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# A Case Study: Using Blackboard Tools to Measure Correlations Between Student Engagement and Student Achievement

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## Using Blackboard Tools to Measure Correlations Between Student Engagement and Student Achievement

- THRT 385: Theatre History and Literature I
- Three tools at play here
  - Student perceptions gathered from course evaluations
  - Student perceptions gathered on a study log
  - Student traffic recorded on Blackboard
- CAVEAT
  - small data pool
  - Will aggregate data over time

## Using Blackboard Tools to Measure Correlations Between Student Engagement and Student Achievement

- Final Achievement in the Course:
  - 62% earned grade of A/A-
  - 10% earned grade of B/B+
  - 28% earned grade of C/C+
- GPA for the entire class of students was 3.39
- Abnormally high achievement for this course historically

## Using Blackboard Tools to Measure Correlations Between Student Engagement and Student Achievement

- Student perceptions on the course evaluation
  - 77% of students completed the online survey
  - 42% said they never missed a class (instructor records show 35%)
  - 58% said they were absent within parameters allowed in the attendance policy (instructor records show 52%)

# Using Blackboard Tools to Measure Correlations Between Student Engagement and Student Achievement

- Student perceptions on the course evaluation
  - 70% said they gave their best effort
  - 30% said they gave a moderate effort
  - 0% said they gave minimal effort
  
  - 43% said they studied 2-4 hours/week
  - 43% said they studied 5-6 hours/week
  - 14% said they studied 9+ hours/week
  
  - It would be interesting to know a student's definition of "best effort" . . .

# Using Blackboard Tools to Measure Correlations Between Student Engagement and Student Achievement

- Study Log
  - Extra credit activity
  - Instructor set it up as a tool in Blackboard
  - Students entered study hours every week
  - 61% of students chose to complete the study log
  - This study will analyze the results of
    - 8 students who earned A/A-
    - 3 students who earned C/C+

# Using Blackboard Tools to Measure Correlations Between Student Engagement and Student Achievement

- Study Log

- Students recorded the hours they studied every week on:
  - Reading textbooks,
  - reading dramas,
  - completing examinations,
  - completing quizzes,
  - researching and writing two essays,
  - preparing the final oral presentation
  - Total hours of study (mathematically counted)

# Using Blackboard Tools to Measure Correlations Between Student Engagement and Student Achievement

## • Study Log

- Hours of study were all over the map, regardless of final grade in the course
  - Highest number for a C/C+ student=231
  - Lowest number for a C/C+ student=59.8
  
  - Highest number for an A/A- student=224
  - Lowest number for an A/A- student=61
- The AVERAGE number of hours studied on each kind of task did not differ much between C/C+ (117.9) and A/A- (119.6) students because of the wild variations among individual students, regardless of final grade.



# Using Blackboard Tools to Measure Correlations Between Student Engagement and Student Achievement

- Study Log

- Some statistical massaging can work wonders.....
  - Drop the students whose total study hours were the highest and lowest in each group and you get.....
    - C/C+ students=63
    - A/A- students=119.6
  - A/A- students reported that they studied almost TWICE AS MUCH as C/C+ students.

# Using Blackboard Tools to Measure Correlations Between Student Engagement and Student Achievement

## • User Activity in Blackboard

- Instructor enabled statistics tracking feature to gather data on:
  - Number of hours students spent on Blackboard
  - Number of times each student visited each content area (hits)
- Content Areas Tracked were:
- Computer settings, calendar, discussion questions, drama texts, essay assignment instructions, final oral presentation instructions, instructor information, instructor's in-class presentations, key terms, quizzes/exams/surveys, syllabus, useful resources

# Using Blackboard Tools to Measure Correlations Between Student Engagement and Student Achievement

- User Activity in Blackboard
  - A/A- students averaged 37.8 hours on Blackboard
  - C/C+ students averaged 23.8 hours on Blackboard
  - A/A- students averaged 335.8 hits on Blackboard
  - C/C+ students averaged 197 hits on Blackboard

# Using Blackboard Tools to Measure Correlations Between Student Engagement and Student Achievement

- Tentative Conclusions:
  - Higher achieving students study more
  - Higher achieving students use Blackboard tools more

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