

Incorporating Learning Analytics into Basic Course Administration: How to Embrace the Opportunity to Identify Inconsistencies and Inform Responses

Lindsey B. Anderson¹

Elizabeth E. Gardner²

Andrew D. Wolvin³

Rowie Kirby-Straker⁴

M. Adil Yalcin⁵

Benjamin B. Bederson⁶

Consistency is imperative to the success of a multi-section basic course. However, establishing consistent practices is a difficult task, especially when coupled with maintaining instructor autonomy. Learning analytics tools, designed to improve learning and teaching by collecting and analyzing pertinent information through interactive databases, can be used by basic course administrators to improve consistency. Using a reflective case study methodology we share our experience incorporating a learning analytics platform into our basic course. In doing so, we highlight the role this technology can play in terms of identifying areas of inconsistency as well as informing ways to improve overall course delivery. Three major areas of inconsistency were uncovered: (1) the use of online grade books; (2) utilization of course-wide rubrics; (3) and instances of grade inflation. Stemming from these findings is a set of very practical implications regarding the coupling of learning analytics and basic course administration. These include clarifying the two-step process of identifying inconsistencies and informing solutions as well as introducing the concept of collaborative consistency, the term we use to describe the co-construction of course materials (e.g., rubrics, schedules) and activities (e.g., norming). The case ultimately provides the opportunity for basic course directors to embrace the role of learning analytics technology.

Keywords: Basic communication course, consistency, learning analytics

Consistency is imperative to multi-section courses (Morreale, Worley, & Hugenberg, 2010). However, that is more easily said than done (Lawton & Braz, 2011), especially when there are multiple instructors and assignments to manage. Traditionally, instructors also value autonomy in their classroom and curriculum. Thus, one persistent challenge and question for course administrators becomes, how do you productively and responsibly navigate the tension between course consistency and instructor autonomy? This is an especially important question to answer within the context of multi-section courses given funding implications and/or general education requirements for consistency (Boyd, Morgan, Ortiz, & Anderson, 2013). And it is a question of concern for basic course directors across the country.

Consistency, especially when coupled with the desire to retain instructor autonomy, is a timely topic and was discussed by course administrators at the NCA Basic Course Director's regional workshops. The participating basic course directors discussed the need to be

¹ University of Maryland

² University of Maryland

³ University of Maryland

⁴ University of Maryland

⁵ University of Maryland

⁶ University of Maryland

consistent and shared strategies for improving consistency across sections. Strategies for identifying problem areas included assessment work and research projects, which then informed changes to course design and instructor training.

There are, however, new avenues to improve consistency. “Big data,” like those featured in learning analytics technology, offer opportunities for improving all dimensions of the educational process (Siemens & Baker, 2012; Romero & Ventura, 2010). Learning analytics is a teaching/learning technology that captures, organizes, and presents course data from multiple perspective (e.g., assignment, section, semester). Efforts to understand how students and instructors utilize a learning management system (LMS) (e.g., Blackboard, Canvas) demonstrate the utility of such platforms to support learning analytics as an increasingly sophisticated approach to evaluating curricular, instructional, and assessment consistency (Duval, 2011; Merceron, 2012).

Using our experience incorporating learning analytics into basic course administration, we highlight the role this technology can play in identifying areas of inconsistency in a multi-section course and informing overall course delivery as well as illuminating avenues to support instructors. To begin, we contextualize this conversation within the existing consistency literature before providing an overview of learning analytics. Next, we detail our case study methodology, which involves a reflective account of the development and use of our learning analytics technology. We then share our results, which focus on uncovering inconsistencies and informing course updates. We conclude with a discussion of the implications emerging from this research as it is applied to basic course administration.

Literature Review

Consistency across Sections

The importance of establishing consistency in multi-section courses cannot be overstated. Morreale, Worley, and Hugenberg (2010) recognized this imperative as well as the accompanying difficulties associated with developing consistency. As the authors explained, “administrators and professors in higher education do face challenges to the consistent delivery of high quality communication instruction” (p. 98). This statement is especially true when applied to the basic course context where multiple sections are often taught by a number of instructors, adjuncts, graduate teaching assistants (GTAs), and/or faculty all with varying levels of experience and autonomy.

