ACTING ON ASSESSMENT: INCREASING AND SUPPORTING STUDENT SUCCESS THROUGH SCAFFOLDING

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Abstract
As educators, we struggle with introducing complex, multifaceted concepts in understandable and effective ways that support student comprehension of materials. Scaffolding is an evidence-based practice that involves a progressive introduction of skills and knowledge to enable students with greater understanding and independence regarding the material introduced. Because of this progressive introduction, scaffolding is an effective strategy to support students learning complex ideas and skills [1, 2]. In this paper, the authors will briefly discuss the application of the scaffolding approach to teaching case briefing. In the law school setting, knowing how to brief (read) a case is a necessary skill for students. Case briefing is a dense exercise, and usually only introduced in one class setting. While students may get a general idea, it is not until this density is broken apart into clearly communicable pieces that actual understanding of the skills involved becomes clear. The authors will discuss how they tackled this issue for a wholly asynchronous, online undergraduate course using “scaffolding” by breaking one large exercise into seven easily understandable pieces and incorporating formative assessment, student reflection, and feedback along the way.

Keywords: scaffolding; student engagement; asynchronous; online; distance learning; assessment; educational technology; pipeline course; legal education; pathways course.

1 INTRODUCTION
As educators, we struggle with introducing complex and multifaceted concepts in understandable and effective ways to allow for a smooth transfer of learning for our students. One example can be found in the law school setting, where knowing how to brief (read) a case is an essential skill for students, as all of the material that they read, especially during their first year of instruction, consists primarily of United States court cases that are compiled into large, dense “casebooks.” Each court case that students read for law school (and in practice) generally contain the same six or seven pieces of information. These pieces of information, for the purposes of this article and the corresponding course, are referred to as “benchmarks” and are made up of the case facts, procedural history, issue, reasoning, holding, judgment, and concurring/dissenting court opinions. All of these pieces let the reader know the legal history of the case (what got the case into court in the first place, what happened during the litigation of that case in court), what legal issue is being litigated between the two parties to the case, what law governs the resolution of that legal dispute, how the court rules on the legal issue at hand, why the court ruled that way, and what, if anything, should happen next in the case.

Case briefing in and of itself is a dense learning exercise, and it is usually introduced in only one class setting. While students may get a general idea, it is not until this density is broken apart into clearly communicable pieces that actual understanding of the skills involved becomes clear. When taught in a face-to-face classroom setting, the instructor has an opportunity (even in a condensed presentation timeframe) to clarify the case brief pieces, go through two cases along with the students (modeling along the way how to identify each piece), and answer questions in the moment regarding any confusion about this skill introduction. When this skill was identified as being necessary to introduce into an asynchronous online course for undergraduate students, initially the same sort of condensed approach was utilized. Based on student feedback and a demonstrated lack of student understanding of this skill in the first version of the course, a new approach using the method of “scaffolding” was configured and implemented for the second version of the online course. By breaking one large exercise into seven easily understandable pieces and incorporating formative assessments, student reflection, and feedback along the way, students in the revised, second version of the course reported significantly better results.
1.1 Student audience: Pathways to the Legal Profession program

This paper focuses on one fully online, asynchronous course taught as part of the Indiana University Purdue University Indianapolis (IUPUI) Robert H. McKinney School of Law (McKinney) Pathways Program (Pathways). Pathways is a "pipeline" program, designed to engage and introduce students from diverse backgrounds to law school and the legal profession by breaking down any barriers that might prevent them from experiencing or attending college or graduate school. Barriers might include academic, financial, social, and emotional issues. Pipeline programs generally combine a targeted academic approach via courses or other curricular activities, and by providing a network of internal and external supports, such as mentoring.

