# "Playful and Gameful"
# Choose Your Own Adventure Method of Teaching and Grading Political Science Courses

IRB Exemption Code: EC2-24-39

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**Abstract**

Teaching political science, particularly in introductory courses, often emphasizes factual knowledge, such as definitions of democracy and the role of the legislative branch. While this foundation is essential, it serves merely as a starting point. I integrate Gameful and gradeless pedagogies in my classes to enhance student engagement. Students choose specific assignments, or "quests," to complete, allowing them to leverage their strengths and challenge themselves within a supportive framework. This choice fosters greater involvement in their learning journey. Drawing on five years of teaching experience at a large public university and a small liberal arts college, I present my case for this innovative teaching method, highlighting its advantages and challenges while providing actionable insights for others interested in implementing similar strategies in their classrooms.

*Keywords*: Gameful pedagogy, ungrading, Universal Design for Learning, political science

**Author Bio**

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**Acknowledgments**

The author recognizes Dr. Jennifer Fitzgerald, Dr. Michaele L. Ferguson, Dr. Lindsey Hamilton, and Dr. Wells Castonguay as invaluable mentors and role models. The author thanks the 2025 APSA Teaching and Learning Conference attendees for their invaluable insights and suggestions. Finally, the author acknowledges the Center for Academic Innovation at the University of Michigan, which developed the Gameful approach to teaching.

**Word Count:** 6,882

## Introduction

Teaching political science—especially in introductory courses—traditionally focuses on disseminating facts. How does one define a democracy? What role does the legislative branch serve? What is political behavior? These facts are essential, especially since many students lack prior exposure to the civics curriculum. However, they are but a launchpad. In all my classes, I combine the learner-centered approaches of Gameful and gradeless pedagogies to stimulate each student's engagement with the subject material.

In this paper, I set out to detail my experience implementing Gameful pedagogical design into various political science courses. This paper aims not to evangelize to the reader about the values of Gameful. Indeed, other course design methods likely achieve the same objectives of motivating student engagement and decreasing the focus on grates. Instead, this paper should be seen as a detailed account of Gameful's various benefits and pitfalls based on real in-class experiences. Hopefully, readers will find my accounts and experiences helpful in their course design efforts.

The paper is outlined as follows. I begin by introducing the reader to "Gameful" pedagogy, building extensively on the foundations provided by the Center for Academic Innovation at the University of Michigan. Next, I discuss how I discovered Gameful and designed my courses with Gameful in mind. Then, I review my experiences teaching with Gameful, drawing on anonymized qualitative feedback from classes taught at the University of Colorado Boulder and Bates College. When reviewing my experience at Bates, I utilize computational text analysis of response papers to provide additional perspective on student experience. I conclude with some final reflections and recommendations.

**What is "Gameful" pedagogy?**[1]

As an approach to teaching, "Gameful" originates from the work of the wonderful people at the Center for Academic Innovation, University of Michigan. It builds upon the self-determination theory (SDT) devised by Ryan and Deci (2000). This theory emphasizes that humans will feel the most self-motivated when: (1) they have some degree of control over the choice of tasks and means of task completion; (2) completion of tasks involves some challenge, but the challenge is achievable; and (3) they feel a sense of belonging with those around who engage in similar tasks (Center for Academic Innovation, 2017; Ryan & Deci, 2000).

The developers of "Gameful" analyzed the three components of SDT and identified that all well-designed games—digital and analog alike—incorporate them (Center for Academic Innovation, 2017). Building on the combined foundation of psychology and game design, the Center for Academic Innovation then outlines the following components of "Gameful" course design:

- "Building points from zero. In contrast to the traditional 100-point grade structure, where students start with the maximum points possible and only lose points afterward, Gameful starts students on the ground floor. Students build their points up using the approaches and end-goals that best work for them" (Center for Academic Innovation, 2017).