Previous research has examined the relationship between consistency and individual instructor factors. For example, Stitt, Simonds, and Hunt (2003) demonstrated the positive impact of instructor training on evaluation and grading consistency. Grading in a consistent manner was also at the heart of Dunbar, Brooks, and Kubicka-Miller’s (2006) work where they observed that the development and use of an evaluation rubric can “increase consistency in teachers’ evaluations of student competency” (p. 126).

Research on multi-section courses identifies other strategies for achieving consistency such as, increasing the amount (and probably quality) of dialogue among instructors (Dunbar, Brooks, & Kubicka-Miller, 2006); engaging core constituencies in course design (Valenzano, 2013); adopting a blended-learning structure (Perrin, Rusnak, Zha, Lewis, & Srinivasan, 2009); utilizing a common spreadsheet grading tool (Mountain & Pleck, 2000); and conducting regular course assessment (Preston & Holloway, 2006).

With that said, there are a variety of variables and relationships to explore that can impact consistency. However, the fact remains that creating and maintaining a uniform

experience is paramount in required, multi-section courses (Mountain & Pleck, 2000). Learning analytics tools equip course directors to examine these variables of course consistency more closely. These tools can allow course directors to capture a snapshot of this type of course and then zoom-in and out on particular components, gaining meaningful insights that aid in meeting the consistency challenges faced by basic course administrators in many institutions.

Learning Analytics

A major platform for tracking and measuring the impact of assessment, curriculum design, and training is learning analytics technology (Dyckhoff, Lukarov, Muslim, Chatti & Schroeder, 2013). Learning analytics is “the collection, analysis, use, and appropriate dissemination of student-generated, actionable data with the purpose of creating appropriate cognitive, administrative, and effective support for learners” (Slade & Prinsloo, 2013, p. 1512). In other words, a learning analytics tool takes a snapshot of a given course by mining data from campus-wide LMS.

And while course information can be accessed through other avenues (e.g., university offices of undergraduate education), learning analytics provides a centralized space for information across semesters, sections, instructors, students, and assignments. With that said, the learning analytics process is unique in that it links large quantities of learner-generated data to produce metrics or visualizations that can be used to enhance the educational experience (Clow, 2012). Indeed, learning analytics are reshaping higher education by “altering existing teaching, learning and assessment processes, academic work, and administration” (Siemens & Long, 2011, p. 5). This type of data collection and analysis further enhances the understanding of consistency in the basic course.

Consistency of curriculum, instruction, and assessment in the basic communication course is critical to an enhanced educational experience for students enrolled in general education offerings. Data retrieved from our LMS provides a case study as to how learning analytics can be used to determine the level of educational consistency we have developed and need to address in our multi-section basic course.

Based on the preceding literature, we have developed two broad research questions that guide our reflective case study.

RQ1: How can learning analytics technology be used to identify areas of inconsistency in a multi-section course?

RQ2: How does learning analytics technology inform strategies for improving instructional delivery of a multi-section course?

Method

In order to answer these overarching research questions, we (the authors and basic course directors of COMM 100—pseudonym) employed a case study methodology. A case study is a detailed account of a given topic that portrays a problem and resolution or possible solutions (Ellet, 2007). Tracy (2013) described this approach to research as a “descriptive narrative” (p. 265). Employing a case study format “produces the type of context-dependent knowledge” that allows readers to develop their understanding of a given topic (Flyvbjerg, 2006, p. 221). Here, we detail our experience adopting a learning analytics platform into our

basic course program. Specifically, we provide a reflective account of instances when the technology helped us uncover inconsistencies in the course and then informed our approaches to improvement. This reflective component is coupled with the large amount of data captured through our learning analytics program (see “Revealer” subheading for numbers). With that said, the context of the situation is fundamental in case study research.

The Context

The course. This case study is specific to a basic course program at a large, mid-Atlantic university. Here, the basic course, COMM 100, utilizes a hybrid structure that covers presentational speaking, interpersonal, and group communication. A combination of 55 graduate students and instructors teach over 100 sections of this course per semester. Two faculty members and two doctoral students oversee the administration of the course (e.g., training, assessing, mentoring). As a result of these efforts, more than 4,500 undergraduate students enroll in COMM 100 every year.

The course was not always such a large enterprise. In 2012 COMM 100 was added to the university’s general education curriculum and, as a result, grew very quickly. With this new status, came the request for additional seats to be provided as well as the assurance of a consistent experience for each of the undergraduate students enrolled in COMM 100. Moreover, there was increased pressure to assess the course and report the findings to multiple levels of the university’s administration.

