

The RECAP and SCAFFOLDS Frameworks: Engaging Students in Self-Reflection and Self-Regulation Within Online Learning

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Abstract: This case study focuses on our efforts to engage students in one asynchronous, online undergraduate legal “pipeline” course, and the substantive revisions made to the course over 3 years to increase student engagement, self-reflection, self-regulation, and metacognition. A pipeline program is designed to identify, support, and guide students from diverse backgrounds to their graduate-level field of interest. We describe two strategic uses of a learning management system (LMS) to increase student engagement and self-regulated learning: a weekly reflection and engagement routine that was developed to address concerns regarding student-to-faculty engagement identified during the first version of the course, and a scaffolded multi-week skills-based activity that was developed to reinforce a critical course learning objective and help students monitor their own learning progress. During each iteration of the course, user data collected from the LMS and other integrated tools, along with student feedback and instructor and designer reflection on practice, informed substantive revisions to the learning activities described. Over three versions of the course, data suggest increased engagement, self-reflection, and self-regulation. We reflect on the implications of this work and possible applications to other settings.

Keywords: student engagement, self-regulation, self-reflection, metacognition, self-regulated learning.

While online learning has been a growing field for many years, instructors continue to face the challenge of using a learning management system (LMS) to replicate the level of interaction of a face-to-face experience in the online environment. From having the opportunity to clarify the meaning of information to being able to relay their expertise in a way that is digestible to the students, instructors need to strategically design high-quality interactions within online courses using an LMS. This article focuses on two frameworks, RECAP (an acronym for reflect on learning, explain what you learned, compare your work, act on feedback, and plan for success) and SCAFFOLDS (an acronym for skill is defined, context is explained, access examples in context, formative assessment with immediate feedback, further clarification with more context, opportunity for application practice, learner submits application practice, deep dive into expert model of application practice, and self evaluation with RECAP), that support opportunities for feedback, self-reflection, and other aspects of self-regulated learning. Using data captured within the LMS, these frameworks enable increased instructor and student engagement, facilitate clear presentation, and provide opportunities for students to practice and apply key skills and knowledge. In this article, we describe these frameworks situated within a specific prelaw course. An effective and ongoing collaborative relationship between the instructor and

designers made this course a prime environment in which to develop and iterate on approaches to promote scaffolded, engaged, and self-regulated learning opportunities.

Review of the Literature

One enduring focus of academic research across all disciplines has been student engagement. Research has suggested engagement is positively related to student success in face-to-face and online learning environments (Lawson & Lawson, 2013). Kuh (2009) argued the premise behind student engagement is that “the more students study a subject, the more they know about it, and the more students practice and get feedback...the deeper they come to understand what they are learning” (p. 5). Within online education, a physical classroom is replaced with a virtual one and students interact with their instructor, course content, and peers through an LMS. An LMS enables students to engage in various interactions, activities, and content, including practice exercises, discussion forums, video-based lectures, documents, and electronic textbooks. In the virtual environment of the LMS, student engagement can be classified as student behaviors captured by the system (e.g., total time in a course, page views, video plays, user clicks, assignment submissions; Pazzaglia et al., 2016). Though user logs record what a learner clicks on within an LMS, and not the quality of interaction with course materials, peers, or the instructor, research has suggested a positive correlation between these interactions and course outcomes. Studies demonstrate that student behaviors such as higher frequency of log-ins, clicks, and total time logged into an LMS are associated with higher course grades (Hung et al., 2012; Morris et al., 2005; Pazzaglia et al., 2016). We used this definition of engagement as we sought to revise and improve on the design of the course and frameworks described in this case study.

In addition, the designs of the RECAP and SCAFFOLDS frameworks were influenced by self-regulated learning theory. Self-regulation requires planning, monitoring, and evaluating and can range from task understanding (Fransen et al., 2011) to strategic planning and action (Järvelä & Hadwin 2013). Self-regulated learning theory extends beyond cognitive processes and outcomes to include interactions between motivation, emotion, metacognition, and strategic behavior (Zimmerman, 2011). Within an LMS, prompting regulation requires support (Järvelä et al., 2015), and this support is built into the design of the frameworks outlined in this article.

Context of Framework Development

Overview of the Pathways program. All research for this article was conducted via a study of the Pathways program’s wholly online, asynchronous Introduction to Law and Legal Process (Introduction to Law) course at Indiana University Purdue University Indianapolis (IUPUI). The Pathways program is a “pipeline” program, designed to engage students from diverse backgrounds and introduce them to law school and the legal profession. Pipeline programs are designed to connect diverse students to higher education opportunities by breaking down any barriers (academic, financial, social and emotional issues) that might prevent them from experiencing or attending college or graduate school. Given the importance of supporting these students for success in the program as well as education beyond the program, we saw a need to develop specific strategies that over three versions of the course evolved into the RECAP and SCAFFOLDS frameworks. This case study focuses on the Introduction to Law course and the data-informed revisions made to the course and frameworks over 3 years to increase instructor presence, student engagement, and self-regulation using the elements of the Canvas LMS.

Introduction to Law course design. For course development needs, the Robert H. McKinney School of Law at IUPUI created a partnership with University Information and Technology Services (UTS)

at Indiana University (IU) to assist with the creation of online courses that would have sufficient rigor yet be clearly understandable. Under the umbrella of UITS, the eLearning Design & Services department provided instructional designers to work alongside faculty, 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.

Introduction to Law was developed for undergraduate students who were interested in the law but whose backgrounds have historically been underrepresented in the legal profession. 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. Critical skills include note taking, outlining, case briefing, exam taking, effective studying, and stress and time management. How to brief a court case (case briefing) was specifically identified as being a primary concrete skill that students needed to master. Case briefing consists of identifying seven common pieces of information in court cases, referred to as “benchmarks” in Introduction to Law. The seven benchmarks are facts, procedural history, issue, holding, reasoning of the court, judgment, and additional court opinions. Benchmarks help students understand what happened in a case and the reasoning behind the outcome of the dispute, critique that reasoning, and think about the future implications of the case. Without mastering this skill, students would struggle to succeed both in the Introduction to Law course and in law school.

The first version of Introduction to Law was offered in the summer semester of 2018 (SU18) with classes spanning a 12-week period. The second offering of Introduction to Law was offered in the spring semester of 2019 (SP19) with classes running for 16 weeks. The third version was offered in the spring semester of 2020 (SP20), at the time this article was under review, with classes running for 16 weeks. For an overview of students in each version, see Table 1.

Table 1. Overview of students.

Course	No. of students	Gender (%)		Class year (%)				
		Male	Female	First	Second	Third	Fourth	Other
SU18	16	25	75	13	44	6	31	6
SP19	19	79	21	16	53	21	10	0
SP20	20	85	15	20	50	10	10	10

Method

Data used to inform the design and revision of the RECAP and SCAFFOLDS frameworks consist of user data from the Canvas LMS (i.e., total activity time in course, page views, assignment completion rates) and video-play data captured by video platforms (e.g., Kaltura, YouTube). Student data from the LMS were collected and exported into an Excel spreadsheet for analysis. Basic descriptive statistics were applied to identify student engagement trends within specific course activities as well as across the three versions of the course outlined in this article. User data were triangulated with student responses to various survey instruments created to gather feedback on the course throughout the semester, as well as ongoing reflective conversations conducted by the instructor and instructional designer on a regular basis through each iteration of the course.

Data from three versions of the Introduction to Law course were collected and analyzed: SU18 (version 1), SP19 (version 2), and SP20 (version 3). While the SCAFFOLDS framework used within

the case briefing exercises was fully implemented by the end of the 4th week, the RECAP framework was used weekly throughout the entire semester.

Development of RECAP and SCAFFOLDS Frameworks

RECAP development. In law school, as in any discipline, there is a great need to take time to reflect on learning, be able to articulate understanding, receive feedback, and incorporate feedback into future learning following a process of reflection. Therefore, incorporating the process of reflecting on learning was identified as a priority in Introduction to Law, especially given the focus of the Pathways program of which it was a part.

In SU18, the design approach called for the instructor to review assignment submissions from the previous week and then record a video as a class announcement sent through the LMS with feedback on how students could improve their work. Because this was an announcement, viewing it was an ungraded and optional assignment. This approach proved to be fairly ineffective, as an assessment based on both the LMS analytics and feedback from students showed. Despite instructor efforts to support student learning through expert thinking, students still expressed confusion about the coursework and the analytics showed that students were not playing the videos. For an overview of weekly announcement video plays, see Table 2.

