ATAC IDEA Report

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Goal

- Analyze and compare Spring 2009 and Fall 2009 data (in class, paper administration of IDEA) with the Spring 2010 data (out of class, online administration of IDEA)
- Determine if significant changes occurred with regards to response rate and rating levels on progress on relevant objectives (PRO) and excellence of instructor (TCH)

Data Analysis

The report is based on the Sub-Committee's data analysis. The numbers present the averages of all instructors involved in the pilot program in the Spring 2010 and their data of the Spring and Fall semesters of 2009.

The histograms were developed by Anton. They were generated by averaging the changes in response rate, progress on relevant objectives, and teacher excellence. The changes were studied based upon professor. Six histograms were developed as follows:

A: FA09 (paper) to SP10 (online)
1. change in response rate (Resp)
2. change in progress on relevant objectives (PRO)
3. change in excellence of instructor (TCH)

B: SP09 (paper) to SP10 (online)
1. change in response rate (Resp)
2. change in progress on relevant objectives (PRO)
3. change in excellence of instructor (TCH)

The change was measured relative to the paper IDEA. For example

$CRx = (ROx - RPx) / RPx$

where CRx = Change in Response rate for professor x
RPx = response rate on the paper IDEA for professor x
ROx = response rate on the online IDEA for professor x

The distribution of the CRx is displayed on the histogram, where the x axis are the degrees of change (e.g., -0.10 is the bin corresponding to a decrease by 10 percent from paper to online), and the y axis is the number of professors with that degree of change.

This change was computed for each of the six items above (A1-3, B1-3), yielding the six

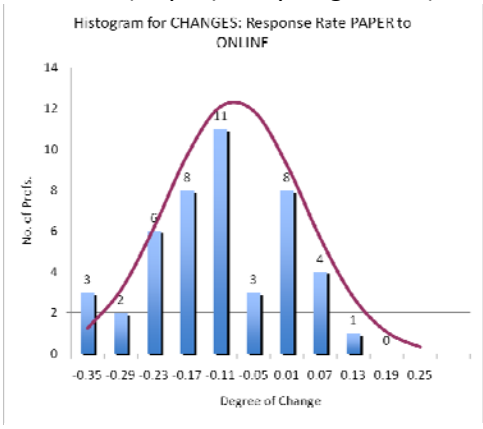
histograms.

Findings

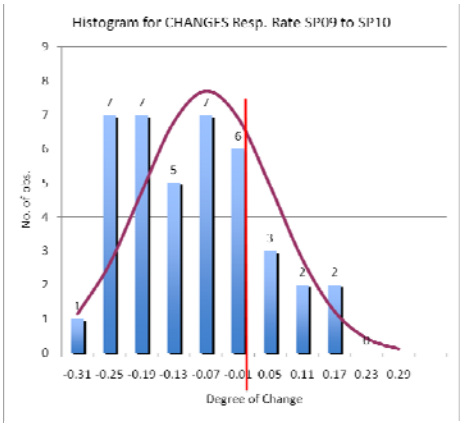
Response rates (paper v. online)

Spring 2009 (paper)	Fall 2009 (paper)	Spring 2010 (online)
79.44%	81.59%	71.99%

Fall 2009 (Paper) to Spring 2010 (online)



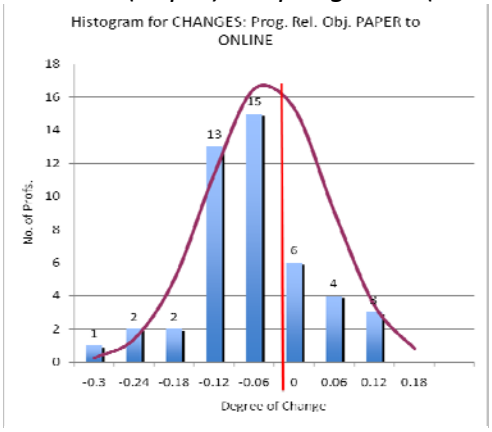
Spring 2009 (paper) to Spring 2010 (online)