Introduction to Law was an online course that was developed as part of the McKinney Pathways program for undergraduate students who were interested in the law, but whose backgrounds have historically been underrepresented in the legal profession as a whole. Introduction to Law is designed to familiarize students with the basic structures and language of the legal profession, as well as the necessary skills to succeed in law school. These skills include note taking, outlining, case briefing, exam taking, study skills, and stress and time management. The first version of Introduction to Law was offered in the summer semester of 2018 (SU18) with classes spanning a twelve week period. The second offering of Introduction to Law was offered in the spring semester of 2019 (SU19) with classes running for sixteen weeks.

For course development needs, McKinney created a partnership with Indiana University’s University Information and Technology Services (UITS) Online Instructional Design department to assist with the creation of online courses that would have sufficient rigor, yet were clearly understandable. Under the umbrella of UITS, the eLearning Design & Services (eDS) department provided instructional designers to work alongside faculty, with those designers providing technology support to foster high-quality, interactive, and engaging experiences for IU students, as well as faculty development support for online course design and online teaching.

1.2 Introduction to Law and Legal Process course

The Pathways learning objectives that were identified for Introduction to Law were as follows: to achieve increased knowledge of the legal profession and opportunities to become a member of the profession; enhance critical thinking skills in preparation for success in law school; develop and enhance basic legal writing skills; develop study skills needed for success in law school courses; understand basic legal concepts and terminology; and begin developing a network of legal professionals.

This paper primarily will focus on one critical thinking skill, how to brief a case, that was introduced in SU18 and reworked using a scaffolding approach for the second version of the course in SP19. Scaffolding is an evidence-based practice that involves a progressive introduction of skills and knowledge to enable a student to have greater educational understanding and independence regarding the material introduced. Scaffolding is an effective strategy that can be used to support students learning complex ideas and skills [1, 2].

Case briefing was introduced in SU18 as one exercise, spread out over one week. Nearly all students were unable to demonstrate proficiency with this skill in course assessments. Through a survey instrument, students also identified case briefing as a challenging component of the course. In response, a scaffolded learning approach was implemented in the second version of the course. The instructor and course designers thus divided case briefing into seven pieces with accompanying activities and formative assessments, spread them out over three weeks, and incorporated feedback and reflection along the way. Within the updated course, both formative (i.e., low-stakes quizzes, assignments, discussions, student reflections) and summative (i.e., assignments, mid-term, and final exams) assessments were implemented. Since scaffolding was introduced, students evidenced greater proficiency and expressed a better understanding of the individual pieces needed, as well as the larger overall process of briefing.

2 IMPLEMENTATION OF SCAFFOLDING

2.1 Version One (SU18)

For the case briefing exercise in SU18, students were provided with an overview of why lawyers and law students brief cases and then were given a PowerPoint slide deck that walked students through the
process of briefing itself. Students were then provided with a document containing the key elements of a case brief along with a case briefing template. After viewing the PowerPoint presentation, students were provided with a case to brief. Upon completion of this brief, students could review a second PowerPoint slide deck summarizing what they should have included in their case brief and asked to post questions to a discussion board. See Figure 1 below for how this learning activity was presented to students in the learning management system (LMS).

While the case briefing lecture approach works well in a face-to-face class setting, it did not work well as it was implemented in the SU18 online course. Students expressed confusion as to the case briefing pieces and overall process, and even though they were asked to brief three additional cases (using the same model) prior to taking the midterm, students were still unable to successfully brief the case that was assigned for the midterm. Students were asked for their feedback about case briefing generally and how it was taught to them online. Again, many expressed confusion and concern at not understanding the benchmarks, as well as a need for more practice. A case brief was again assigned as part of the students’ final exam for the online course, and students still could not grasp the main learning objectives that the instructor had been trying to disseminate with respect to case briefing.
Due to the student feedback, the consistent confusion, and the lack of learning on this subject, when Introduction to Law was to be offered a second time online, both the instructional designers and the faculty decided that a pedagogically-sound, scaffolded approach might work better in cementing this skill in the minds of students. Instead of introducing this skill in one week, the decision was made to spread the skill out over three weeks in gradual, modeled, feedback-intensive instruction.