Table 2. Percentage of weekly announcement videos played each week in SU18.

Course	Week											
	1	2	3	4	5	6	7	8	9	10	11	12
SU18 (%)	N/A	N/A	38	63	31	50	69	31	SB	31	13	0

Note. N/A = Not applicable; SB = spring break.

For the second iteration of the course (SP19), a more structured approach that was loosely based on the K–W–L teaching model—know, want to know, learned (Ogle, 1986)—was taken to allow for feedback and self-regulation. K–W–L is a process of providing students with prompts to allow them to activate prior knowledge, set learning goals, and summarize learning. Using this model as a foundation, the designers and instructor created a weekly feedback-in-review assignment. This assignment consisted of a discussion page in Canvas with a prerecorded video of general feedback from the instructor. For an example, see Figure 1. Instructor feedback was directed at student performance on the learning activities from the previous week. Questions helped students articulate what they had learned the previous week, what they were still curious about, and what they hoped to learn from the next week/module, and space was provided for them to share their answers within the discussion page in Canvas. While initially there was a significant increase in engagement and self-reflection compared to SU18, video plays and student engagement dropped off in later weeks.

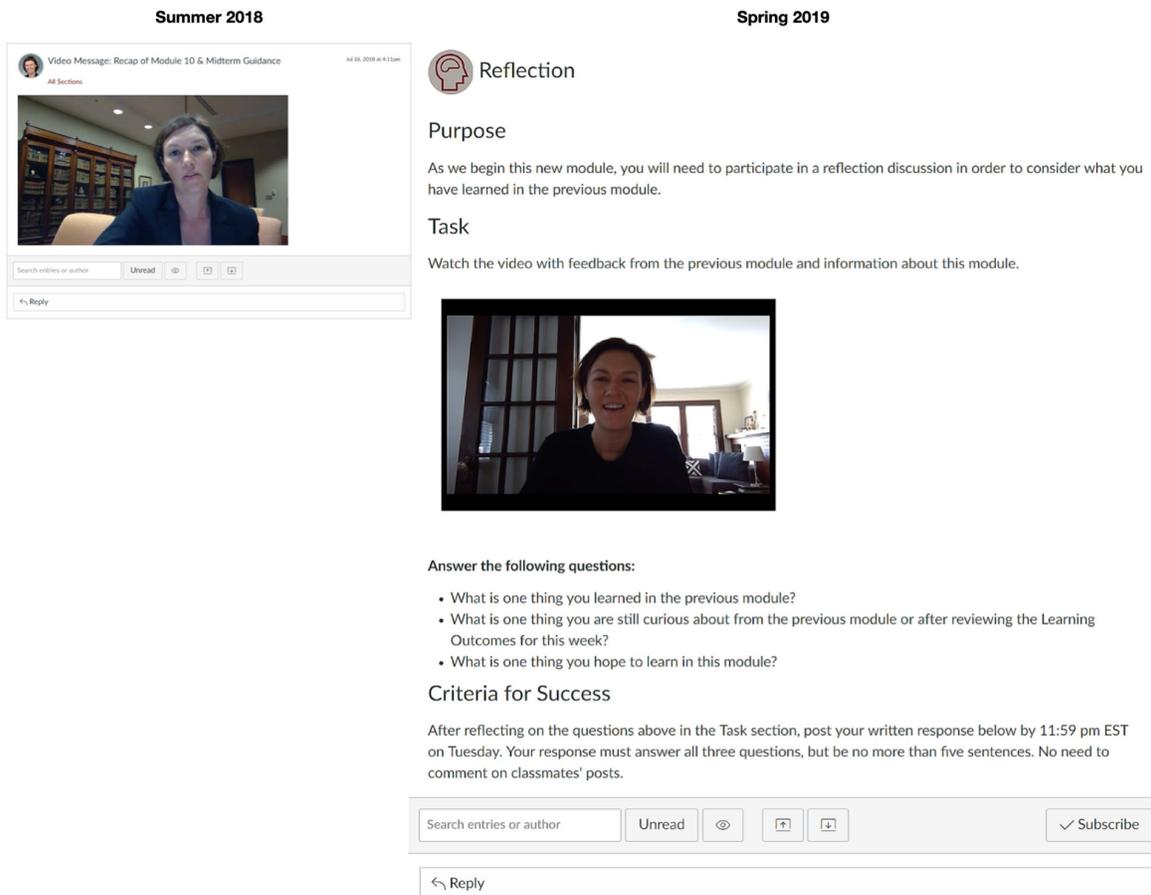


Figure 1. Screenshots of summer 2018 video announcement and revised spring 2019 video as a Canvas discussion assignment.

The quality of answers in the discussion posts along with analytics of video views suggested that there was a lack of variety in guiding questions and a lack of specificity in feedback, which led to further adjustments to SP20 and the development of RECAP as a means for academic success. RECAP is a structured process for instructors and students to follow that emphasizes the cumulative nature of learning. Also, using a discussion page in Canvas and a prerecorded video with feedback from the instructor about performance on the learning activities from the previous week, RECAP spells out more specific, measurable, and timely guiding questions for students. As seen in Figure 2, RECAP requires students to reflect on learning, explain what they learned, compare their work to feedback provided by the instructor, act on the feedback and plan for success in future work. RECAP has been used in two different ways within the context of Introduction to Law, which we discuss below.



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Figure 2. The RECAP framework.

SCAFFOLDS development. Case briefing, when taught in person, typically consists of a 1-hr interactive lecture at law school orientation for all incoming law students, with the instructor using a PowerPoint to highlight key terms and the general approach to be used for the skill. Students are then given a case briefing template and asked to go through two sample cases. Each case is around one to two pages long, and both cases deal with the same area of law (criminal law) and the same general legal question (can a certain defense apply in a situation not anticipated by the law at issue). Both cases give students clear examples of cases that contain all seven benchmarks, and they are similar in how they deal with the same legal issue.

The instructor for Introduction to Law is the same instructor who teaches this skill at IU Robert H. McKinney School of Law's orientation, and students consistently report that this session was their favorite of all orientation sessions offered, because it gave them the opportunity to learn about and immediately practice a skill.

Given the positive feedback it received when taught in the live classroom setting, case briefing in SU18 (Figure 3) was introduced very much the same way it had been taught live. In the SU18 online course, the instructor provided a passive introduction of key terms and context, embedded a PowerPoint slideshow that detailed the process of case briefing, provided a template for students to work off of, and ended with having students prepare a case brief (an outline of the seven key pieces that normally are within a court opinion) of a one-page court case.

This week you will be introduced to all of the "benchmarks" of a case brief. Case briefs are summaries that we create of the cases that we read. Each case brief contains several noted "benchmarks" or sections, that should be present in the cases that we read, helping us to better organize our thought processes about what it is that we have read. As law students, case briefs make up the main way we prepare for class and retain information on cases that we read from our text.

We brief cases for several reasons:

- So that we can understand what happened;
- So that we can understand the reasoning behind the outcome of the dispute;
- So that we can critique that reasoning; and
- So that we can think about the future implications of the case and the reasoning.

Case briefs are not copying all of the case verbatim from our texts.

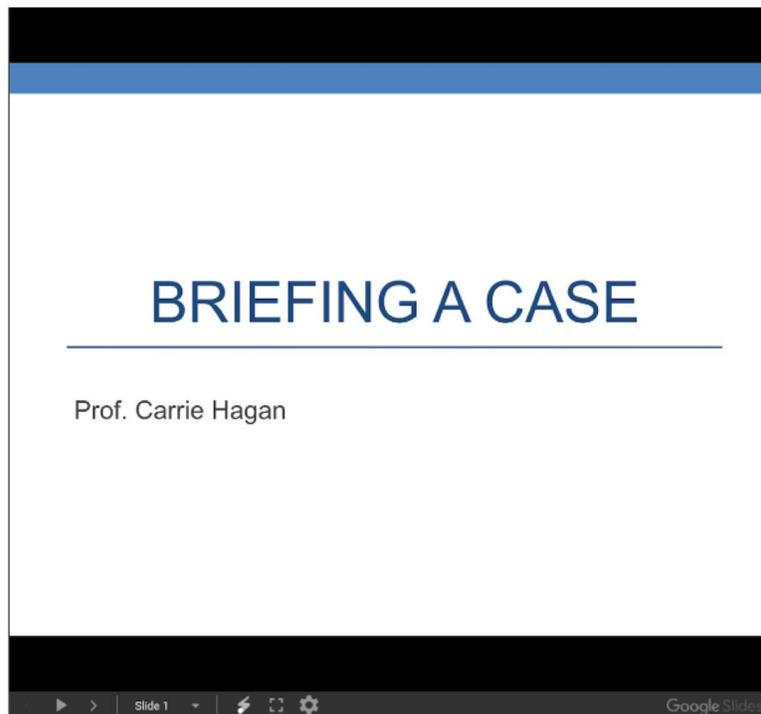
By briefing our cases, we then end up with an organized system of notes for each class that we take, which in turn:

- Makes us prepared for class and gives us practice on our legal writing;
- Creates organized, ready-made study materials for the final exam; and
- Gives us a system for understanding and distilling cases.

