

## Not Missing the Point(s):

### *Applying Specifications Grading to Credit-Bearing Information Literacy Classes*

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#### Introduction

Librarians at the Z. Smith Reynolds Library (ZSR) have been involved in teaching credit-bearing information literacy courses since 2002.<sup>1</sup> Recently, a group of instruction librarians at ZSR began implementing the ideas outlined in Linda Nilson's 2015 book, *Specifications Grading: Restoring Rigor, Motivating Students, and Saving Faculty Time*, to address some of the challenges they all shared, including motivating students, providing meaningful feedback, and conveying appropriate course expectations.<sup>2</sup> As a new grading model, specifications grading (SG) has not yet been explored as it applies to credit-bearing information literacy instruction. Its emphasis on competency-based learning has the potential to profoundly influence the way we teach and assess our students and it directly aligns with our values as instructors.

In this case study, the authors share the connection between Scholarship of Teaching and Learning (SoTL) theory and SG, an overview of SG, their experience so far of using SG to design and teach courses, and suggestions for further research.

#### Overview of Specifications Grading (SG)

Mia O'Brien challenges SoTL practitioners to take a more student-centered, reflective, evidence-based approach to the design of teaching and learning activities.<sup>3</sup> After reflecting on O'Brien's SoTL Compass, it becomes apparent that Nilson's proposed specifications grading system sits squarely within the kinds of deliberately designed activities for which

O'Brien advocates, particularly in the way SG asks, "What will my students learn and why is it significant?"<sup>4</sup> and "What can I do to support students to learn effectively?"<sup>5</sup> This section explores what SG is and how it answers both of these questions.

In her book, Nilson presents a somewhat radical alternative to traditional points-based grading systems, which she sees as being inherently flawed.<sup>6</sup> Points-based systems, Nilson argues, are ineffective at assessing outcomes and do not motivate students to do any more work than the minimum required to earn a passing grade. In fact, Nilson claims that they may actually incentivize students to produce sloppy work and enter into the kinds of negotiations instructors find so tiring: asking for extensions, arguing for points, and settling for partial credit. Nilson also says that the wide discretion afforded to instructors in their evaluations of students, coupled with the tremendous pressure put on instructors to "pass" students, means that often it is *only* those students who earn an A who even approach achieving the learning outcomes (LOs), to say nothing of those who earn lower grades. "A grade of C," Nilson writes, "does not communicate competency in any particular skill or ability; students routinely pass courses even though their graded work falls considerably below our objectives for them."<sup>7</sup> Traditional, points-based grading, in other words, is a fine mechanism for "passing" students but it says very little about what that "pass" actually means. Clearly, if students are earning credit for a course but cannot demonstrate achievement of the learning outcomes, there is a serious disconnect between the grade and the assessment of learning.

Nilson's proposed specifications grading system encourages doing away with points-based grading entirely. In an attempt to increase rigor, align grades to outcomes, support and motivate students to achieve higher learning, and eliminate some of the drudgery of grading, Nilson outlines a system in which all (or most) assignments are graded on a pass/fail basis. In SG, instructors hold students to very high standards that must be met in order to earn a passing grade. These standards, or *specifications*, are closely aligned with the learning outcomes for each assignment and are presented to students in the form of a checklist or a single-level rubric. If a student fails to meet even a single specification, Nilson reasons that the student has not successfully demonstrated achievement of the outcomes. She suggests that the student receive a non-passing grade for the assignment, at which point the instructor may provide the student an opportunity to revise to prove mastery of the content. Compared to most multi-level rubric assessment, which could award students points for things like "grammar and mechanics" while the core objectives remain unmet, with SG, it is all or nothing—everything is weighted with equal importance. Arriving at the set of specifications for each assignment becomes an exercise in "teaching-as-design,"<sup>8</sup> in which the instructor must carefully reflect on what is essential to demonstrate the outcome. Such concern for alignment, design, and assessment of learning is a hallmark of the kinds of SoTL activities for which O'Brien advocates.