“Revealer”. As a result of this responsibility to our constituents (e.g., students, administration), we partnered with the director of the university’s teaching center and a graduate student in computer science. In the fall of 2014, we worked collaboratively to apply and refine a learning analytics program to the context of COMM 100. In order to differentiate learning analytics technology in general and our specific program, we have developed a pseudonym that will be used throughout the remainder of the case (Revealer).

Revealer is an interactive data analysis program that pulls information from our campus-wide LMS and organizes it into an interactive interface that allows users to see a visual representation of data trends. At this point we have three semesters (spring 2013, fall 2013, spring 2014) of data captured within Revealer. This total includes over 300 sections of the course where each section has approximately 19 students resulting in 5,310 students. The course consists of four major assignments—the informative briefing, informational interview, group discussion, and persuasive speech—all of which have scaffolded tasks that build up to the final presentation (e.g., topic selection, outline, interview plan, self-evaluation). In more specific terms, the data represent more than 69,000 student assignment/task submissions that can be viewed from multiple perspectives (e.g., student, section, semester). While this is a large amount of data to be sorted through, it is easily organized through the learning analytics functions featured in Revealer. By using learning analytics, we can zoom in to specific semesters and/or assignments and/or sections or zoom out to see a broad picture of the data over time. And the program is evolving in nature; it will continue to grow as more data is added.

Results

This data has yielded interesting findings, especially in terms of developing course consistency. Our results will be organized by identified inconsistency and will address each of

the two overarching research questions in order. The first research question asked, *how can learning analytics technology be used to identify areas of inconsistency in a multi-section course?* We found three ways in which the course demonstrated inconsistency among sections, including: (1) the use of online grade books, (2) utilization of course-wide rubrics (3) and instances of grade inflation. Research question two then built on the identification as it was concerned with the ways in which learning analytics technology informed strategies for improving instructional delivery of a multi-section course.

Inconsistency One: The Use of Online Grade Books

Our basic course uses the university's LMS in a variety of ways, including posting assignments, turning in written work, and posting grades. Students frequently turn to the campus-wide LMS to check on grades. With that in mind, the COMM 100 leadership team created a grade book template that can be copied from the master LMS course to each instructor's individual LMS sections. The grade book template provides assignment titles, related tasks (e.g. Informative Briefing Topic Proposal, Informative Briefing Outline), and details the assignment point values. However, through Revealer, we found that not every instructor uses the online grade book. This finding raises questions about the consistent and optimal use of our available technology resources since some instructors may not be comfortable with the available teaching/learning technologies. There were also other instances of inconsistencies that were uncovered and centered on the use (or lack thereof) of the online grade book, including how assignments are grouped/labeled and varied point distributions.

Lack of an online grade-book. There were differing levels of LMS instructor use. Some instructors used the LMS for almost every aspect for the course—posting additional readings, providing feedback, and viewing sample presentations. On the other end of the continuum, there was one person who did not use the LMS at all. The lack of complete course data ultimately required us to remove this instructor's sections from our overall data pool, but it also led us to question what degree of LMS usage is essential and how it contributes to the consistent delivery of COMM 100.

While this finding was troubling, it helped us identify instructors who are struggling with the use of technology. For example, one instructor entered and published the "Persuasive Speech" assignment four times, but, again, this LMS usage skewed course data and confused students. In order to overcome these technology hurdles, we paired the instructor with a member of the COMM 100 leadership team who specializes in education technology to teach the instructor about the uses and advantages of LMS. These meeting took place in a one-on-one setting where specific and individual questions could be asked in a non-threatening environment. To date, our technology expert reports that this instructor is effectively using the LMS during the spring 2015 semester.

Assignment names and groupings. We attempted to create a common vocabulary surrounding the basic course that is framed in a more practical and career-oriented manner. With this goal in mind, we made the effort to adjust the titles of our assignments to be more aligned with professional settings (e.g., "Informative Speech" to "Informative Briefing"), yet this change is not mirrored in all of our instructors' language choices and uses. For example, the labeling of assignments in the grade books range substantially, such as using "Speech 1" as the title for the "Informative Briefing."

Besides the common vocabulary, the inconsistency in labeling assignments makes it difficult to organize all of the data. For instance, when trying to find average scores on "Exam 1", we had to scour the data for misnomers like, "Exam #1", "Class 10-8 / Exam 1", "Midterm Exam 1", and "The Exam: Episode One".