To better understand this process, follow the instructions below to work through a couple of examples.

Watch

Here are a few slides to get you started. If you would, open and work your way through How to Brief a Case. Note as you work your way through them that the main thing to take away from this presentation is that most cases all contain the same things, even if noted a little differently in each case.



Read

Let's see how you fare on case briefing. First read the [Case Briefing 101 Handout](#) to briefly review what you will be looking for, and then after you have read that handout, read [State v. Worley](#) and brief it, using the information you've learned along the way. Should you find it helpful, feel free to use this [Sample Briefing Template](#) form to organize all of your case information.

Figure 3. SU18 case briefing exercise on a Canvas page.

Although the instructional approach was effective in the face-to-face setting, in SU18 nearly all students could not successfully identify the pieces of a case and struggled to clearly identify those pieces in related assignments throughout the semester. For example, students averaged around 70%

on the first case briefing assignment and around 66% on the second, when the bulk of those assignments expected the students to identify and restate the pieces for each case. As can be seen in Figure 4, the answers to the case were provided for the students to review after they completed their first case briefing assignment, and students were given an opportunity to ask clarifying questions. Additionally, both the midterm and the final exam expected students to successfully brief a case, but students averaged 52% on the midterm exam and 57% on the final exam (note that for all subsequent semesters the same midterm and final exams were used for consistency and data collection purposes).

Now that you've briefed *State v. Worley*, see how you did by watching the slideshow below and debriefing the case. Your final task after completing all of the above will be to create a case brief of *State v. Cole*, to be found in the next step, and which you will submit as an assignment.



Review and Recap State v. Worley

Below is a breakdown of what you should have pulled out of *State v. Worley* for your case brief. As you click through the slides, see how you did on spotting the various benchmarks in our sample case, and putting the needed information where it should go. If you have an issue viewing the slides below, you can access them [here](#).

State v. Worley

- **You have now read and briefed *State v. Worley*. Let's see how you did identifying our case briefing benchmarks:**
- What is the name/citation of this case?
- What are some relevant facts?
- What is the procedural history?
- What is the issue?
- What is the holding?
- What is the judgment?
- What are the rules relied on in making the decision?
- What is the court's reasoning?
- Are there dissents or concurrences?



Questions

If you have questions about what I presented in the slideshow or need clarification about a point I made, please use the discussion below to share your thoughts. I will publicly respond to questions below so that everyone benefits.

Figure 4. Screenshot of a Canvas discussion reviewing the SU18 case briefing exercise.

The SU18 Canvas analytics showed low student engagement with specific module pages pertaining to the case briefing assignment (Table 3). Students all viewed the actual assignment page, but only 50% of students viewed the page giving a summary of the answers to the assignment, and only 38% viewed the grading criteria. No students viewed the page that asked them for their questions or feedback on the assignment.

Table 3. Percentage of students engaging in case briefing components in SU18.

Case brief component	Student engagement (%)
How to brief a case assignment page view	100
Summary of correct case brief page view	50
Review and recap discussion forum post	0
Grading criteria for case brief page view	38

Taking into consideration student performance and analytics in the SU18 course as described above, the instructor and designers mapped out a scaffolded approach to case briefing for the SP19 course. See Figure 5 for an overview of the learning experience for each of the benchmarks (facts, procedural history, issue, holding, reasoning of the court, judgment, and additional court opinions). The scaffolded approach broke case briefing down into the seven benchmarks of a case and spread the seven benchmarks out over 4 weeks instead of 1. Then the students were guided through a cycle for each benchmark. The cycle began with a benchmark being introduced and defined; then each benchmark was shown within the context of the case. After that, students were provided a formative assessment opportunity in the form of a low-stakes quiz. After completion of the quiz, students were presented with the correct answers, allowing them to assess their performance. Following this, further clarification was provided about the characteristics of the benchmark in the context of a case brief "case trap." A "case trap" in this context let students know that now that they were familiar with one presentation of a benchmark, other presentations/configurations in cases were possible as well, and taught them to be aware of multiple ways a benchmark could appear. Next, students were asked to practice locating each specific benchmark and submit their answer. Following their submission, the instructor provided the answers in the form of a prerecorded video. Finally, the students were asked to reflect on their understanding and performance on each benchmark. This cycle was repeated for each benchmark, allowing students to practice each one in depth.

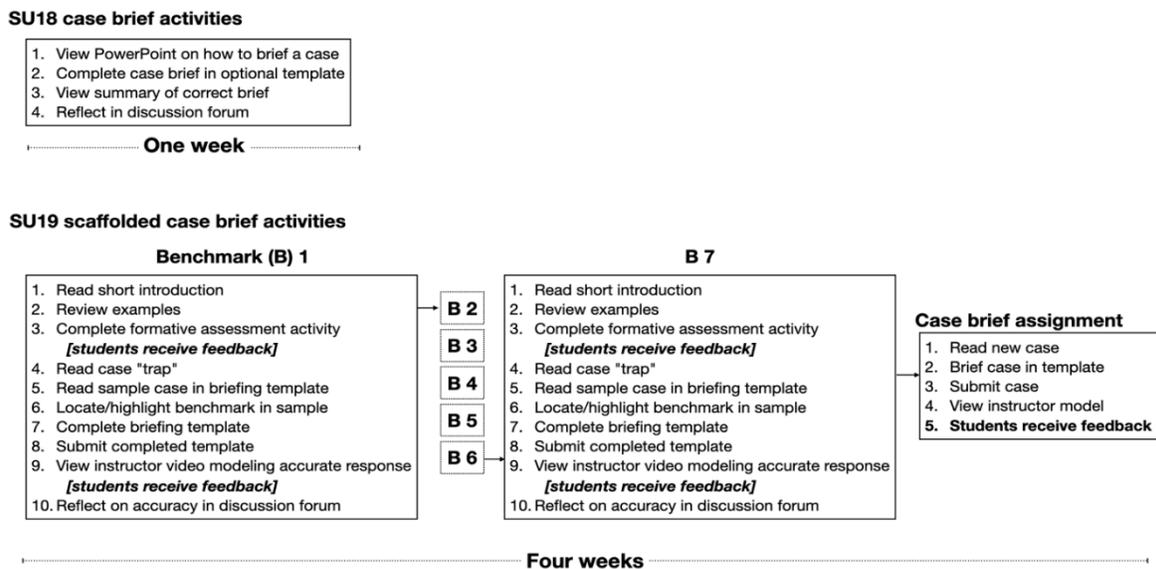


Figure 5. Illustration of the overview of the learning experience for each of the benchmarks.

After reviewing the feedback and analytics within Canvas for SP19, based on the definition of engagement referred to earlier in the article (Pazzaglia et al., 2016), we drew up another hypothesis: that this new delivery method for teaching the skill of case briefing was highly effective in engaging the students. Table 4 below shows the percentage of students engaging in case briefing components in SP19.

Table 4. Percentage of students engaging in case briefing components in SP19.

Benchmark (B) component	B 1	B 2	B 3	B 4	B 5	B 6	B 7
Formative assessment	100%	100%	100%	100%	100%	100%	100%
Benchmark submission	100%	95%	100%	100%	95%	100%	95%
Video model	79%	89%	79%	84%	95%	84%	74%
Reflection discussion	100%	100%	100%	100%	100%	100%	95%

In SP20, the instructor and designers formalized the process they followed in the scaffolded course design in SP19 by referring to it as SCAFFOLDS and specifying RECAP in the final step. For an overview of the SCAFFOLDS framework, see Figure 6.



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Figure 6. The SCAFFOLDS framework.