2.2 Version Two (SP19)

Based on learning analytics captured by the LMS and related tools, student feedback and performance, and instructor and instructional designer reflection, revisions were made to the SU18 version of the course in preparation for the SP19 offering. The instructional designers and the faculty worked to implement scaffolding to better support student learning in the SP19 course. Scaffolding is a research-based instructional strategy in which temporary but essential assistance is provided in a way that facilitates students moving toward new skills, concepts, or levels of understanding [1, 2, 3]. In the SP19 course, the following scaffolds were thus implemented: (a) chunking content, (b) visual aids/graphics, (c) examples, (d) templates, (e) practice with feedback, (f) modeling expert thinking, and (g) student self-reflection on performance.

In conjunction with the scaffolding approach, each benchmark was broken down into a series of learning activities. As illustrated below in Figure 2, only four activities occurred over the one week where this exercise was introduced in SU18 while additional scaffolded activities for each of the seven case benchmarks were implemented in SP19.

<table>
<thead>
<tr>
<th>SU18 Case Brief Activities</th>
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<tbody>
<tr>
<td>1. View Powerpoint on how to brief a case</td>
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<tr>
<td>2. Complete case brief in optional template</td>
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<tr>
<td>3. View summary of correct brief</td>
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<tr>
<td>4. Reflect in discussion forum</td>
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<tr>
<th>SP19 Case Benchmark Activities</th>
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</thead>
<tbody>
<tr>
<td>1. Read short introduction</td>
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<tr>
<td>2. Review examples</td>
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<tr>
<td>3. Complete formative assessment activity</td>
</tr>
<tr>
<td>4. Read case “trap”</td>
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<tr>
<td>5. Read sample case in briefing template</td>
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<tr>
<td>6. Locate/highlight benchmark in sample</td>
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<td>7. Complete briefing template</td>
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<td>8. Submit completed template</td>
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<tr>
<td>9. View an instructor model video</td>
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<tr>
<td>10. Reflect on accuracy in discussion forum</td>
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In the next sections, the authors will discuss each of these scaffolds and how they were implemented within the LMS.

2.2.1 Chunking

Due to the importance of each piece of case briefing, in SP19 case briefing was chunked into seven benchmarks with accompanying activities and formative assessments, spread out over three weeks, and incorporated feedback and reflection along the way [4]. Each benchmark represented a key component of a case that students needed to identify and summarize as part of the case briefing process. See Figure 3 for a depiction of this breakdown.

<table>
<thead>
<tr>
<th>Briefing a Case Learning Exercises (3 weeks)</th>
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<tbody>
<tr>
<td><strong>Week 1</strong></td>
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<tr>
<td>Facts</td>
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<tr>
<td>• Brief Benchmark #1: Facts Part 1</td>
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<tr>
<td>• Brief Benchmark #1: Facts Part 2</td>
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<tr>
<td>• Facts Practice</td>
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<tr>
<td>• Facts Reflection-McBoyle</td>
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<tr>
<td>Procedural History</td>
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<tr>
<td>• Brief Benchmark #2: Procedural History Part 1</td>
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<tr>
<td>• Brief Benchmark #2: Procedural History Part 2</td>
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<tr>
<td>• Procedural History Practice</td>
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<tr>
<td>• Procedural Reflection-McBoyle</td>
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<tr>
<td><strong>Week 2</strong></td>
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<tr>
<td>Issue</td>
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<tr>
<td>• Brief Benchmark #3: Issue Part 1</td>
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<tr>
<td>• Brief Benchmark #3: Issue Part 2</td>
</tr>
<tr>
<td>• Issue Practice</td>
</tr>
<tr>
<td>• Issue Reflection-McBoyle</td>
</tr>
<tr>
<td>Holding</td>
</tr>
<tr>
<td>• Brief Benchmark #4: Holding Part 1</td>
</tr>
<tr>
<td>• Brief Benchmark #4: Holding Part 2</td>
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<tr>
<td>• Holding Practice</td>
</tr>
<tr>
<td>• Holding Reflection-McBoyle</td>
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<tr>
<td>Reasoning of the Court</td>
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<tr>
<td>• Brief Benchmark #5: Reasoning of the Court Part 1</td>
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<tr>
<td>• Brief Benchmark #5: Reasoning of the Court Part 2</td>
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<tr>
<td>• Reasoning of the Court Practice</td>
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<tr>
<td>• Reasoning of the Court Reflection-McBoyle</td>
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<tr>
<td><strong>Week 3</strong></td>
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<tr>
<td>Judgment</td>
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<tr>
<td>• Brief Benchmark #6: Judgment Part 1</td>
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<td>• Brief Benchmark #6: Judgment Part 2</td>
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<tr>
<td>• Judgment Practice</td>
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<tr>
<td>• Judgment Reflection-McBoyle</td>
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<tr>
<td>Court Opinions</td>
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<tr>
<td>• Brief Benchmark #7: Court Opinion Part 1</td>
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<tr>
<td>• Brief Benchmark #7: Court Opinion Part 2</td>
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<tr>
<td>• Court Opinion Practice</td>
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<tr>
<td>• Court Opinion Reflection-McBoyle</td>
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</tbody>
</table>