Although the authors of Gameful do not express this clearly in their discussion of the rationale behind this Gameful principle, the process of scrapping the standard 100-point and A-F arrays relates to the pedagogical theory of ungrading. Indeed, applying a traditional grading

[1] It is important to make a distinction between gamified and Gameful pedagogy. Gamification "refers to adding game elements to a course such as leaderboards, badges, trophies, and achievements, without making underlying changes to the design of the course" (Center for Academic Innovation, 2017). Meanwhile, Gameful pedagogy involves "building game elements into the design of the course, such as building up points from zero, user choice, immediate feedback, learning from failure, and transparency" (Center for Academic Innovation, 2017).

structure tends to reduce students' interest in learning, leads them away from more challenging tasks, and may even negatively affect the quality of students' thinking (Blum, 2020a; Kohn, 1999).

- "Emphasis on learner choice. This aspect of Gameful pedagogy focuses on granting students the ability to pick how they approach or "play" the course in terms of assignment completion. Although the experts at the Center for Academic Innovation recommend controlling the amount of freedom the students have by limiting the degree of choice (Center for Academic Innovation, 2017), the focus on user preference is clear" (Center for Academic Innovation, 2017).

In giving learners the ability to choose their assignments, the developers of Gameful echo the suggestion made by Maryellen Weimer (2013, Chapter 4) to shift the balance of power in the classroom. In surrendering even a minor sliver of control, the instructor motivates the students to consider their learning style and even engage in meta-cognitive thinking. Contract grading, one of the popular approaches to ungrading, further demonstrates the value of learner agency in assignment selection (Hiller & Hietapelto, 2001).

- "Feedback is fast (immediate). In games, feedback to the player's action is instantaneous. Furthermore, players can easily identify how their earlier choices affect the final outcomes. In a game such as *Pokémon*, players know immediately whether their move was "super-effective" or whether it did not do much at all. Such immediate feedback suggests to the player whether an alternative course of action may be needed and can even provide guidance on what they may do differently. Thus, Gameful instructors are encouraged to utilize a range of tools, such as rubrics, auto-graded assignments, and peer feedback, to offer timely and actionable suggestions" (Center for Academic Innovation, 2017).

An ever-growing body of research on college pedagogy indicates that effective feedback—as long as the students engaged with it—consistently leads to positive pedagogical outcomes for students (Evans, 2013; Hattie & Timperley, 2007; Iraj et al., 2020, 2021; Lowman, 1987). The swift nature of feedback allows students to work on fixes sooner. As instructors, our aim should be for students to tweak their learning habits or engage in targeted paper edits with as complete a toolkit as possible. Actionable feedback is among the most critical instruments in that.

- "Freedom to fail. In my opinion, this is one of the key components of both games and Gameful pedagogy. In well-designed games, players are asked to tackle novel tasks, such as jumping across a bottomless pit in a Mario game or defeating a hulking monster in *Elden Ring*. While the players may fail in their first attempt at the task, they are encouraged to keep trying until they overcome the challenge. Gameful courses can facilitate the freedom to fail by allowing assignment resubmission and making available many more points than would be necessary to earn an 'A'" (Center for Academic Innovation, 2017).

Additionally, building points up from zero allows students to earn credit even for assignments that do not go as well. Whereas earning a low number of points or a poor grade on a test or a paper in a traditionally structured course could lead to a student panicking or feeling discouraged, in a Gameful course, "all points are good points." Similarly, the learner's ability to earn more points for completing additional assignments allows for a side-stepping of the iconic "Do you offer extra credit?" plea.

- "Course transparency. The final component of Gameful pedagogy is nevertheless essential. Poorly designed games that fail to communicate player's objectives soon find themselves abandoned. Similarly, students will be frustrated if they cannot easily determine what it takes to "win" in our courses. By clearly defining expectations in terms of content and

> grading structure—possibly even allowing students some freedom in shaping both by engaging them in final course design touches—we establish right away what the expectations are for students to succeed. Lack of curves and presence of understandable feedback in grading further emphasizes predictability and provides students with clear pathways forward" (Center for Academic Innovation, 2017).

Transparency in course design—and college pedagogy more broadly—is underrated. Past research in pedagogy has identified that hidden curriculum—i.e., the collection of unwritten and unstated norms and expectations of thriving in academic settings—negatively affects students' learning (Joughin, 2010; Smith Myles et al., 2024; Snyder, 1973). The negative impacts of hidden curriculum hit especially hard for first-generation, BIPOC, and other underserved students (Alexander & S.E.A.S Program @ URI, 2019; Gable, 2021; Jack, 2020). Providing the much-needed clarity alleviates the pressures our students face one course at a time.