Framework Implementation

RECAP Framework

RECAP was first used in SP20 in the context of student engagement on a weekly/modular basis (see Figure 7 for an example). The RECAP assignment came as the first assignment at the beginning of each new week or module of Introduction to Law. To set up this assignment, the instructor, with the aid of the designers, created a set of prompts to lead students through the RECAP process. Each week the instructor reviewed the module-level learning outcomes from the previous week. The instructor next reviewed assignment submissions from the previous week, looking for common areas of improvement associated with the learning outcomes, and then recorded videos with feedback based on the areas of improvement identified in the previous step. This video was then uploaded prior to the start of the next week/module. When students went to complete the assignment, the first step was to review the feedback video before following the RECAP steps. Each week followed the same format, which allowed the students to get used to reflecting in a consistent way and, as no additional editing was required by the instructor because the prompts were consistent from week to week, allowed the instructor to have consistent and manageable opportunities for student feedback.

Purpose

As we begin this new module we will **RECAP** from the previous week:

R E C A P

Reflect
on your week

Explain
what you learned

Compare
your work

Act
on feedback

Plan
for success

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R: Reflect on your week

- Thinking specifically about the learning outcomes and assignments for this past week, what did you learn? Were you successful in following your strategy for success?

E: Explain what you learned

- In your own words, summarize what you learned this week.

C: Compare your work to the general feedback

- Look at your work compared to the video feedback provided by your instructor.

A: Act on feedback

- Create 1-2 specific, concrete action steps you will take to improve your work based on the feedback you received. Feedback is information you received from the instructor as well as your own analysis of your work compared to the model.

P: Plan for success for this week

- Based on feedback and your reflection, what will you apply to make this next week a success? What is one specific strategy you will take to make sure you are on track for a successful week?

Task

Watch the video with feedback from the previous module and information about this module.



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For your RECAP reflection, answer the following prompts:

- This past week I learned...
- Based on the feedback provided in the video, I noticed...
- Based on how I did this time, next time I will focus on <list 1-2 concrete, specific action steps you will take to improve your work based on the feedback>...
- This week my strategy for success is...

Criteria for Success

Post your written response below by 11:59 pm EST on Tuesday. Your response must address all prompts and components of RECAP. No need to comment on classmates' posts.

Example of a **good** RECAP post: This past week, I learned that I need to use facts and not feelings when arguing a side. Based on the feedback provided in the video, I saw an example of how to use facts to argue a case instead of feelings. Based on how I did this time, next time, I will focus on creating an outline for my argument before I write it to make sure I don't use words like "I feel" or "I think". This week my strategy for success is to read more examples of how lawyers use facts of a case to argue their side.

Example of a **bad** RECAP post: I learned that I need to submit my homework on time. My answer was correct based on the feedback, so I don't need to review my work.

Figure 7. Screenshot of the weekly RECAP activity in Canvas.

The second context in which RECAP was used was within the SCAFFOLDS framework for the reintroduction of the case briefing skill as a more focused version of the process. When RECAP was used at the beginning of the week to help students engage in self-reflection and metacognition, the process was related to general learning from the previous week. Placing RECAP within the SCAFFOLDS framework for a specific skill provided the instructor and students with a more focused opportunity to reflect on work and feedback and plan for success on that specific skill. Similar to the weekly RECAP, the RECAP that occurred within the context of the SCAFFOLDS framework allowed students to receive specific feedback on their work. Implementation and discussion of how the general concept of RECAP was incorporated into the SCAFFOLDS framework is discussed below.

SCAFFOLDS Framework

The SCAFFOLDS framework is used to scaffold complex skill development. The primary use of the SCAFFOLDS framework was tied to the skill of case briefing in Introduction to Law, encompassing the first 4 weeks of the course. The steps outlined in the SCAFFOLDS framework were repeated for each of the seven benchmarks (Figure 6). The steps were placed in a Canvas module that required students to walk through it in a linear fashion. An example of what this looked like in the Module view in Canvas can be seen in Figure 8.

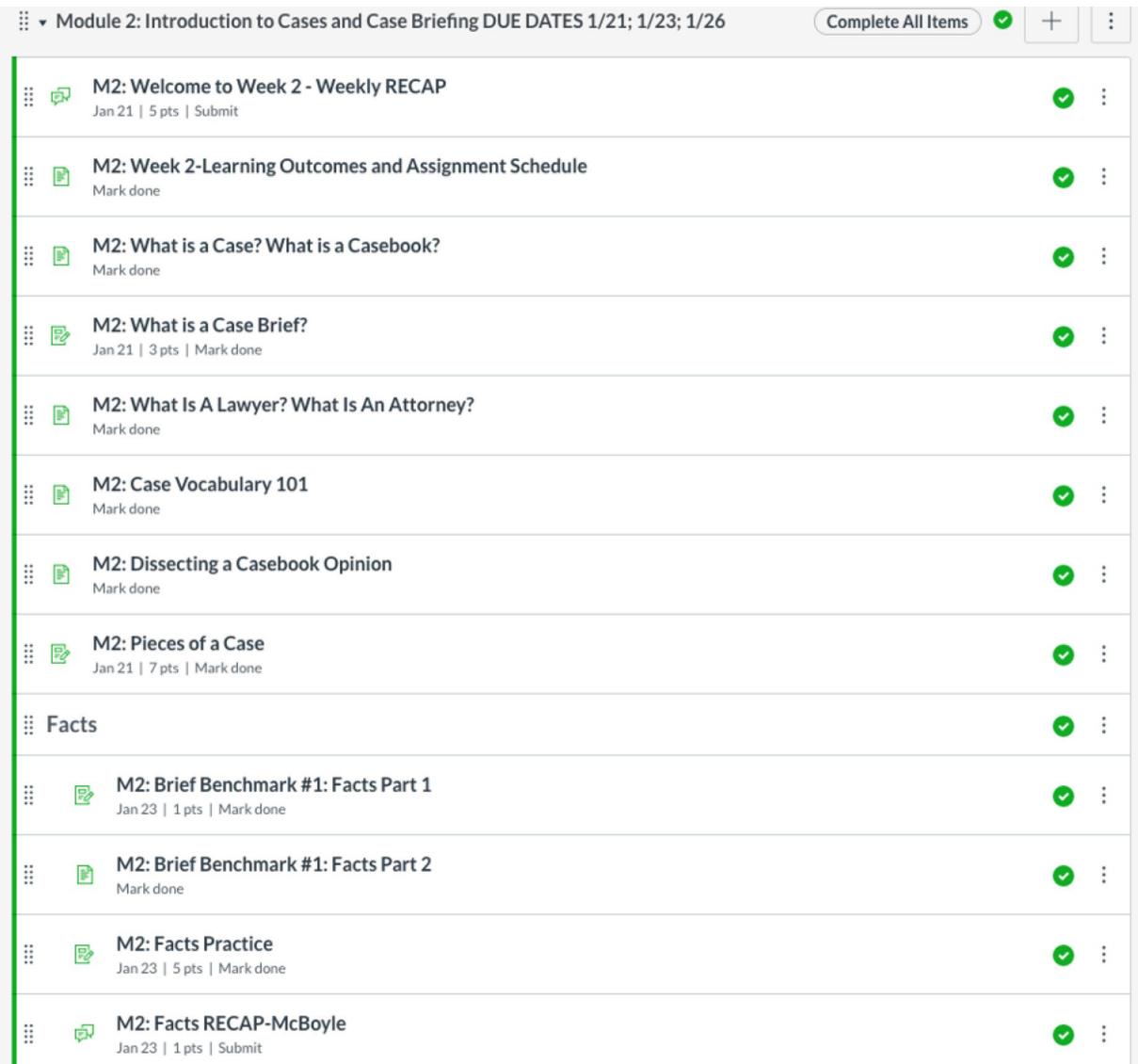


Figure 8. Screenshot of benchmark components within a Canvas module.

Skill is defined. Within the SCAFFOLDS framework the first step is to define the skill that the activities will be focused on. In Introduction to Law, this was being able to brief cases. An example of this skill definition can be seen in Figure 9. In addition to the larger skill of being able to brief a case, the skill within case briefing is being able to identify the seven benchmarks of a case.



What is a Case Brief?