However, by engaging in this critical process of parsing out inconsistent grade book labels, we found that some instructors added extra layers to the overarching assignments, which could be the reason for some of the name variation. In one instance, an instructor added a grading column for the PowerPoint slides used in the "Group Discussion" assignment. This finding uncovered possibilities for redesigning the major assignments to include additional scaffolded tasks. In a similar vein, it caused us to pay greater attention to the need for additional layered tasks that add to the complexity and contribute to the successful completion of the major assignments.

Varied point scales. Besides having multiple names for the same assignment, we also found that instructors used varied point distributions for individual assignments as well as the overall course. We identified data from instructors who used different point scales from the one detailed in the common course documents (e.g., syllabus, assignment descriptions) and rubrics. Most often, the points would be redistributed to make assignments worth more. For one assignment, the "Informative Briefing", we found that for the actual presentation the points available ranged from 24-40 depending on the instructor. However, the actual amount of points allotted in the course-wide syllabus, assignment description, and rubric was set at 29.

In another case, an instructor gave 50 points for the written "Informative Interview Reflection" assignment. This was a shocking discovery since, as detailed in the course documents, the assignment should be worth only 8 points. Based on the number of points available in the course, which is set at 200, we believe that this instructor might be using a 1,000-point scale. Even more problematic for questions of consistency is that the 50 to 8 point variation does not translate equally when turned into a percentage of total course points (5% and 4% respectively).

Again, this point variation skews the weight of the assignment for certain students who are enrolled in specific sections of COMM 100. In addition, it created a new agenda item for our returning instructor meeting held at the beginning of the fall semester as well as our new instructor orientation. We will highlight the importance of keeping the course-wide use of the LMS grade book (including assignment titles and point distributions) consistent. During this point of orientation, we will be able to show de-identified data that visually illustrates the range of inconsistency in this facet of the course.

Inconsistency Two: Utilization of Course-Wide Rubric

The second overarching theme we uncovered through Revealer was the inconsistent use of course-wide grading rubrics. We developed grading rubrics for each of the major assignments and the tasks that build up to the formal presentation. The creation process was integrative in nature and is still ongoing. In the past, we actively sought feedback from instructors to align the rubrics with grading needs and actual classroom practices. Even with this instructor involvement in the design and development of the rubrics, we still see that some instructors are not regularly using the common rubrics.

We found instances where the rubrics were not used for all of the scaffolded levels of assignments (e.g., topic selection, outline, presentation, and self-evaluation). For example, one person did not use the rubric to grade the "Persuasive Speech." When we zoomed in on this

major assignment we uncovered additional cases of inconsistency as several other instructors emerged who did not use the “Persuasive Speech Self-Evaluation” rubric. Ultimately, this decision on the part of instructors leaves room for confusion concerning what concepts, skills, and demonstrated knowledge should emerge as part of the assignment as well as for inconsistency in the weighting of various components of the assignment.

The good news is that through Revealer we can easily identify instructors who are not incorporating the rubric in their grading and have individual conversations about the importance of consistency after just one semester. These one-on-one discussions open up space for the leadership team to hear back from specific instructors, and in the past, this type of dialogue has led us to alter and improve the master course setup. For example, formerly we established a “Topics and Purpose” rubric leading up to both the Informative Briefing and the Persuasive Speech. After conversations with instructors (some of whom had already opted to not use the provided rubric), we recognized that this setup failed to reflect active and productive classroom practices, and consequently, we altered the master course space. Therefore, these type of findings through Revealer lead us to question the usefulness/purpose of the rubrics while also encouraging us to engage in additional conversations about utility and design.

Number of assignments/tasks. Rubrics are an important instructional tool that detail expectations for student work and allocate points to specific course items (Goodrich, 2005) (e.g., physical delivery, oral citations). The COMM 100 leadership team created rubrics for each assignment/task (except the three major exams) in order to clearly detail the grading criteria. In all, we have 13 rubrics that correspond to the 13 major assignments and tasks. While this does not seem like an excessive amount, the end of the semester course evaluations completed by students often state that there are too many assignments in COMM 100.