While not expressly stated, Gameful course design also presents clear connections to the Universal Design for Learning (*see* Figure 1). Specifically, the main UDL themes of "engagement" and "action and expression" are clearly connected to Gameful pedagogy.

<Figure 1 goes about here.>

In summary, the creators of Gameful course design devised a learning methodology that overtly and covertly applies the concepts of ungrading, learner-centered teaching, and UDL. Data suggest that Gameful increases student engagement while either improving—or at least not hindering—academic performance (Fishman et al., 2021; Hayward et al., 2021). In the following section of this manuscript, I draw on qualitative data from my five years of working with Gameful to support the argument that Gameful is the most elegant and fun implementation of modern

pedagogy theories. Its flexibility and accessibility and the ability to connect to my students' hobbies and interests make Gameful my go-to for my current course design.

**How I Discovered Gameful**

I started experimenting with "Gameful" approaches to college teaching as a PhD candidate at the University of Colorado Boulder in the Fall 2018 semester. Freshly post-comprehensive exams, I was champing at the bit to finally take command of my own classes. My first solo teaching appointment was an introductory comparative politics course offered over a condensed summer session in June 2018. In roughly 4.5 weeks, I was required to cover a semester's worth of material. For two hours a day, five days a week, 28 students and I met in a windowless basement classroom to make the best out of a challenging teaching situation.

Having received only limited teaching training at this point in my career, I approached the course in the most cookie-cutter way possible: lectures, some discussion, three exams, and a term paper. Needless to say, despite my general interest in and passion for this introductory material and the student's general satisfaction with how the course went, I did not feel satisfied with the teaching experience. I started looking at various ways to reshape my approach to teaching and grading to make the whole process more enjoyable both to me and to my students.

In the opening of the first chapter, Weimer explains that she was looking for ways to improve her teaching and picked approaches that were interesting and relatively easy to implement (Weimer, 2013, pp. 3–4). I followed a similar trajectory in my course design. First, I adopted some of Weimer's recommendations. Weimer made a strong case for self-reflective assignments and student choice, and my inner nerd immediately connected the learner-centered approach and the old-school choose-your-own-adventure games.

As the second step, I investigated how other professors in the department designed their courses and what approaches they took. Dr. Jenny Wolak used a variation of the choose-your-own-adventure for some of her graduate seminars. Still, for the most part, the undergraduate courses all looked pretty similar in design, except for courses taught by Dr. Michaelle Fergusson. Already back in 2018, Professor Fergusson was using Gameful (including its LMS implementation *GradeCraft*) in her classes. I was fascinated and sold on building my future courses around the Gameful framework.

I was not slated to teach my own classes again until the Spring 2020 semester, so I had plenty of time to develop a syllabus incorporating the Gameful components. As part of my preparation, I read a book about "geeky pedagogy," which focuses on harnessing our inner nerdiness as college professors—and pop-culture lovers—to power up our teaching (Neuhaus, 2019). Neuhaus inspired me to incorporate my extra-academic hobbies when building my syllabus and designing my courses. I started regularly referencing my passion for tabletop and video games, science fiction and fantasy, and sports in my course design.

Bringing my hobbies into my teaching—and research, as most of my scholarship focuses on hobbies and politics—keeps fueling my love for teaching. Moreover, it carries the vital co-benefit of helping students see me as a whole human and allows them to connect with me better. In combination with the Gameful course design, I can move from serving as the elevated and remote "sage on the stage" to a more approachable and relatable "guide on the side" (King, 1993).

**How I Design Courses with Gameful**

I found designing—or re-designing—my courses using Gameful relatively straightforward. The five pillars of Gameful are linked to means of application, and the Gameful Pedagogy website

provides helpful, actionable steps for instructors (Center for Academic Innovation, 2017). Here, I summarize how I injected the Gameful approaches into my courses.

The first step was to plan out the material and assignment timelines for the course. This was probably the most challenging component of the whole process, although it is fortunately a one-time activity. I continue to tinker with my courses depending on new developments in the field or the scheduling peculiarities of the semester in which I teach. However, setting the course parameters early has a long-term return in saved time. Just make sure you reserve the right to change the course timelines in case of unexpected events, especially if you expect your students to get a bit "litigious" about unanticipated changes to the syllabus.