One of the main things law students are eager to learn is how to brief a case, or compile a "case brief". **A "case brief" is where you compile your notes on a case in an organized way.** We organize our case briefs by identifying common pieces of information in the cases we read and learning to understand why they are important to what we are reading. I call these case pieces "benchmarks" - and in every case you read, you should be able to find the following benchmarks (with a little practice) located somewhere in that case opinion. **Case Briefs and their Benchmarks give us the essential pieces that we need later for class discussion, for when we are getting ready to study for our exams and to allow us to focus on the rules of law that cases stand for, so that we may apply those rules to other sets of facts (which usually happens on a law school exam).**

We brief cases for several reasons:

- So that we can understand what happened;
- So that we can understand the reasoning behind the outcome of the dispute;
- So that we can critique that reasoning; and
- So that we can think about the future implications of the case and the reasoning.

Case briefs are not copying all of the case verbatim from our texts.

By briefing our cases, we then end up with an organized system of notes for each class that we take, which in turn:

- Makes us prepared for class and gives us practice on our legal writing;
- Creates organized, ready-made study materials for the final exam; and
- Gives us a system for understanding and distilling cases.

Figure 9. Screenshot of a Canvas page defining the skill of case briefing.

Context is explained. Next, explaining the context to learners will help them see where and how this specific skill is applied in a specific field. For example, in Introduction to Law, the context of case briefing was explained to students so that they could be prepared for law school and understand how to read and understand the cases that they would be assigned. An example of how this context was presented can be seen in Figure 10.

Pieces of a Case

Each case that you will read contains several key pieces of information - information that tells us as the reader what question the court issuing the opinion is trying to solve; how they solve it; what the outcome is at the end; and what it means for the facts involved.

For Modules 2-4 of this course, we will practice learning what these different pieces look like, and the meaning that each brings to a case.

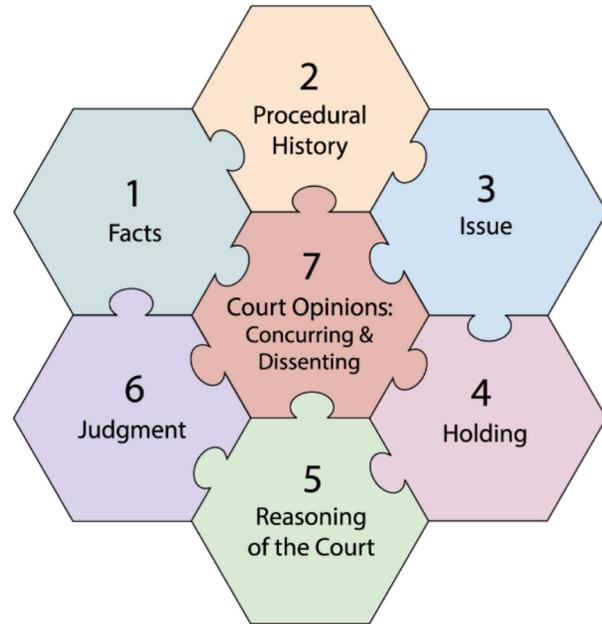


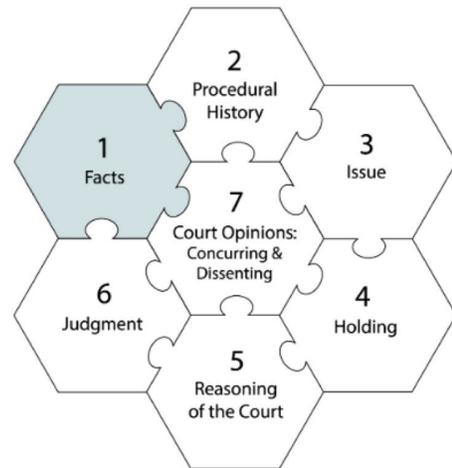
Figure 10. Screenshot of a Canvas page explaining the context for case briefing and an identification of the seven benchmarks of case briefing.

Access examples in context. The next step in the SCAFFOLDS framework is to provide students with access to examples in context. In Introduction to Law, this meant providing students three examples of each benchmark within the context of a case. Students were thus able to see how each case is made up of these benchmarks. See Figure 11 for an example of what this example context looks like.

Finding Our Facts

As we just learned, the facts of a case are the case's reason for existing - and facts involve what happened *before* the case was filed in court.

When we look for our facts, we are looking for some sort of a story that the court gives us about what gave rise to the litigation in court.



What do facts look and sound like?

Here are some highlighted examples of what facts look like in the cases that we read - note how they all sound like stories. They sound like stories because *they are stories*. Facts are the stories of what happened before the case went to court. **All of the facts below are found at the very beginning of the court cases that they come from - and the beginning of cases is where we generally find facts.** This is because we need to know what happened before in order to know what the court is trying to do now.

Use either the right arrow or dropdown menu on the bottom left corner of the Google Slides below to view the three (3) slides below for examples of what facts in cases look like:

Example #1

Estate of Hemingway v. Random House, Inc.
Court of Appeals of New York, 1968.
23 N.Y.2d 341, 296 N.Y.S.2d 771, 244 N.E.2d 250.

FULD, C.J. On this appeal -- involving an action brought by the estate of the late Ernest Hemingway and his widow against the publisher and author of a book, entitled "Papa Hemingway" -- we are called upon to decide, primarily, whether conversations of a gifted and highly regarded writer may become the subject of common-law copyright, even though the speaker himself has not reduced his words to writing.

Hemingway died in 1961. During the last 13 years of his life, a close friendship existed between him and A.E. Hotchner, a younger and far less well-known writer. Hotchner, who met Hemingway in the course of writing articles about him, became a favored drinking and traveling companion of the famous author, a frequent visitor to his home and the adapter of some of his works for motion pictures and television. During these years, Hemingway's conversation with Hotchner, in which others sometimes took part, was filled with anecdote, reminiscence, literary opinion and revealing comment about actual persons on whom some of Hemingway's fictional characters were based. Hotchner made careful notes of these conversations soon after they occurred, occasionally recording them on a portable tape recorder.

During Hemingway's lifetime, Hotchner wrote and published several articles about his friend in which he quoted some of this talk at length. Hemingway, far from objecting to this practice, approved of it. Indeed, the record reveals that other writers also quoted Heminawav's conversation without anv objection from him. even when he was

Figure 11. Screenshot of a Canvas page showing an example of accessing examples in context for the facts case briefing benchmark.

Formative assessment with immediate feedback. Formative assessment is critical when it comes to guiding students' understanding of concepts and lessons, but the real challenge in an online course is

how to provide immediate feedback in an asynchronous setting. In Introduction to Law, we used a variety of tools to provide immediate feedback to students as they worked through the benchmarks of a case. At this step in the SCAFFOLDS process, the tool was Quick Check, a graded, formative assessment tool that was created at IU (see Figure 12 for an example). Quick Check questions can be placed on the same page as content and allow students to test their knowledge of the material. After all questions are answered, Quick Check will show the number correct. Students can take the Quick Check as many times as needed.

Let's see if you can find the facts in the case below.

Task:

1. Read the case below.
2. Identify the facts within the case.
3. Choose from the multiple choice answers below to identify the facts of the case

QUESTION 1 OUT OF 1

51 S.Ct. 340
Supreme Court of the United States
McBOYLE v. UNITED STATES.

Mr. Justice HOLMES delivered the opinion of the Court. The petitioner was convicted of transporting from Ottawa, Illinois, to Guymon, Oklahoma, an airplane that he knew to have been stolen, and was sentenced to serve three years' imprisonment and to pay a fine of \$2,000. The judgment was affirmed by the Circuit Court of Appeals for the Tenth Circuit. 43 F.(2d) 273. A writ of certiorari was granted by this Court on the question whether the National Motor Vehicle Theft Act applies to aircraft. *26 Act of October 29, 1919, c. 89, 41 Stat. 324, U. S. Code, title 18, s 408 (18 USCA s 408). That Act provides: 'Sec. 2. That when used in this Act: (a) The term 'motor vehicle' shall include an automobile, automobile truck, automobile wagon, motor cycle, or any other self-propelled vehicle not designed for running on rails. * * * Sec. 3. That whoever shall transport or cause to be transported in interstate or foreign commerce a motor vehicle, knowing the same to have been stolen, shall be punished by a fine of not more than \$5,000, or by imprisonment of not more than five years, or both.'

