long when opened with some browsers)
    - o 1 student disliked the layout/formatting of CIOS
- Ease of use of surveys:
    - o 22 students cited the ease of use of PILOT (more straightforward, easier to follow, clear)
    - o 4 students cited the ease of use of CIOS (more familiar, easier to navigate through)
    - o 1 student thought PILOT was more complicated than CIOS
- Length of surveys:
    - o 23 students thought PILOT was shorter than CIOS
    - o 59 students thought PILOT was longer than CIOS
- Survey equivalence: 57 student expressed the opinion that PILOT and CIOS were essentially the same
- Suggested improvements for survey items:
    - o 55 students provided suggestions for improving one or both surveys
    - o Adding specific items (23 comments):
        - ▪ Ability of professor to be understood; specifically, is professor's English readily understood if he/she is not a native English speaker? (suggested by three students)
        - ▪ Difficulty of tests (suggested by three students)
        - ▪ Expected grade in the class, so students can look at the link between effort level and expected grade (suggested by two students)
        - ▪ Was the instructor organized?
        - ▪ Was the professor approachable?
        - ▪ Was the professor encouraging?
        - ▪ Usefulness of recitation, textbook, lecture; specifically, which was most useful in learning course material?
        - ▪ Importance of class attendance
        - ▪ Items specific to labs; for example, was teamwork encouraged in labs?
        - ▪ Design of course
        - ▪ Can student make a "B" in the class if he/she has one bad test?
        - ▪ Item specific to students re-taking a course: is the current instructor more helpful/more clear than previous instructor?
        - ▪ What was the class format? (mostly PowerPoint, how much discussion, etc.)
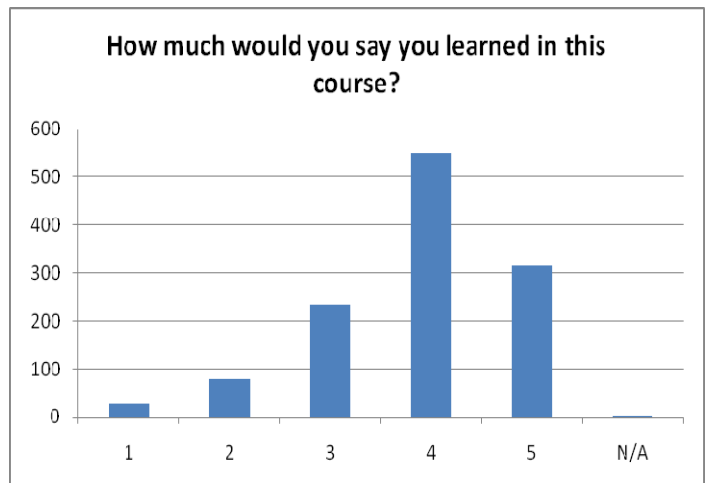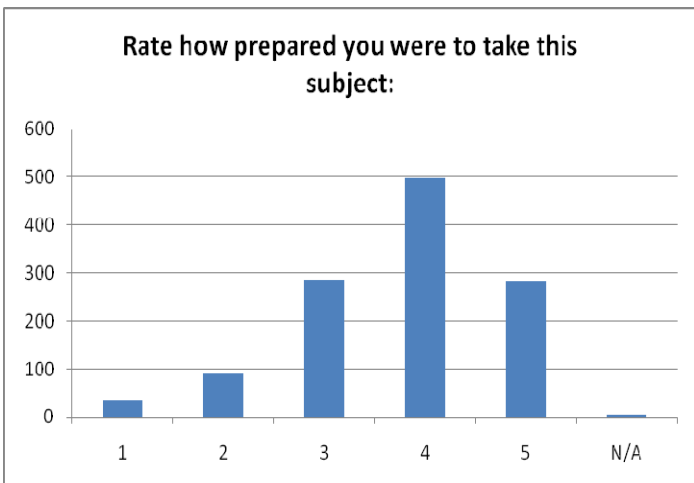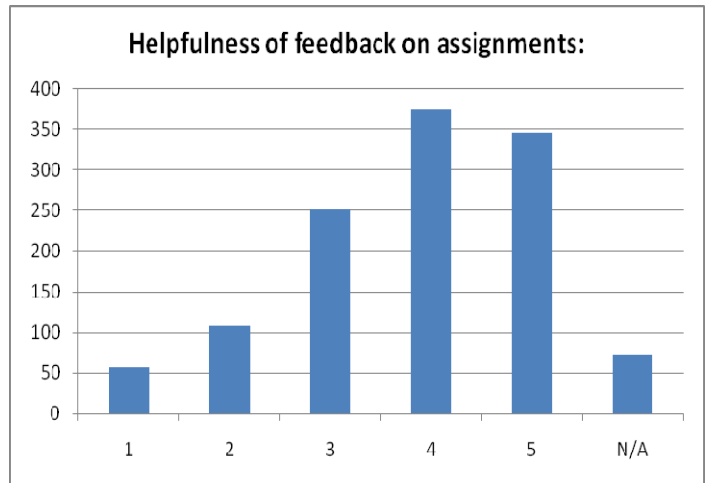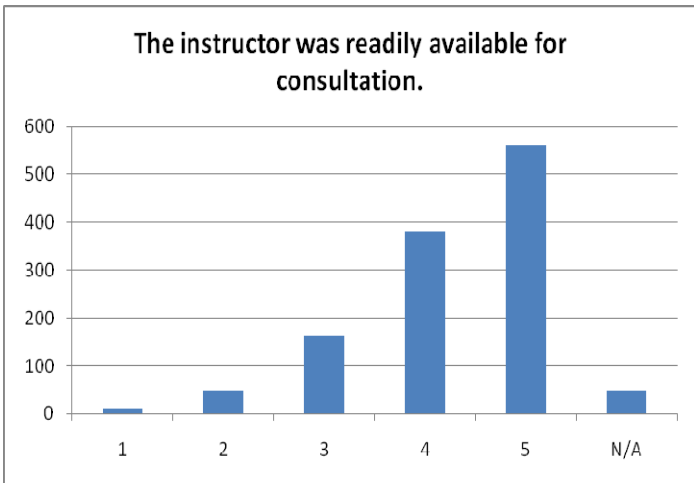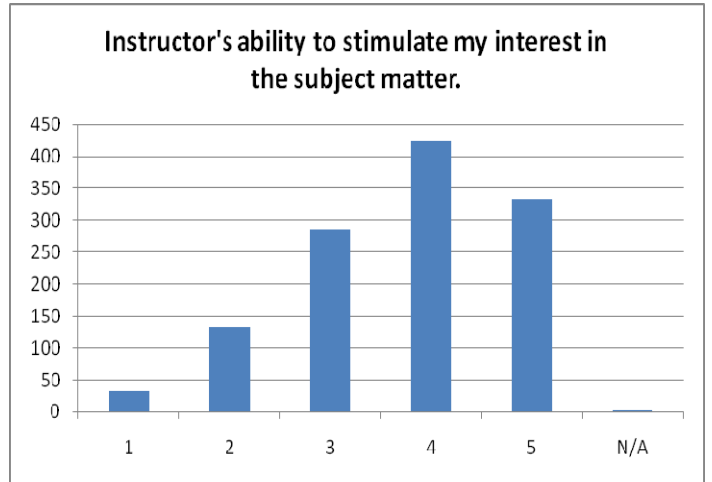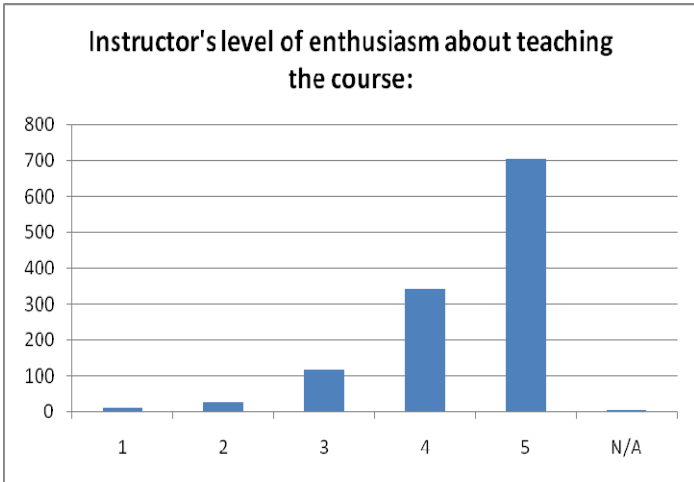   - o General suggestions (six suggestions) about the survey items:

- Add items which will generate more quantitative data, such as # hours spent in class or % of classes attended
- Keep CIOS but add item on how the course could be administered better
- Keep CIOS but add item on professor's strengths and weaknesses
- More questions asking about specific likes and dislikes
- Wants more detailed items in general in the PILOT
- Isolate the item that is being evaluated in each question; for example, on the question "the number of assignments and tests was sufficient", how would one answer this if they were happy with the number of tests but thought there were too many assignments?
  - Dislike of specific items (three comments):
    - Dislikes item on helpfulness of other resources
    - Dislikes leading nature of questions like greatest strength and most needed improvement
    - Dislikes item on amount of homework one completes because classes have varying amounts of homework
  - Giving comments in the survey (seven comments; items suggested by more than one student are noted):
    - Students would like more frequent opportunities to give feedback in the PILOT survey (suggested by six students)
    - Students would like to have no word limit on comment boxes in CIOS.
- Improving the survey process - suggestions were made by 10 students; some of these include (items suggested by more than one student are noted):
  - Students indicated that they would like have access to the comments left by other students (suggested by three students)
  - Make the PILOT shorter by reducing the number of items or combining certain items
  - Allow responses to be saved automatically when they navigate between pages
  - Have teachers provide incentives for students to complete the survey in order to get a higher response rate
- Miscellaneous:
  - 18 students preferred PILOT but did not give a specific reason
  - 3 students thought PILOT was insufficient to capture one's experience with the course
  - 1 student thought CIOS was insufficient to capture one's experience with the course
  - 3 students thought the changes that had been made to CIOS were unnecessary
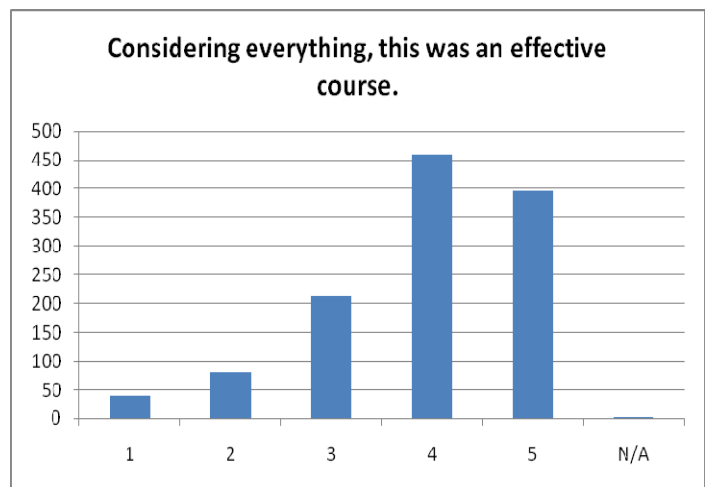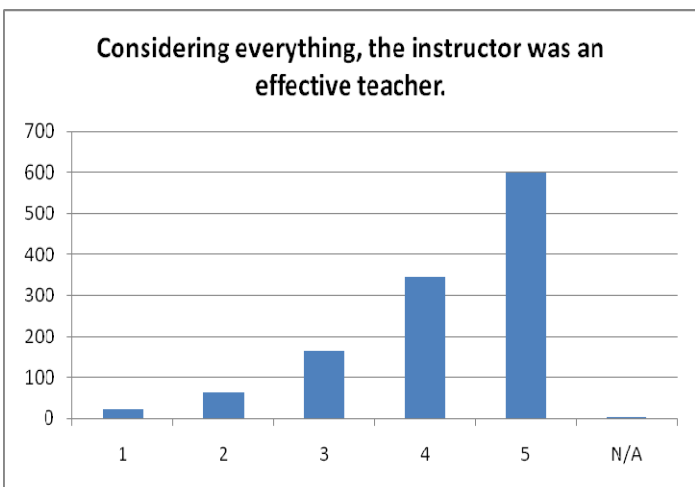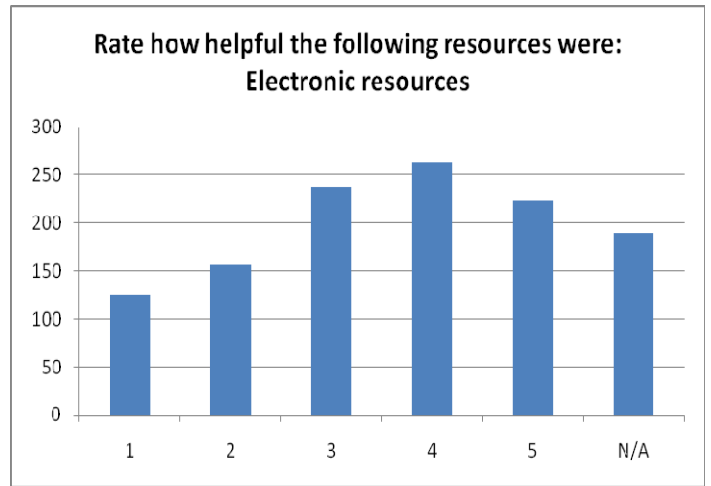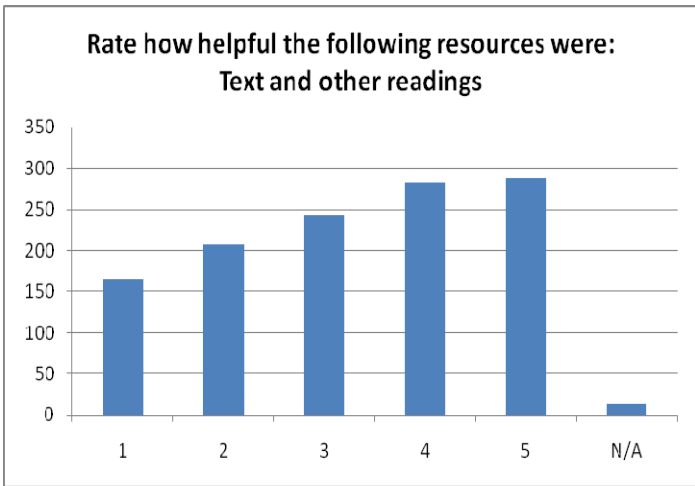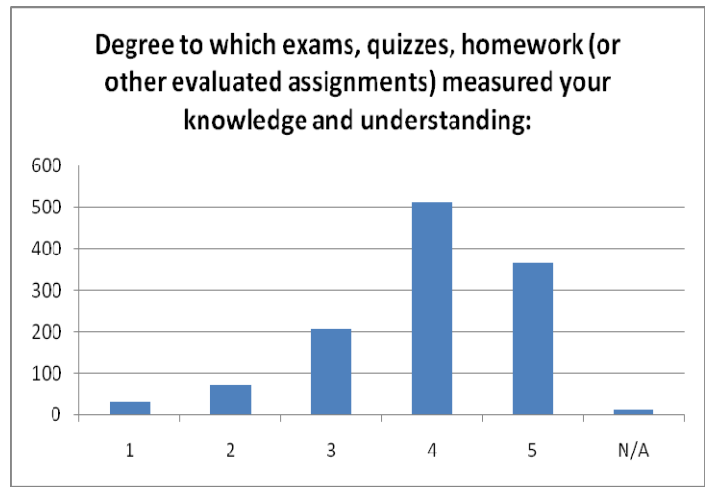
Table 1 - Comments Counts Comparing PILOT and CIOS