My students frequently comment on how refreshing it is to know precisely when we cover specific topics and when assignments are due. In an era where students overcommit on extracurricular and co-curricular activities (Harmon, 2010; Hetland et al., 2012; McClelland & Case, 2023; Porru et al., 2021), establishing the game "rulebook" clearly and early provides immense added value. It allows our students to plan their academic, extracurricular, and personal lives. Similarly, the instructor can tailor deadlines to avoid accidentally scheduling three major assignment deadlines in the same week.

The second step in applying Gameful pedagogy to my courses was to scrap the 100-point scales altogether. Instead, my students are earning Experience Points (abbreviated as XP) just like the characters in a tabletop or digital role-playing game. The students all start at zero, and their XP total only ever increases. As I go into more detail below, some students expressed initial resistance towards this approach, as the new way of grading was unfamiliar to them. However, I eventually achieved the necessary buy-in through diligent explanations and regular refreshers of course mechanics.

I should note that the precise scaling of the XP was the aspect of this grading system that took me the longest to fine-tune. The first handful of courses utilized XP hauls in the hundreds of thousands, but students found that confusing and overwhelming. I have since settled on having—at most—fifteen to twenty thousand XP up for grabs in a course, with about two-thirds to three-fourths of the available XP needed to earn the highest grade in the course. This cut-down seems to have worked well. I also found deciding how much XP an individual assignment (or quest) should be worth somewhat challenging. After some trial and error, I was able to set the values at reasonable levels. However, I still tinker with these in pre-semester prep, based on how the course unfolded when I taught it last.

The third component of my Gameful transition was allowing students a significant deal of choice in their assignments. Generally, the menu of options involves some combination of tests, group projects, discussion leadership, and essays, with a core set of tasks that all students must complete (more on later). The optional "quest paths" carry the same amount of XP available to ensure students are not penalized for choosing one path over another. The quests are also divided into constituent parts, with deadlines distributed throughout the semester. For example, students who elect to complete the "Scholar in Training" term paper must complete a topic memo, annotated bibliography, and a rough draft before submitting the final assignment, earning XP and feedback along the way.

I also stagger due dates for assignments so that grading flows quickly and students receive feedback in a timely fashion. The speed of my grading turnaround is further complemented by relying on rubrics to "automatize" feedback-giving and equalize the feedback across students. Students always see these rubrics beforehand so they know what standard they must meet to earn specific XP amounts.

The final major component in my implementation of the Gameful course design is to allow students to reflect on their learning. My students write three reflection essays over the course of the semester, earning them XP on the "incomplete-complete" scale (i.e., if they complete the assignment in good faith, they earn the full XP amount). I schedule the first reflection deadline for the first or second week of the semester. At this point, the students and I have met a handful of times, and the students are more familiar with the course design. In the essay, the students reflect on the course design and indicate how they plan to "play" the class. Instructors who can use the GradeCraft platform also find this an ideal time for students to submit their quest log or select assignments they plan to complete. The second and third reflections come at the mid- and end-points of the semester and allow students to take stock of how the course has been going, where they are versus where they would like to be in terms of their XP haul, and—at least in context of the mid-semester check-in—how they plan to "attack" the second half of the course.

One refinement for future iterations of my courses may be to make the reflection logs more regular, potentially on a weekly or unit basis. That way, students have even more opportunities to communicate what is and is not working with me. I can also actively respond to student feedback, which furthers students' feeling of agency in the course (Blumberg, 2015; Clayton & Ash, 2005).

**My Experience of Teaching with Gameful**

In this section of the manuscript, I recount my experiences teaching with Gameful at two distinct institutions: the University of Colorado Boulder and Bates College. I will provide a qualitative survey of how my students and I navigated the teaching method, with student perspectives drawn from the official course evaluation questionnaires. I also include quantitative text analysis of the three reflection essays mentioned earlier to provide an alternative survey of the students' experience.

Without a strict experimental design, I will avoid making any hard conclusions from either quantitative or qualitative data. Still, the general observations will hopefully give the reader an interesting survey and insight into Gameful teaching.