The Revealer platform allowed us to weigh this feedback in relation to the number of assignments in each section. Again, we found that the amount of student work ranged widely. For instance, 21 sections had between 40 and 60 assignments per semester, including the major course assignments plus participation assignments, and one section had between 80 and 90 for each of the three semesters of data. In comparison, the median number of assignments was 27 over the course of the three semesters, with a majority of sections including between 17 and 31 items. We attributed the range in the number of assignments to the ways in which instructors distribute the available 24 participation points (12% of total course grade). However, it is potentially problematic that some instructors are including an extra 40 to 70 tasks in addition to the core 13 assignments.

By looking at the data housed in Revealer, we can coax out best practices regarding the amount of student work expected. To do this, we can learn about productive uses of our LMS while simultaneously layering this data with course evaluations. The hope is to see how students report the amount of work required in the class as well as the overall evaluation of the course (e.g., “there was a lot of assignments, but this was a useful course” or “too many assignments for a 100-level class”). These data can make a case for why the skill of the instructors—in terms of establishing a rationale for the assignment/task and motivating students, rather than the number of assignment—is at the heart of receiving positive student evaluations.

Participation point distribution. This difference in number of assignments also led us to ask how people are distributing participation points. In COMM 100 each instructor has 24 points they can dole out as desired. Once again, we found that the means for distribution varied widely. Some instructors gave their students homework and/or extra speaking

assignments (e.g., elevator pitches, impromptus, critiques) while others rolled it into daily activities that were completed in class as part of our active learning format.

We now need to initiate a discussion about guidelines for distributing the 24 participation points in a format that avoids frustrating students with a multitude of tiny assignments. To do this, we are going to engage in conversations with current instructors who receive high course evaluations to determine best practices for assigning and assessing participation points.

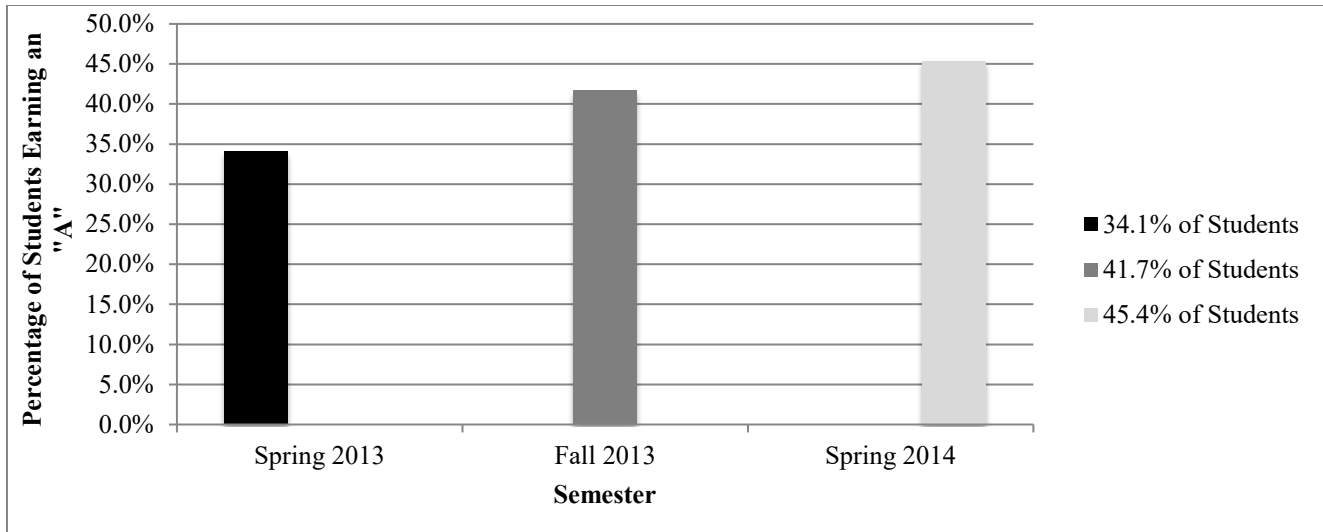
Inconsistency Three: Grade Inflation

A third theme of inconsistency with course expectations that we uncovered through Revealer was grade inflation. There are various approaches to grading that instructors can choose to take—some instructors may prefer to rely on criterion-based grading while others may take context into account (e.g., first versus last presentation). And these approaches not only impact individual student scores, but can contribute to grade inflation. With that said, it becomes difficult to establish consistency among grades in a large multi-section course. This assumption was found in our data as final student grades varied, but were overall higher than we expected. Specific assignments also showed grade inflation that we want to address as course administrators.