Comment:	Count:
questions in PILOT are more useful than those in CIOS	144
PILOT is too long compared to CIOS	48
greater ease of use in PILOT	22
PILOT layout is good	21
PILOT is shorter compared to CIOS	20
CIOS allows for more comments	19
PILOT allows for more comments	18
PILOT is better in general (no specific reason cited)	18
One-page layout of CIOS is preferable	13
CIOS is shorter vs. PILOT	11
CIOS questions are useful	10
PILOT needs to allow for more comments	8
PILOT layout is poor	7
likes some aspect of comment boxes in PILOT	7
likes a specific PILOT item	5
questions in PILOT are not useful	5
CIOS questions are redundant	5
CIOS has greater ease of use	4
CIOS layout is good	4
changes to CIOS are unnecessary	3
dislikes a specific PILOT item	3
PILOT survey is insufficient to capture class experience	3
CIOS questions are not useful	3
CIOS is longer vs. PILOT	3
difficult to distinguish between instructor and course	2
dislikes response scales in PILOT	2
dislikes some aspect of comment boxes in PILOT	2
likes response options in PILOT	2
CIOS pre-selects courses for students	2
dislikes CIOS response scales	2
likes use of Survey Monkey	1
dislikes use of Survey Monkey	1
PILOT is more complicated	1
likes that PILOT saves answers before end	1
CIOS is insufficient to capture class experience	1
CIOS layout is poor	1
PILOT is too long in general	1