However, SG does not call for abolishing letter grades altogether. Rather, like traditional grading, Nilson suggests that the final letter grade be representative of the extent to which the student has demonstrated achievement of the outcomes. The difference, however, is that higher letter grades in SG correspond to "bundles" of *more* or *more difficult* assignments, not simple accumulation of more points. Students then select their desired grade and

corresponding workload. For example, a student attempting to earn an A would complete more or more difficult work than a student attempting to earn a B, but both students would be expected to meet the specifications for each required assignment. A high final grade, then, would indicate that a student has demonstrated achievement of the LOs at a higher level than would otherwise be required for a lower grade. This approach has numerous benefits, which Nilson supports by linking to abundant research on student motivation.<sup>9</sup> SG raises student confidence by presenting the student with clear expectations, increases student autonomy by giving students meaningful choice in the activities they complete, motivates students to perform at a high level, and makes student work much more authentic by shifting the locus of control to the student and giving students complete ownership over their grade.<sup>10</sup>

Although Nilson does not explicitly say it, SG should be thought of as much more than a grading mechanism—it is a framework for “teaching-as-design” that requires careful reflection on the part of the instructor. Before implementing SG, an instructor must first determine what is essential to the course; that is, “what must be learned”<sup>11</sup> and how the instructor’s design can support students in that learning. SG is borne out of a concern for student learning and demands the kind of deliberate design and systematic implementation required of all SoTL activities.<sup>12</sup>

## Literature Review

In developing SG, Nilson draws from research and practice on various grading methodologies and student motivation. She criticizes traditional grading, which she argues places an unnecessary focus on points, an extrinsic motivator. One of the problems with such traditional grading systems is that this performance-orientation might influence strategies on the part of students that have little to do with learning or mastery of course content.<sup>13</sup> For example, students often lack the motivation to meaningfully engage with instructor feedback, as it is generally received after the opportunity to incorporate it into their work has passed.<sup>14</sup> However, steering assessment to the course learning objectives and promoting mastery orientation has demonstrated an increase in students’ intrinsic motivation.<sup>15</sup>

Student motivation is layered in complexity; however, studies suggest that motivation is changeable and responsive to course design and classroom experiences.<sup>16</sup> Traditional approaches to measuring student motivation in the classroom have considered psychological motives and need achievement theory, addressing how both opportunities for success and a fear of failure can motivate students.<sup>17</sup>

In terms of grading and library instruction, credit-bearing library instruction is still relatively new to the university campus. Most librarians have not received instructional training and may find developing assessment tools daunting.<sup>18</sup> In addressing student motivation specifically within credit-bearing library instruction courses, Jacobson and Xu studied the personal characteristics most highly associated with ideal or best library instructors and found four aspects of instruction that have an influence on motivation: “course design, teaching behaviors, active engagement and student autonomy.”<sup>19</sup> The authors

note that “clarity, along with other teaching factors such as enthusiasm and interaction, has positive effects on teacher effectiveness, student performance, and student motivation levels.”<sup>20</sup> Both clarity and agency are central components of SG.

While little research has been done to support SG, much research has been done to support the alternative grading systems that inspired SG—for example, pass/fail grading systems and contract grading. SG also draws from the concepts of competency-based education—a much more recent development.<sup>21</sup>

Much of the research on pass/fail grading was conducted in the late 1960s and early 1970s, and at that time, many of the findings were negative, as it was found to inhibit student motivation.<sup>22</sup> More recent research, however, has shown some value in this method. In a recent study, some students actually chose to be graded pass/fail because they perceived it would be less stressful than being traditionally graded, which has potential implications for students’ overall well-being.<sup>23</sup> However, SG is not completely pass/fail. Although individual assignments are graded as pass/fail in SG, students are still working toward an overall letter grade.