Final grade inflation. The final average grade across all three semesters and all sections was an 88.4%. With 70% of all students earning an 84% or above. With these numbers in mind we decided to further explore the topic of grade inflation through Revealer. While parsing out this information, we found an instructor who gave 88 students a final grade of 95-100% over the three semesters. In all, 84% of the instructor's students received an “A” in the course (234 out of the 278 students). By zooming in on this data and corresponding course evaluations, we saw that the same instructor's class average has risen from a 90.5% to a 94.4% in the most recent semester of data. Given the predominately freshman composition of the course, this success rate is unlikely.

Taking a broader view in Revealer, we can see if and how median grades shifted by semester. In Graph 1 we show how the number of “As” earned in COMM 100 has increased significantly over recent semesters; 34.1% (544/1,594) of student in the spring of 2013 and 45.4% (812/1,789) in the spring of 2014 received an "A". Through Revealer, we are able to visually see this marked difference in the number of “As.”

Graph 1
Percentage of Students Earning an “A” (90-100%) by Semester



Failed intervention. Besides showing trends, Revealer illuminates outcomes of our intervention efforts. In this case, we contextualized the jump in number of “As” between spring 2013 and fall 2013 with the implementation of an ultimately failed policy. When we first noticed grade inflation in the course in the fall of 2012, one of the course directors implemented a required grade distribution that limited the number in “As” that could be earned in COMM 100 in the spring of 2013. While the policy worked in terms of decreasing grade inflation, there was backlash from instructors who were upset because of the top-down mandate. The feedback we received from instructors was mostly negative, as they felt the required grade distribution was an arbitrary and unfair rule. With the instructors’ autonomy in mind, we dissolved the policy. In looking at the data from subsequent semesters, though, we believe that we are seeing some re-inflation following the failed attempt to regulate grade inflation.

Collaborative intervention. As we approach the problem of grade inflation now, we will utilize the data gathered through Revealer as well as the lesson learned from the failed policy to address grade inflation in a collaborative manner. We are going to show visually the grade inflation to instructors to bolster our argument that, as a course, we need to develop and implement more critical grading standards. In order to achieve this goal, we plan to hold group norming sessions in which instructors can debate the quality of presentations using the department-wide rubric. We hope this process will develop better grading skills in terms of critically evaluating the demonstration and application of course concepts as well as improve the use and refinement of our rubrics.

Specific assignment/task grade distribution. Through the learning analytics program, we noticed some assignments appear to have higher than expected scores as well. For example, the three exams that are given over the course of the semester averaged a low “A” (90.5%). This discovery has informed another approach that we are taking to combat grade inflation, which is to redesign our testing mechanism.

Currently, students take three exams per semester. Instructors are given autonomy in terms of writing the exams, which means students can take widely different tests. We have a question bank available to all instructors, but build in flexibility so that instructors can develop their own test items. Some instructors create higher order questions (see Bloom, 1956) where

students are asked to apply the concepts learned, others draw communication models (e.g., transmission, interactive, transaction) and have students label parts (e.g., sender, receiver, channel, noise), and still others use basic, definitional, multiple-choice questions to test understanding.

Even with the range of available test items, we are seeing higher than expected scores. Based on this information, one of the basic course directors suggested that we pilot the administration of daily quizzes rather than three larger exams. The hope is that this structure will hold the students accountable for the reading assignments as they are due rather than cramming for an exam at three points in the semester.

Moreover, the quiz format ensures that students are engaging with the course content that is relevant for that day of class and upcoming assignments. For example, students would read the chapter on persuasive speech organizational patterns before class. Then, in class, the students will take a brief quiz about that material (currently three one-point items). The questions are then debriefed after the quizzes are turned in. This debriefing serves as the brief lecture/discussion portion of class that informs an active-learning exercise. The quiz format then leaves a majority of class time to participate in a learning activity that revolves around that material (e.g., Monroe's Motivated Sequence). Besides holding students accountable for the daily reading assignments, the quiz structure facilitates the active-learning format the COMM 100 course adopted in the fall of 2012. As our team moves forward with this shift, Revealer will allow us to take a broad view and to assess (in conjunction with feedback from our instructors) whether the change is achieving our desired end.