Appendix A – Aggregated Results for PILOT Items.

On average, how many hours did you spend on this course per week (total per week in class, on homework, etc.)?

What percentage of classes did you attend?

What percentage of the homework did you complete?

Instructor's clarity in discussing or presenting course material:

The instructor clearly communicated what it would take to succeed in this course.

Instructor's respect and concern for students:

Instructor's level of enthusiasm about teaching the course:

800
700
600
500
400
300
200
100
0

1   2   3   4   5   N/A

Instructor's ability to stimulate my interest in the subject matter.

450
400
350
300
250
200
150
100
50
0

1   2   3   4   5   N/A

The instructor was readily available for consultation.

600
500
400
300
200
100
0

1   2   3   4   5   N/A

Helpfulness of feedback on assignments:

400
350
300
250
200
150
100
50
0

1   2   3   4   5   N/A

Rate how prepared you were to take this subject:

600
500
400
300
200
100
0

1   2   3   4   5   N/A

How much would you say you learned in this course?

600
500
400
300
200
100
0

1   2   3   4   5   N/A

18

Degree to which activities and assignments facilitated learning:

Degree to which exams, quizzes, homework (or other evaluated assignments) measured your knowledge and understanding:

Rate how helpful the following resources were: Text and other readings

Rate how helpful the following resources were: Electronic resources

Considering everything, the instructor was an effective teacher.

Considering everything, this was an effective course.

19

How highly would you recommend this instructor?

How highly would you recommend this course?

Appendix B: CIOS and PILOT Survey Items

CIOS Core Questions	Scale
1. The course seemed well planned and organized. **Comments**:	strongly disagree … strongly agree
2. The instructor did a good job of covering the course objectives and content. **Comments**:	strongly disagree … strongly agree
3. The instructor explained complex material clearly. **Comments**:	strongly disagree … strongly agree
4. The instructor was approachable and willing to assist individual students. **Comments**:	strongly disagree … strongly agree
5. The instructor encouraged students to consult with him or her. **Comments**:	strongly disagree … strongly agree
6. Class attendance was important in promoting learning of the material in this course. **Comments**:	strongly disagree … strongly agree
7. The number of course assignments (or projects or papers) was appropriate. [Include comments below if you disagree - were there too many or too few for example.] **Comments**:	strongly disagree … strongly agree
8. The examinations and quizzes (or other evaluations) covered the course content and objectives. **Comments**:	strongly disagree … strongly agree
9. The examinations and quizzes (or other evaluations) were of appropriate difficulty. [Include comments below if you disagree - were they too easy or too hard, for example.] **Comments**:	strongly disagree … strongly agree
10. Considering everything, the instructor was an effective teacher. **Comments**:	strongly disagree … strongly agree
Comments about the class, instructor, or other issues.	

PILOT Questions	Scale
Student Effort 1. On average, how many hours did you spend on this course per week (total per week in class, on homework, etc.)? 2. What percentage of classes did you attend? 3. What percentage of the homework did you complete? 4. **Comments** about your responses in this section: (eg - were expected and expended effort appropriate for this course?) (there is space for other overall comments later)	0-3, 3-6, 6-9… 0-30, 30-50, 50-70, 70-80, 80-90, 90-100 0-30, 30-50, 50-70, 70-80, 80-90, 90-100
Quality of Teaching 1. Instructor's clarity in discussing or presenting course material: 2. The instructor clearly communicated what it would take to succeed in this course. 3. Instructor's respect and concern for students: 4. Instructor's level of enthusiasm about teaching the course: 5. Instructor's ability to stimulate my interest in the subject matter. 6. The instructor was readily available for consultation. 7. Helpfulness of feedback on assignments: 8. **Comments** about your responses in this section: (there is space for other overall comments later)	very poor … exceptional strongly disagree …strongly agree very poor … exceptional detached … extremely enthusiastic ruined my interest … made me eager to learn more strongly disagree …strongly agree not helpful … extremely helpful
Quality of Course 1. Rate how prepared you were to take this subject: 2. How much would you say you learned in this course? 3. Degree to which activities and assignments facilitated learning: 4. Degree to which exams, quizzes, homework (or other evaluated assignments) measured your knowledge and understanding: 5. Rate how helpful the following resources were: text & other readings, electronic resources, other (please specify in comments) 6. **Comments** about your responses in this section: (there is space for other overall comments later)	completely unprepared … extremely well prepared almost nothing … an exceptional amount very poor … exceptional very poor … exceptional useless … essential

Overall Ratings
 	
1. Considering everything, the _instructor_ was an effective teacher.
 	
2. Considering everything, this was an effective _course_.
 	
3. How highly would you recommend this _instructor_?
 	
4. How highly would you recommend this _course_?
 	
5. **Comments**: Regarding this INSTRUCTOR'S TEACHING –
 	
    what was the greatest strength?
 	
    what is the most needed improvement?
 	
6. **Comments**: Regarding this COURSE –
 	
    what was its best aspect?
 	
    how could it be improved?
	strongly disagree …strongly agree
	
	strongly disagree …strongly agree
	
	not at all … very highly
	
	not at all … very highly