Contract grading, or the “learning contracts” system, is another predecessor of SG. The original contract grading system involves two-way agreements between the supervising faculty member and each individual student about what the student would produce to earn the preferred grade in the course. The contract grading system also includes a design for a single contract developed solely by the instructor (with or without student feedback) that students must follow to earn their desired grade.<sup>24</sup>

Studies have demonstrated multiple benefits associated with the contract grading system, such as developing a trusting learning environment, engaging multiple learning styles, increasing the effectiveness of evaluative feedback, and increasing student motivation and satisfaction.<sup>25</sup> Additionally, contract grading allows for greater student accountability and sense of ownership in the evaluation process, as “the contract removes, or at least diminishes their helpless feeling since fulfilling the contract is wholly a matter of concrete activities over which they can keep control.”<sup>26</sup> However, only a few instances of contract grading have been found to advocate tying course grades to learning outcomes, an essential component of SG.<sup>27</sup>

## Case Study: Applying Specifications Grading to LIB classes at WFU

### CONTEXT

Wake Forest University is a mid-sized private institution with an undergraduate enrollment of just under 5,000 students. Instruction librarians at the Z. Smith Reynolds Library, the main library on campus, teach more than forty sections of the popular series of 1.5-credit information literacy courses each year, including thirty sections of the introductory-level LIB 100 “Academic Research and Information Issues,” as well as ten sections at the 200 level, including LIB 210 for social science majors, LIB 220 for science majors, and various special topics courses. These courses are traditionally offered face-to-face, but LIB 100 is

also offered in a fully-online version once or twice a year. In 2016, the librarian teaching the fully online section of LIB 100 was the first to make the transition to specifications grading, and based on this librarian's positive experiences, other librarians have since expressed interest. At the time of this writing, two ZSR librarians have taught a total of three sections using SG and an additional two librarians are currently in the process of implementing SG in their own courses.

## INITIAL IMPRESSIONS

For the instructors, the transition to SG had profound effects on how they designed their courses. Transitioning to SG required significant amounts of reflection on what constitutes basic achievement of the learning outcomes for each class—that is, what constitutes a C—and allowed for each instructor to build upon that basic mastery and introduce more rigor into the higher-level “tracks” or “bundles.” By designing for mastery rather than point accumulation, each instructor could be confident that a student earning an A would be able to demonstrate significantly greater mastery of the concepts than a student earning a C.

In all sections in which SG has been implemented, the removal of the points system had a number of effects on both the instructors and the students. For instructors, grading was no longer a subjective exercise in how many points a particular component was worth or in deciding how many points to deduct when a student's work was found lacking. Rather, students either met or did not meet all of the specifications, and instructors provided detailed feedback accordingly. Feedback became a crucial element for the students in order to understand why they did not pass a particular assignment. Both instructors have noticed a marked difference in the number of students lobbying for a higher grade; when students did challenge a “no pass,” they had to look closely at the specifications and the instructor comments to understand why they did not pass, not just ask for a few extra points to be awarded back. Instances of “No Pass,” while somewhat rare, were opportunities for conversations about how the work might be improved to meet the specifications. Although it still took a significant portion of instructor time to grade and provide feedback to students (especially because of the writing-intensive nature of assignments), this time was spent reading and providing targeted feedback, which led to “less mental exertion required to deliberate over small differences in points.”<sup>28</sup> When SG was implemented in LIB 210 in the second half of the spring semester, the majority of students enrolled were graduating seniors. SG enabled students to choose to pursue an A or, in some instances, to pursue a lesser grade if they were more interested in earning a credit than earning a high grade. Either way, because of how the assignments were structured, instructors could rest assured that students still gained mastery of the core learning outcomes, and students largely felt empowered to choose their grade and the corresponding amount of work. The final grade, therefore, never felt punitive as it might feel in a points-based system; grades truly reflected each student's level of mastery of the course learning outcomes.

In both courses, students had a generally positive response to SG, particularly the transparency and the agency that it provided them. This was especially important in the

online sections of LIB 100, as almost every student was entirely new to online learning and many were understandably anxious; for these students, SG provided much-needed transparency. The few students who expressed uncertainty about SG cited discomfort with the inability to earn partial credit on assignments or the requirement to complete consistently high-level work, despite being able to choose their workload.

## CHALLENGES

SG does have several challenges, the first of which is conveying to students how this new grading system will work. The system needs to be thoroughly explained early in the course so that students feel equipped to be successful. One way of ensuring comprehension is to have students take a required syllabus quiz before or after the first class, or as an interactive activity in class that asks them about some of the most important aspects of this grading system. It can also be a challenge to get students, especially high-achieving students, to buy into an SG system, but it is the instructors' experience that the kind of autonomy afforded them by SG and the kind of transparency SG requires quickly override any initial anxiety.