Discussion

By incorporating Revealer into our basic course, we were able not only to identify areas of inconsistency, but also to inform responses to improve COMM 100. We found that inconsistency manifested in a multitude of ways, such as the use (or lack thereof) of the course-wide grade book, utilization of the course rubrics, and grade inflation. By zooming in on these larger themes, we uncovered other instances where consistency could be improved (e.g., higher than expected exam scores) and developed informed changes in these areas in order to increase the overall level of consistency in the course (e.g., adopting a quiz format).

Stemming from these findings is a set of very practical implications regarding the incorporation of learning analytics into basic course administration. Two of the lessons we have drawn from this project are the concept of collaborative consistency and the process of identifying inconsistencies and informing solutions.

Implications

Establishing consistency in a large multi-section course is a balancing act between complete control/standardization and providing instructor autonomy. Learning analytics provides an outlet to address this tension through what we term as, *collaborative consistency*. We define collaborative consistency as the co-construction of course materials (e.g., rubrics, schedules) and activities (e.g., norming). Through the data we can see areas where inconsistencies are emerging. Rather than enacting a top-down approach to resolve the consistency concerns (which has failed in the past), we can mine the data to enhance understanding of the root sources and encourage instructors to be active participants in establishing course-wide consistency. Ultimately, this process affords the opportunity to engage with instructors to better adjust to their classroom needs, so that they might be more

likely to follow course procedures and utilize course materials. While time consuming, collaborative consistency, of course, would be completed with the expectations that any co-constructed changes would be implemented across all sections.

The second practical implication that emerged is highlighting the importance of the dual-step process associated with identifying inconsistencies and using data to inform responses. While our case is context-specific, the process we used of identifying and informing can be adopted by other basic courses. One of our ongoing projects enacts both of these implications as it explores the quantity and quality of written feedback provided to students. In following with our two-step process, we are using the data to inform new training units about providing comments to students on oral presentations. We will ask current instructors who excelled to lead discussion about best practices or tips that they have learned during their tenure working in the basic course, thus engaging in collaborative consistency.

Hopefully, other basic courses can have similar, positive experiences that strengthen consistency and encourage instructor involvement, but depending on a variety of factors, may have different experiences. The range of experiences incorporating learning analytics into basic course administration is important to discuss. With that said, learning analytics and other forms of “big data” and interactive data platforms will become an opportunity to explore and potentially embrace in the basic course arena.

Limitations and Future Research

There are limitations in this case study. First, it is context-dependent, meaning that results cannot be generalized to other multi-section basic courses. However, some of the lessons learned can be applied with the expectation that experiences will vary across courses and administrative teams. Second, we have only collected three semesters of data, which just provides a snapshot of our course history rather than a full mosaic. It will be interesting to see the trends as additional semesters of data are added to the existing database. Third, we are still learning about the capabilities of our learning analytics platform, which means that there could be more data that further bolster the identified inconsistencies and responses or counters our findings in ways that we could not expect. Finally, the notion of establishing consistency in a multi-section course is dependent upon compliance from each instructor. While many instructors are compliant with the procedures that are put in place to enhance course consistency, others intentionally choose not to be compliant and have reasons for their decision (e.g., technology avoidant).

With that said, there is a vast array of future research possibilities associated with learning analytics and basic course administration. Besides topics of consistency, basic course directors can utilize this technology in assessment work, specifically, in terms of collecting and organizing data concerning the success of newly implemented policies or curricular changes.

Learning analytics can be used as a form of documentation, which is especially important given the budgetary constraints higher education is currently facing. As we write this piece, the dean of our school has asked for a report that supports the smaller class size COMM 100 was afforded after being added to the general education curriculum. Now, we are tasked with gathering data that provides a rationale for the initial decision to reduce seats from 24 to 19 and to keep the limited number in place. We plan to use Revealer to supplement our report by using the program's features that allow us to filter data by the number of students in each section. As a specific example, we will be working with our research partners to modify a facet of the program that examines the total grading time in order to help us to zoom in on the average time it takes to grade and return assignments when an instructor has 19 students

compared to 24 students. This scenario underscores the usefulness of a learning analytics program when responding to requests from administration regarding course structure and resource allocation.

Beebe (2013) has (in)famously argued that the basic course is the “front porch” of the discipline and, as the only oral communication course many college students will have, needs careful attention and support. Moreover, Valenzano, Wallace, & Morreale (2014) echoed this sentiment when they concluded that this front porch “must be tended to with care, so we can continue to serve the needs of our students, colleagues, and communities” (p. 363). With that said, learning analytics affords us with a valuable tool to better tend to these needs.

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