Section 2 defines the motor vehicles of which the transportation in interstate commerce is punished in Section 3. The question is the meaning of the word 'vehicle' in the phrase 'any other self-propelled vehicle not designed for running on rails.' No doubt etymologically it is possible to use the word to signify a conveyance working on land, water or air, and sometimes legislation extends the use in that direction, e. g., land and air, water being separately provided for, in the Tariff Act, September 21, 1922, c. 356, s 401(b), 42 Stat. 858, 948 (19 USCA s 231(b)). But in everyday speech 'vehicle' calls up the picture of a thing moving on land. Thus in Rev. St. s 4 (1 USCA s 4) intended, the Government suggests, rather to enlarge than to restrict the definition, vehicle includes every contrivance capable of being used 'as a means **341 of transportation on land.' And this is repeated, expressly excluding aircraft, in the Tariff Act, June 17, 1930, c. 497, s 401(b), 46 Stat. 590, 708 (19 USCA s 1401).

So here, the phrase under discussion calls up the popular picture. For after including automobile truck, automobile wagon and motorcycle, the words 'any other self-propelled vehicle not designed for running on rails' still indicate that a vehicle in the popular sense, that is a vehicle running on land is the theme. It is a vehicle that runs, not something, not commonly called a vehicle, that flies. Airplanes were well known in 1919 when this statute was passed, but it is admitted that they were not mentioned in the reports or in the debates in Congress. *27 It is impossible to read words that so carefully enumerate the different forms of motor vehicles and have no reference of any kind to aircraft, as including airplanes under a term that usage more and more precisely confines to a different class. The counsel for the petitioner have shown that the phraseology of the statute as to motor vehicles follows that of earlier statutes of Connecticut, Delaware, Ohio, Michigan and Missouri, not to mention the late Regulations of Traffic for the District of Columbia, title 6, c. 9, s 242, none of which can be supposed to leave the earth.

Although it is not likely that a criminal will carefully consider the text of the law before he murders or steals, it is reasonable that a fair warning should be given to the world in language that the common world will understand, of what the law intends to do if a certain line is passed. To make the warning fair, so far as possible the line should be clear. When a rule of conduct is laid down in words that evoke in the common mind only the picture of vehicles moving on land, the statute should not be extended to aircraft simply because it may seem to us that a similar policy applies, or upon the speculation that if the legislature had thought of it, very likely broader words would have been used. United States v. Bhagat Singh Thind, 261 U. S. 204, 209, 43 S. Ct. 338, 67 L. Ed. 616.
Judgment reversed.

Slide 1 | Google Slides

- The question is the meaning of the word 'vehicle' in the phrase 'any other self-propelled vehicle not designed for running on rails.'
- The term 'motor vehicle' shall include an automobile, automobile truck, automobile wagon, motor cycle, or any other self-propelled vehicle not designed for running on rails.
- The petitioner was convicted of transporting from Ottawa, Illinois, to Guymon, Oklahoma, an airplane that he knew to have been stolen...

Figure 12. Screenshot of a Canvas page containing an example of a formative assessment (Quick Check).

Further clarification with more context. Oftentimes, instructors provide the perfect example in the classroom setting, only for students to find themselves stumped when they are completing an assignment where they encounter the exception to the rule. Therefore, the second F in SCAFFOLDS means to provide further clarification with more context. With this in mind, each benchmark in Introduction to Law was presented first as that benchmark is typically seen in a case. Then, a “case trap,” that is, presentation of the benchmarks in a less typical form, was shown and discussed for the students. This allows students to be aware of what to look for if they are having trouble identifying a particular benchmark. For an example of what this further clarification looks like, see Figure 13.

Case Trap - Facts - Placement of Information

Here is what is tricky about court case opinions. Each and everyone, even if it has all of the benchmarks, will look and sound different. Sometimes the information we are looking for will be where we expect it to be, and other times we will need to work through a bunch of information out of the order that we are used to in order to find what we need to learn about the case. Additionally, sometimes things might be where we expect them to be, but then additional pieces of what we need are spread throughout the opinion.

What I mean by this is sometimes our facts may be both at the beginning and scattered throughout the opinion. Let's look again at our third example from Part 1, *Jacques v. Steenberg Homes*, 563 N.W.2d 154. Not only are there facts located within the first paragraph of the case, but also they are located in the second and third paragraph.

The initial facts, located at the top of the first paragraph, are helpful to us because they present a very quick snapshot of what the story is that got these folks into court. But if you read a little further, you will see that the court has included a lot more facts for us to consider as we read this case. Both presentations of facts are helpful to us. The short snapshot gives us a quick, clear overview of what happened, and the longer facts fill in more details that give us more of the story to consider as we try and figure out what the court is going to do here.

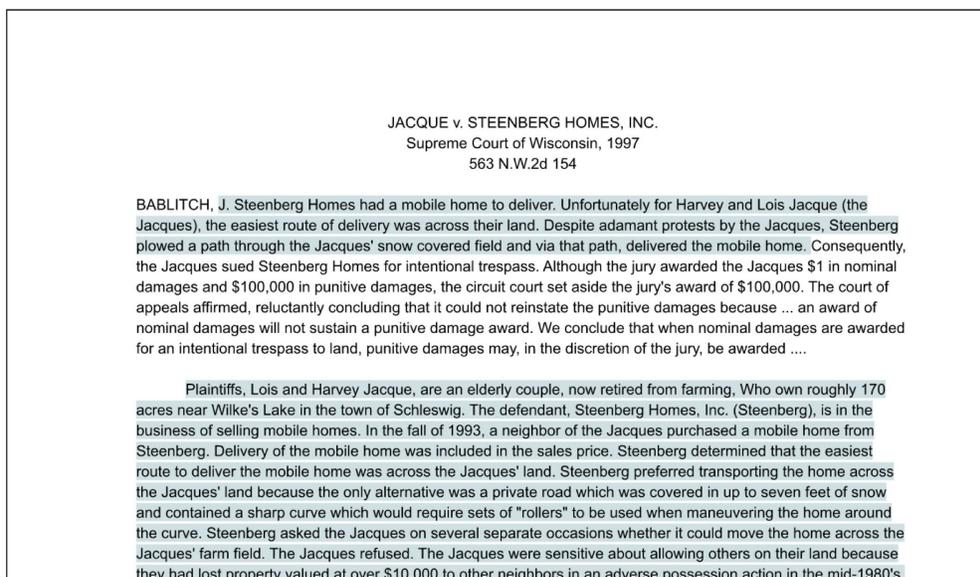


Figure 13. Screenshot of a Canvas page showing an example of further clarification with additional context.

Opportunity for application practice. Once students have seen the material in context, have had opportunities to practice with immediate feedback, and have identified exceptions to the rules, the next step is to provide an opportunity for application practice. In Introduction to Law, the students are given a template (see Appendix) that they can use to identify the specific benchmark for that assignment. Using another feature of Canvas, these assignment pages are locked until students submit their application practice (Figure 14).

Learner submits application practice. Once the application practice is submitted (Figure 14), the following page in Canvas will unlock to reveal the answer in a prerecorded video prepared by the instructor. By prerecording the answer, the instructor is able to give students immediate feedback, and

this also eliminates the need for the instructor to grade all of the submissions in the middle of the week.

The screenshot shows a Canvas assignment page for 'M2: Facts Practice'. At the top right, there are buttons for 'Mark as done' and 'Submit Assignment'. Below the title, it says 'Due Jan 23 by 11:59pm', 'Points 5', and 'Submitting a file upload'. A decorative banner for 'Week Two' is visible. A 'NOTICE' box states: 'You will only complete the Facts section of the Case Brief for this assignment.' The main content is titled 'Building a Case Brief' with a description, purpose, task, and criteria for success.

M2: Facts Practice

Due Jan 23 by 11:59pm Points 5 Submitting a file upload

Week Two

NOTICE
You will only complete the Facts section of the Case Brief for this assignment.

Building a Case Brief

Description

- In this course, you will be learning how to create and use a Case Brief. Each practice section is designed to allow you an opportunity to practice putting together a Case Brief piece-by-piece. In later Modules, you will be expected to be able to compile a Case Brief on your own.

Purpose

- In Modules 2-4 of this course, you will be learning about benchmarks in a case. Being able to identify these benchmarks will help you to build a Case Brief. Each practice section under a benchmark heading will provide you with an opportunity to identify a benchmark within a case and also summarize the benchmark in a Case Brief template.

Task

- [Login to your Google at IU account](#). You will need to use your Google at IU account, not your personal account.
- Make a copy of this [template](#). **In order to copy this template, you will need to be logged in to your Google at IU account. It will not work if you are using a personal account.**
- Once you have made a copy of this document, it will be saved in your Google at IU account. Remember, that you will use this same document to complete all Benchmarks through the end of Module 4.
- First, locate and highlight the Facts within the case with the designated color.
- Next, you will fill in the Facts section of the Case Brief template. You will add to each section of the Case Brief as you work through Modules 2-4.
- Finally, submit your assignment as a word document. Directions for how to do this are located in the template.
- Once this assignment has been submitted on the due date and time, the next assignment page will be viewable. On this page, you will read the Facts Benchmark Example along with a video explanation of the answer.