There is also an up-front cost on the instructor side, as it takes significant time to set up a course according to SG. This includes the time needed to create detailed, thoughtful descriptions and checklists/rubrics for each assignment as well as time to create the "tracks" or "bundles" that correspond to each letter grade. The instructor must decide which of the assignments are essential to mastery at the C-level and how to increase rigor for those students at the A- and B-levels. An additional challenge involves the grade book, as most traditional learning management systems (LMS) are not set up to accommodate the "bundled" nature of the assignments in SG. Instructors must decide whether they want to create a workaround in the LMS or use an external product to manage their grades, which can introduce privacy concerns as well as technological issues.

## Criticisms of Specifications Grading

While many of the concepts grounding SG, including contract-based grading, are supported by a strong body of research, SG itself has not yet been formally studied. Nilson's sources are primarily personal communications and anecdotes, rather than published research studies.<sup>29</sup> This is Prescott's main critique of SG in her review of Nilson's book: "I would seriously consider adopting this scheme if published evidence of student gains were available."<sup>30</sup> Prescott does, however, remark on the potential value of SG: "The method does allow for linking specific learning outcomes more transparently and is worth consideration."<sup>31</sup> In order to be taken seriously, therefore, instructors using SG need to conduct evidence-based research.

However, it is important to note that traditional grading is not grounded in research, either.<sup>32</sup> Traditional methods based on arbitrary points and letter grades are much more susceptible to idiosyncrasies in instructor grading practices and less transparent than a standards-based, mastery learning, or SG method. Unless instructors are critical and

reflective of their own expectations and how these expectations are linked to learning outcomes, then grades are being based largely on subjective criteria.

SG may also fall subject to criticisms of the pass/fail grading system, as noted earlier. SG is not, however, a true pass/fail system, as students are working toward an overall letter grade that is aligned with learning outcomes. Because these final grades have an associated workload that is student-selected, and because Nilson emphasizes revision for mastery, SG manages to avoid many of the shortcomings of true pass/fail grading.

SG may also be criticized for the commitment it requires on the part of the instructor. Not only does SG require significant investments in time to develop assignment checklists and align assignments to outcomes, but it may also require additional effort to get students to understand and buy into a SG course. Some instructors may see this effort as too great a burden.

Another criticism of SG is that it is too prescriptive. Most would agree that learning is a messy process and cannot be reduced to a list of requirements. In addition, it doesn't translate to the real world, as employees are not typically given detailed specifications to complete a given task successfully on the job.

## Future Research

Since SG currently lacks a large body of evidence, there are rich possibilities to contribute to further SoTL research on this topic. Aside from a few recent articles in academic journals,<sup>33</sup> much of the current discussion around SG is taking place through blog posts and online forums by faculty who are implementing SG in their courses.<sup>34</sup> Some of the questions that remain to be explored include: To what extent are students more/less motivated in a SG class than non-SG? How does student agency/choice affect motivation? How do transparency and clarity of expectations affect motivation? For the instructor, to what extent does SG actually save time, or is the time spent grading simply exchanged for time spent developing specifications, providing feedback, engaging with students, and related tasks? What value do students and instructors place on feedback, and how does that differ by group? How does an SG course compare to a pure rubric-based course? Do students aim for a higher or lower grade in an SG course than what they might achieve in a traditionally graded course? How effective might SG be for teaching at-risk students, international students, or first-generation college students?

Studies addressing these questions should be carried out at a variety of institutions and in different contexts (including library instruction) to determine whether SG can be applied effectively. For the purposes of this project, the librarians who teach LIB 100 and LIB 210 plan to implement SG-designed courses in the 2017–2018 school year and investigate some of the questions identified earlier, at least in terms of the credit-bearing library courses at WFU.

## ENDNOTES

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5. *Ibid.*, 11.
6. Nilson, *Specifications Grading*.
7. *Ibid.*, 24.
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10. *Ibid.*, 108–9.
11. O'Brien, "Navigating the SoTL Landscape."
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