Figure 2. Case briefing learning activities in SU18 compared to SP19.

Figure 3. Case briefing as presented in SP19.
2.2.2 Visual Aid

The instructional designers and faculty collaborated with a graphic designer to devise a graphic that could be used to visually represent the seven components (benchmarks) of a case brief. The team settled on a puzzle illustration with each of the seven benchmarks representing a separate piece of the puzzle. Each benchmark puzzle piece was given a specific color. The colors were used in two ways. First, the color was used to signal to the students when a particular benchmark was the focus of an activity. For example, when students were learning about Facts, only the Facts piece of the puzzle was colored. Second, as they were introduced to each benchmark, students were asked to highlight portions of a sample case using the corresponding color. For example, when students were learning about Facts, they were asked to highlight the relevant facts within a case using the color of the Facts puzzle piece. The colors for each benchmark were selected from highlight colors available within Google Docs as students were provided with a Google Doc template (see section 2.2.5) that they used throughout these case brief activities. See Figure 4 below for an example of the visual aid and corresponding highlights in a case brief.

![Figure 4. Case briefing benchmark visual aid and corresponding highlights in a case brief.](image)

2.2.3 Examples

After an initial introduction to each benchmark, students were given three separate, increasingly complex case samples exhibiting that benchmark highlighted in the corresponding color [5]. The three example cases were displayed within the LMS pages using an embedded Google Slides presentation that was formatted to correctly display each case. See Figure 5 below for a page from the LMS displaying a portion of the Facts examples.

![Figure 5. Example of a page in the LMS presenting case brief examples.](image)
Once students made their way through the examples, they were then asked to practice identifying that particular benchmark and were given feedback on each attempt using a formative assessment quizzing tool called QuickCheck. This activity enabled students to identify a benchmark within the context of a case and receive immediate corrective feedback, thus helping them understand their accuracy without a detrimental impact on the students’ grades. Educators refer to this as a “low-stakes” assessment.

2.2.4 Practice with Feedback

In order to allow students to practice and receive feedback, three approaches were utilized [6]. First, students participated in a low-stakes QuickCheck activity as outlined above. Within each QuickCheck, students were presented a case and then asked to correctly identifying the benchmark within the case by responding to a series of multiple choice questions. Each QuickCheck was set up so that students received immediate feedback on their responses and could retake each quiz as many times as they desired. Second, students were provided feedback in the form of a video and PDF of a model response to each benchmark. Using the template provided (see section 2.2.5 for details), students were asked to identify and summarize a particular benchmark within a case. Once students submitted their attempt at this task, they were given access to a video of the instructor modeling how she completed this activity (see 2.2.6 for details), and a PDF document containing the model response. See Figure 6 for an example of how this video and model response were presented to students within the LMS. Third, students were provided general feedback in the form of a weekly video that the instructor created based on common issues she identified in the submitted benchmark practice assignments. These videos were posted in the LMS at the beginning of each week, and students were required to share a reflection related to their performance and any issues learning issues they experienced. For both the second and third points outlined above, students posted their reflections publicly using the LMS discussion forum tool.