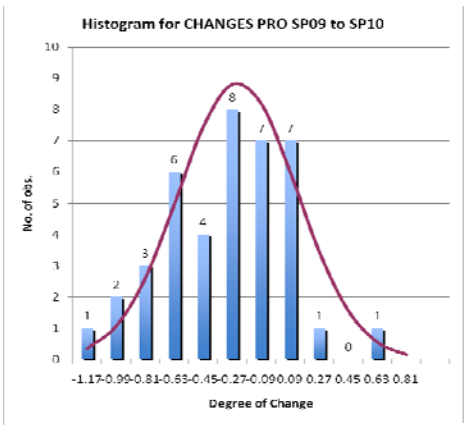
Progress on relevant objectives (paper v. online)

Spring 2009 (paper)	Fall 2009 (paper)	Spring 2010 (online)
4.22	4.19	4.10

Fall 2009 (Paper) to Spring 2010 (online)



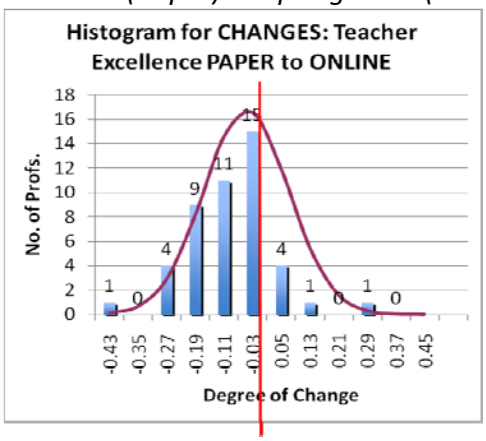
Spring 2009 (paper) to Spring 2010 (online)



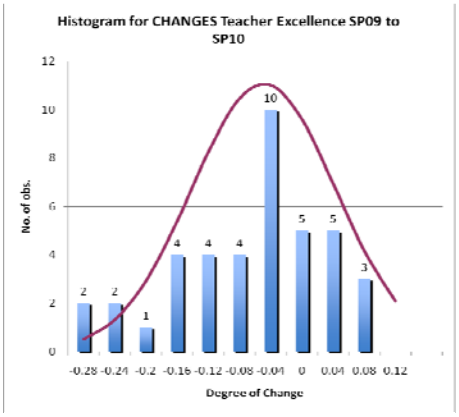
Excellence of instructor (paper v. online)

Spring 2009 (paper)	Fall 2009 (paper)	Spring 2010 (online)
4.28	4.36	4.14

Fall 2009 (Paper) to Spring 2010 (online)



Spring 2009 (paper) to Spring 2010 (online)



Summary and Analysis

While the data is noisy and the number of samples too low, it is clearly observable that the general trend is a lower online measure as compared to the respective paper measure. The trend was observed across all three measures and for all relevant comparisons (Fall to Spring, and Spring to Spring).

The drop in response rates is consistent with the outcome of other universities,[1] which have seen response rates drop to less than 55%. According to the IDEA Center, only response rates above 75% are considered representative.[2] The overall drop in response rate needs to be addressed, particularly because response rates might drop further as the "Hawthorne effect" and "novelty effect" wear off. Additionally, online teaching evaluations produced a bimodal distribution representing students with strong opinions (either strongly liked or disliked the

[1] See for example Dommeyer, C., Baum, P., Hanna, R.,Chapman, K. (2004). Gathering Faculty Teaching Evaluations by In-class and Online surveys: Their Effects on Response Rates and Evaluations. *Research in Higher Education* 44/1, pp. 1-19. Sorenson, D.L. & Johnson, D. (2003). *Online student Ratings of Instruction*. San Francisco: Josey Bass. See also http://innovateonline.info/pdf/vol2_issue6/Online_Student_Evaluations_and_Response_Rates_Reconsidered.pdf at Washington State Univeristy http://www.educause.edu/Resources/StudentEvaluationsAComparisono/156307 at University of Minnesota. While these institutions might not be directly comparable to CNU's college environment, they give an indication for the overall trend of response rates.

[2] http://www.theideacenter.org/sites/default/files/ReliablityMessages.pdf

class or the instructor). Indifferent students are no longer represented.[3] However, the drop in evaluation ratings is not supported by the literature.[4] It is possible that the drop in teacher ratings and progress on relevant objectives at CNU is a result of the noisy data and selection of professors in the pilot and not representative of an overall trend. Only time will show the real effect on quantitative evaluation of teaching.