Criteria for Success

Your work will be evaluated based on the following criteria...

- This assignment is graded as complete or incomplete. You will continue to use this same template for practice assignments from Modules 2-4. By using this template and completing the Case Brief as you work through the Benchmark Modules, you will have a good example of what a Case Brief should look

Figure 14. Screenshot of a Canvas assignment page showing an example of application practice and submission of that practice.

Deep dive into expert model of application practice. In the online asynchronous setting, it can be hard to envision how instructors can model their expertise with a specific skill they are trying to share with students. In the Introduction to Law course, the instructor recorded a video for each benchmark to model expert completion of the assignment (Figure 15). This allowed the instructor to showcase expert thinking and explain common challenges among students.

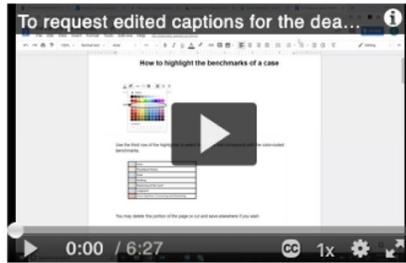
Self-evaluation with RECAP. The last step in the SCAFFOLDS framework asks students to end with a self-evaluative RECAP of their progress, with guided reflection prompts provided by the instructor (Figure 15).



Expert Model

In this RECAP 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 RECAP reflection:

R: Reflect on this benchmark using the guiding prompts below

- Think specifically about the purpose of this benchmark.

E: Explain what the benchmark is

- In your own words, summarize what this benchmark is.

C: Compare your work to the expert model

- Think about where you had an accurate response and where you could improve on the accuracy of your answer

A: Act on the feedback provided in the expert model

- Create 1-2 specific, concrete action steps you will take to accurately identify this benchmark based on the feedback you received. Feedback is information you received from the instructor as well as your own analysis of your work compared to the model.

P: Plan for Success for the future

- What is one specific strategy you will take to make sure you are on track for being able to identify this benchmark in the future?



Task

For your RECAP reflection, answer the following prompts:

- Facts in a case are...
- Based on the feedback provided in the video, I noticed...
- Next time I work on Facts in a case brief, I will make sure to...
- As I continue to work on case briefing I will apply the skills I learned by...

Figure 15. Screenshot of a Canvas discussion assignment showing an example of the deep dive into the expert model with RECAP self-evaluation.

Case Study Results and Student Feedback

The only difference between the SP19 and SP20 versions of the case brief benchmark exercises was the more focused self-evaluation with RECAP, and the student engagement data from Canvas showed that students remained engaged with the course material throughout the course, as shown in Table 5.

Table 5. Percentage of students engaging in case briefing components in SP20.

Benchmark (B) component	B 1	B 2	B 3	B 4	B 5	B 6	B 7
Formative assessment (%)	100	100	100	100	100	100	100
Benchmark submission (%)	100	100	100	100	100	100	100
Video model (%)	80	75	90	65	80	85	85
Reflection discussion (%)	100	95	100	100	100	100	100

With the weekly RECAP in SP20, the weekly RECAP portion of the course has shown increased engagement over SP19, as is shown in Table 6.

Table 6. Percentage of weekly RECAP videos played per week.

Course	Week															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
SU18 (%)	N	N/A	38	63	31	50	69	31	SB	31	13	0	12-week course			
SP19 (%)	84	84	74	63	79	53	47	58	SB	63	42	58	58	47	53	42
SP20 (%)	85	85	95	95	95	10	90	90	95	SB	SB	90	95	90	80	79

Note. N/A = Not applicable. Spring break (SB) was 2 weeks long in SP20 due to university policy related to COVID-19.

In addition to the Canvas analytics that show increased engagement, students in both SP19 and SP20 expressed support and appreciation for these frameworks. One SP19 student stated:

I have never learned how to brief a case before and I did not know everything that went into it, but this module has been more than helpful in teaching me how to do this. It was very clear and I liked that it walked through each and every step very thoroughly before practicing ourselves. I also liked that after we submitted our practice, there was a video that explained what the correct answer was and why.

Overall, I think that this module was very beneficial and set up in a way for students to succeed and effectively learn how to brief a case.

Another stated, “This was very informative without being too much at once. The way we break these down into chunks (for lack of a better word) makes it easier to manage.” Students also appreciated the weekly videos from the instructor (as they were actually watching them) and commented, “I definitely enjoyed the video feedback, as it was helpful in identifying what I may have done wrong as well as answering any questions that I had. I feel as if this benefited me more than that or written comments.” Last, one student commented, “I did find this feedback very helpful. I feel that it is much easier to understand what people are saying when it is said in a video rather than written. I also like that my question was answered so that I know how to change things moving forward.”

In addition to appreciating the RECAPs, students also positively reflected on the clarity of the SCAFFOLDS process and their appreciation for the consistency of the presentation of the material. One SP20 student commented, “I love the way you teach and how the course is laid out. I also love how what we learn is reiterated several times over the course of the week. It definitely helps my comprehension.” Another student commented:

As I continue to work on case briefings, I will apply the knowledge and skills I have learned by making sure that I am not guessing when it comes to piecing apart a case briefing. I have noticed myself guessing answers and then second-guessing myself but know that I have learned more about case briefings, I am excited to test and apply my [n]ew-found knowledge.

Students also showed huge improvements in their comprehension of case briefing and consistently reflected that they understood the material, were thinking about the material, and were planning ahead on how they could improve:

Now that we have completed one full case briefing and based on the feedback provided, I realized that case briefings are not as intimidating as I anticipated. Of course, they still require a lot of attention and focus, but as long as I follow the templates, I think I understand how to properly complete a case brief.

Students also appreciated the pace of the course and the layout, stating, for instance:

This past week really drove home the importance of how this class is laid out in locked modules. The structure of focusing on one concept at a time is helping me pay close attention and re-reading when necessary to ensure I understand what’s required before going forward to the next page.

Conclusion

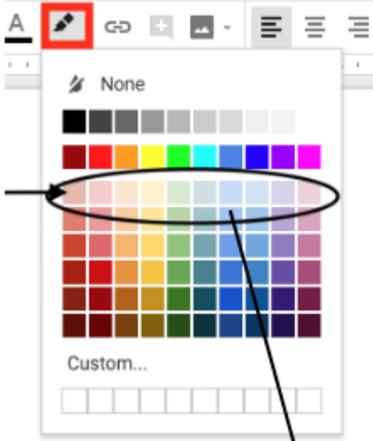
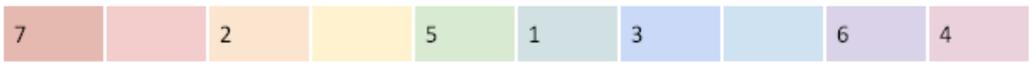
The findings from both the SP19 and the SP20 courses—that is, the user data and student feedback—show that the revisions to the Introduction to Law course increased student engagement. The essence of why the new course format works is because instructors are not just passively presenting content but are leveraging the Canvas LMS to design learning activities that require students to engage with content through various types of practice and self-reflection. Creating the SCAFFOLDS structure in a course and producing the deep dive expert videos can take a significant amount of time, but the payoff is great, and during the course, instructors can spend less time creating content and more time

guiding students through the learning process. The weekly RECAP structure is effective because it not only encourages students to engage with the course at the start of each week but fosters self-reflection and self-regulated learning.

Appendix

Appendix 1. Example Template for an Opportunity for Application Practice in the SCAFFOLDS Framework.