![Task]

In this reflection assignment, you will review the example below and watch a video explanation of the Facts of the McBoyle case.

- McBoyle’s Example: “The petitioner was convicted of transporting from Ottawa, Illinois, to Guymon, Oklahoma, an airplane that he knew to have been stolen...”

To see a copy of what our case brief template looks like so far, as highlighted in the video, you may open and download a copy of the McBoyle Facts Reflection Case Brief.

![Reflection]

Post a reflection using the guiding questions below.

- Did you have the same answer as provided in the example above? If yes, was it easy to identify the benchmark? If no, why do you think you had a different answer?

Figure 6. Course page showing instructor model response video and reflection assignment.
2.2.5 Template

The final product of the case briefing benchmark exercise was for the students to read an assigned case, spot the benchmarks within that case via the practice and feedback scaffolding approach outlined above, and then turn in a completed brief for that case on a single document as an assignment. To facilitate this, in SP19, students were all given one Google Doc template to work with over the three weeks of the case briefing activities. This approach allowed students to use one document, continuously input their work in that single document as they learned about each benchmark, edit any answers that they had that were incorrect (after learning about the correct answer from the instructor feedback), and have a final, complete product at the end to submit [7,8]. Students were also provided an opportunity to reflect on their progress at the end of the introduction of each piece (as discussed above in section 2.2.4 and below in section 2.2.7).

2.2.6 Modeling Expert Thinking

Because the instructor has expertise in case briefing, it was important to tap into this for the benefit of the students. Modeling expert thinking was achieved in the practice with feedback (section 2.2.4) by having the faculty member walk students through completing a case brief in a video using the same document template the students were required to work in [9,10]. In the video, the instructor was able to model her thinking and decision making process by “thinking aloud” as she completed the benchmark activity.

2.2.7 Student Self-Reflection

It is important for students to reflect on what they have learned before moving on to additional learning [11]. To allow for this self-reflection, students were asked to reflect on what they learned at each benchmark of the case. Students were asked to reflect on whether or not they had gotten the same answer as the instructor who had modeled expert thinking. If they had gotten the same answer, they were encouraged to reflect on why they were able to identify the correct answer and if they had not gotten the correct answer, they were encouraged to reflect on why they were not able to identify the correct answer. As noted above (see section 2.2.4), the instructor used these student reflections, in conjunction with the work students submitted for each benchmark, to identify additional learning issues she could address in her weekly videos.

2 REFLECTION ON IMPLEMENTATION

Given the feedback from students in both courses, and a reflection on the quality of student work, the scaffolding that was implemented in SP19 appears to have improved the learning process for students. The student feedback from SU18 was that the case briefing exercise was difficult and unclear. This perception was also noted by the instructor based on their difficulties briefing on both the midterm and the final exam. After implementing the scaffolding techniques outlined in this paper, the students reported greater clarity and understanding with the case briefing assignment. One student reflected, “I enjoyed this assignment because I was pushed to recognize my own knowledge from the previous modules and apply it to a brand new case. This is the only true way to learn!” Another student stated, “I believe that this module was very helpful. Not only were we shown examples and given interactive activities to brief cases, but the professor also took the time to explain the right answers and further explain the topics.” The instructor also reported that students in general evidenced greater understanding of the skills needed for case briefing as compared to SU18.

3 CONCLUSION AND NEXT STEPS

Based on student feedback and performance in SP19 and the positive results seen throughout that course, next steps may include conducting in-person interviews to collect additional data from students regarding their impressions of the course, greater detail on their feedback, and best practices for successful engagement techniques. The outcomes of SP19 also warrant more formal research to better understand the impact and utility of the scaffolding techniques described in this paper.
REFERENCES