ATAC Recommendations

In order to address the outcome of this data analysis and some of the concerns voiced in prior ATAC reports, ATAC considered the adoption of one of two options:

Option 1: Online, in class administration of IDEA surveys
Instructors are given the permission to open the surveys to students at the beginning of class and close the surveys after all students present in the class on the day of the survey completed the evaluation. At the professor's request, students will use their personal portable electronic devices with web browser capabilities such as notebooks, laptops, PDAs, smart phones, iPod Touches, iPads etc. to complete the survey. According to IT, 98% of students on campus own a laptop or comparable electronic device. ATAC recommends moving towards a laptop requirement for all CNU students.

Advantages:

- Online surveys can be administered without the downsides of online administration such as uncontrollable circumstances of survey taking (e.g., as a group rather than individual or survey taking right after a bad grade).
- No paper work for administrative assistants.
- Support for CNU's "Going Green" initiative and CNU's push to use academic technology for instructional purposes.

Open questions and issues:

- IDEA does currently not provide mobile applications for smart phones. If such devices are used, they will have to have web browser capabilities
- Wireless internet is available in most parts of the campus, but not everywhere. IT is in the process of expanding wireless accessibility.
- While it is possible to give instructors the right to open and close the survey, there are some administrative issues involved. At this point, only IT administrators have the rights to open and close surveys. For each instructor, the times would have to be set manually.

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[3] See http://www.educause.edu/Resources/StudentEvaluationsAComparisono/156307

[4] Dommeyer et. al (2004) and Sorensen & Johnson (2003) report little change in quantitative scores. See also Layne, B., DeChristoforo, J. McGinty, D. (1999). Electronic Versus Traditional Student Ratings of Instruction. *Research in Higher Education* 40/2, pp. 221-232. Some universities show mixed results. See http://www.memphis.edu/sete/pdfs/fresno.pdf for a comparison. Others experienced an increase in results. See

A possible solution is the involvement of Department Secretaries or a designated faculty member in each department.

Option 2: IDEA survey as a requirement/incentive

The IDEA surveys will be open for one week in the last part of the semester for all instructors. Students are required to take the survey or receive a strong incentive to complete the IDEA forms. Here are a couple of ideas:

- requirement:
  - Make completion of IDEA part of the grade (e.g., 5 points towards the final grade). → Issue: Except for the response rate, scores might drop because of the "punishment factor".
  - Make taking the IDEA survey connected to logging into email or Scholar (e.g., the survey has to be completed before email can be accessed; ideally there would be a couple of "warnings" meaning that the reminder can be disregarded three times). → Issue: Students might "rush" to the survey if they have a deadline or no time to complete the survey. The "punishment factor" might lead to lower scores.
- incentive:
  - Students who complete the IDEA survey will be able to access their final grades a couple of days earlier than students who didn't complete their survey.

Advantages:

- Technological issues mentioned in option 1 resolved.
- Allows for flexibility.
- Less administrative effort needed.

Open questions and issues:

- Scores will likely decrease further. The online pilot possibly triggered the "Hawthorne Effect" or a "novelty effect". ATAC expects scores to drop further.
- Issues mentioned in previous reports such as the uncontrollability of the environment in which students take the survey (as a group, after a party…), the fact that students who never or rarely attend classes can take the survey, and the polarization of survey results (only the students with a strong preference for or against the instructor/class have an incentive to take the survey) remain.

While Option 2 is easier to administer and has some advantages in the administrative areas, ATAC expects that Option 1 would lead to better results on all levels. Based on these considerations, ATAC recommends the following:

1. The Faculty Senate and the Provost's Office should discuss the two options and check on the implementability of each. In the long run, a laptop requirement for all students might be beneficial to online administration of IDEA surveys. ATAC is happy to support this process as needed.

2. The overall importance of IDEA surveys needs to be reconsidered given the likely drop in response rates and the fact that IDEA scores will no longer be reliable. This has to be considered also in light of the incompatibility of IDEA forms with the Digital Measures system.