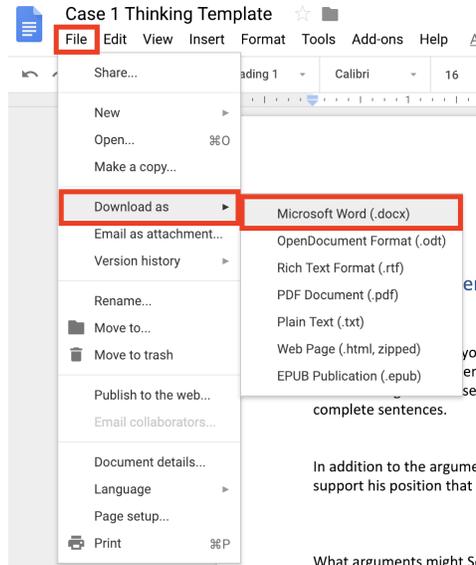
How to highlight the benchmarks of a case

	<p>Use the third row of the highlighter feature in Google.</p>														
 <p>This row of highlighter colors has been numbered to correlate with the numbered benchmarks in the color-coding key below.</p>															
<table border="1"> <tr> <td>1</td> <td>Facts</td> </tr> <tr> <td>2</td> <td>Procedural History</td> </tr> <tr> <td>3</td> <td>Issue</td> </tr> <tr> <td>4</td> <td>Holding</td> </tr> <tr> <td>5</td> <td>Reasoning of the court</td> </tr> <tr> <td>6</td> <td>Judgment</td> </tr> <tr> <td>7</td> <td>Court Opinions: Concurring and Dissenting</td> </tr> </table>	1	Facts	2	Procedural History	3	Issue	4	Holding	5	Reasoning of the court	6	Judgment	7	Court Opinions: Concurring and Dissenting	<p>Use the color-coding key for the corresponding benchmark.</p>
1	Facts														
2	Procedural History														
3	Issue														
4	Holding														
5	Reasoning of the court														
6	Judgment														
7	Court Opinions: Concurring and Dissenting														

How to download a Google Doc as a Word file.

Directions:

1. Complete this Benchmark of the Case Brief (see next page of template)
2. Download this Google Doc as a Word file



3. Submit this Word document to the related Canvas assignment.

51 S.Ct. 340
Supreme Court of the United States
McBOYLE
v.
UNITED STATES.

Mr. Justice HOLMES delivered the opinion of the Court.

The petitioner was convicted of transporting from Ottawa, Illinois, to Guymon, Oklahoma, an airplane that he knew to have been stolen, and was sentenced to serve three years' imprisonment and to pay a fine of \$2,000. The judgment was affirmed by the Circuit Court of Appeals for the Tenth Circuit. 43 F.(2d) 273. A writ of certiorari was granted by this Court on the question whether the National Motor Vehicle Theft Act applies to aircraft. Act of October 29, 1919, c. 89, 41 Stat. 324, U. S. Code, title 18, s 408 (18 USCA s 408). That Act provides: 'Sec. 2. That when used in this Act: (a) The term 'motor vehicle' shall include an automobile, automobile truck, automobile wagon, motor cycle, or any other self-propelled vehicle not designed for running on rails. * * * Sec. 3. That whoever shall transport or cause to be transported in interstate or foreign commerce a motor vehicle, knowing the same to have been stolen, shall be punished by a fine of not more than \$5,000, or by imprisonment of not more than five years, or both.'

Section 2 defines the motor vehicles of which the transportation in interstate commerce is punished in Section 3. The question is the meaning of the word 'vehicle' in the phrase 'any other self-propelled vehicle not designed for running on rails.' No doubt etymologically it is possible to use the word to signify a conveyance working on land, water or air, and sometimes legislation extends the

use in that direction, e. g., land and air, water being separately provided for, in the Tariff Act, September 21, 1922, c. 356, s 401(b), 42 Stat. 858, 948 (19 USCA s 231(b)). But in everyday speech ‘vehicle’ calls up the picture of a thing moving on land. Thus in Rev. St. s 4 (1 USCA s 4) intended, the Government suggests, rather to enlarge than to restrict the definition, vehicle includes every contrivance capable of being used ‘as a means of transportation on land.’ And this is repeated, expressly excluding aircraft, in the Tariff Act, June 17, 1930, c. 497, s 401(b), 46 Stat. 590, 708 (19 USCA s 1401). So here, the phrase under discussion calls up the popular picture. For after including automobile truck, automobile wagon and motor cycle, the words ‘any other self-propelled vehicle not designed for running on rails’ still indicate that a vehicle in the popular sense, that is a vehicle running on land is the theme. It is a vehicle that runs, not something, not commonly called a vehicle, that flies. Airplanes were well known in 1919 when this statute was passed, but it is admitted that they were not mentioned in the reports or in the debates in Congress. It is impossible to read words that so carefully enumerate the different forms of motor vehicles and have no reference of any kind to aircraft, as including airplanes under a term that usage more and more precisely confines to a different class. The counsel for the petitioner have shown that the phraseology of the statute as to motor vehicles follows that of earlier statutes of Connecticut, Delaware, Ohio, Michigan and Missouri, not to mention the late Regulations of Traffic for the District of Columbia, title 6, c. 9, s 242, none of which can be supposed to leave the earth.

Although it is not likely that a criminal will carefully consider the text of the law before he murders or steals, it is reasonable that a fair warning should be given to the world in language that the common world will understand, of what the law intends to do if a certain line is passed. To make the warning fair, so far as possible the line should be clear. When a rule of conduct is laid down in words that evoke in the common mind only the picture of vehicles moving on land, the statute should not be extended to aircraft simply because it may seem to us that a similar policy applies, or upon the speculation that if the legislature had thought of it, very likely broader words would have been used. *United States v. Bhagat Singh Thind*, 261 U. S. 204, 209, 43 S. Ct. 338, 67 L. Ed. 616. Judgment reversed.

Briefing Benchmarks: Remember, for each case you read you will want to look for all of the below and write a brief containing a summary of this information.

Case Name (name and case citation information — for citation, which court is writing this opinion?)

- 1) **Facts** (focus on issue significant/legally relevant facts before the case went into court)
- 2) **Procedural History** (what happened during the litigation process?)
- 3) **Issue(s)** (what question(s) is the court trying to answer in this case?)
- 4) **Holding** (what did the court decide?)
- 5) **Judgment** (what happens next in this case, if anything?)
- 6) **Court Reasoning (and Rule(s) of Law)** (what are the statutes or prior case law that the court uses in making a decision? Why did the court decide here the way it did — how did they apply the law?)
- 7) **Additional Case Opinions** (concurring: agreeing with end result but not reasons for the decision; dissenting: disagreeing with the reasoning and result)

Your Comments/Questions

References

- Fransen, J., Kirschner, P. A., & Erkens, G. (2011). Mediating team effectiveness in the context of collaborative learning: The importance of team and task awareness. *Computers in Human Behavior*, 27(3), 1103–1113. <https://doi.org/10.1016/j.chb.2010.05.017>
- Hung, J.-L., Hsu, Y.-C., & Rice, K. (2012). Integrating data mining in program evaluation of K–12 online education. *Educational Technology & Society*, 15(3), 27–41.
- Järvelä, S., & Hadwin, A. F. (2013). New frontiers: Regulating learning in CSCL. *Educational Psychologist*, 48(1), 25–39. doi:10.1080/00461520.2012.74800
- Järvelä, S., Kirschner, P. A., Panadero, E., Malmberg, J., Phielix, C., Jaspers, J., Koivuniemi, M., & Järvenoja, H. (2015). Enhancing socially shared regulation in collaborative learning groups: Designing for CSCL regulation tools. *Educational Technology Research and Development*, 63(1), 125–142. <https://doi.org/10.1007/s11423-014-9358-1>
- Kuh, G. D. (2009). The national survey of student engagement: Conceptual and empirical foundations. *New Directions for Institutional Research*, 2009(141), 5–20. <https://doi.org/10.1002/ir.283>
- Lawson, M. A., & Lawson, H. A. (2013). New conceptual frameworks for student engagement research, policy, and practice. *Review of Educational Research*, 83(3). <https://doi.org/10.3102/0034654313480891>
- Morris, K. V., Finnegan, C., & Sz-Shyan, W. (2005). Tracking student behavior, persistence, and achievement in online courses. *Internet and Higher Education*, 8(3), 221–231.
- Ogle, D.M. (1986). K-W-L: A teaching model that develops active reading of expository text. *Reading Teacher*, 39, 564–570.
- Pazzaglia, A. M., Clements, M., Lavigne, H. J., & Stafford, E. T. (2016). An analysis of student engagement patterns and online course outcomes in Wisconsin. *Institute of Education Sciences Regional Educational Laboratory Program Midwest*, 2016(147). Retrieved from https://ies.ed.gov/ncee/edlabs/regions/midwest/pdf/REL_2016147.pdf
- Zimmerman, B. J. (2011). Motivational sources and outcomes of self-regulated learning and performance. In B. J. Zimmerman & D. H. Schunk (Eds.), *Handbook of self-regulation of learning and performance* (pp. 49–64). Routledge.