University of Colorado Boulder

At CU-Boulder, I taught five courses using the Gameful methodology. The first one was a 4000-level political psychology course scheduled for the Spring 2020 semester. This course constitutes my first full implementation of Gameful pedagogy in my classes. In their initial reactions, students expressed a mix of enthusiasm and trepidation. Once I addressed students' initial resistance to a novel and mostly unfamiliar[2] teaching method, we got off to a smooth start. However, the flow of the course was drastically interrupted by the arrival of COVID-19 and the subsequent transition to fully remote teaching while the university shut down.

Luckily, the built-in flexibility of my Gameful course made the switch to virtual teaching relatively painless. In their mid-semester and end-of-semester reflections, the students expressed that they enjoyed the ease with which we shifted modalities and continued learning. In addition to navigating the move from in-person to fully remote learning, the other major takeaway from teaching a Gameful course in the Spring 2020 semester was that it was the source of joy and levity for both the students and myself, even—or maybe especially—in a period of uncertainty and anxiety. According to one anonymous course evaluation comment, the student "found the ability to choose which assignments counted toward our final grade really helpful. It made me more interested in the class because I felt like I wasn't being forced into learning."

[2] I say "mostly" here because a handful of students have taken a course offered by Dr. Fergusson, which used an even more thorough implementation of Gameful pedagogy.

I got to teach the same political psychology course during one of the summer sessions in June 2020. This one-month condensed format, which originally pushed me to explore alternative teaching philosophies, seemed to work very well for Gameful. Nevertheless, I must caveat this observation by saying that an already unusual teaching context was made even more so by the COVID-19 protocol at CU-Boulder. The course was fully online, but the synchronous nature meant that the students and I met for 1.5 hours daily for five weeks. Like the Spring semester cohort, the students found that the flexible and self-directed class greatly reduced their anxiety and made learning enjoyable. One student mentioned in their anonymous course evaluation: "Amazing instructor and did a great job adjusting to class through Zoom. (...) [The] method of grading is extremely innovative, engaging, and motivating."

I haven't been able to teach my courses again until Fall 2021. This semester, I applied a completely Gameful approach to two out of four courses I taught: a comparative course focusing on the politics of the European Union and an American politics course on campaigns and elections. Armed with two Gameful courses already under my belt, I knew what to expect when addressing students' buy-in trepidation. Fortunately, the students seemed thrilled to be back in the classroom and willing to experiment with a new method of instruction. Moreover, the greater assignment diversity meant that my grader for campaigns and elections did not experience the same burnout that can come from having to grade a large number of cookie-cutter assignments. One anonymous student from the EU politics class said: "The choose-your-own-path style of it made me excited to do the assignments. I really liked the XP because it helped me let go of missing some points which was beneficial for me in other classes as well. I thought it was fun to keep track of my XP and even enjoyed making a spreadsheet for it." A similar sentiment was reflected in other student responses. A student from the U.S. campaigns and election class stated: "An effective part of this course is choosing a path at the start of the semester so that you can apply your strengths."

That said, in both fall semester courses, a significant number of students expressed trepidation regarding the XP structure. One U.S. campaigns student noted in their end-of-semester questionnaire: “I found the grading system to be very discouraging. Not only is it frustrating to earn 50,000 out of 80,000 points on [an exam], but it is also annoying to constantly improve the quality of work and still lose thousands of points on each assignment.” A student in E.U. politics lamented: “The grading system is also a bit confusing for those who aren't familiar, and it makes me feel stressed out sometimes as I cannot [gauge] whether I am doing well or doing poorly.” Feedback like this made me re-evaluate the scales and ensure that students understand that they are *earning* rather than *losing* XP.

In the Spring 2022 semester, my last at CU-Boulder, I was able to teach two upper-division courses: EU politics and political psychology. As I previously taught both courses using the Gameful methodology, I was able to incorporate the vast body of student feedback to make the novel course design clearer and the student buy-in more natural. Student feedback from the spring semester suggests that I was successful in my efforts. For example, one political psychology student stated in their anonymous course evaluation: “I thought your "gamified learning" approach was a great way to grade that allowed flexibility and I love the idea that points you earn you ought to keep.” A student from the EU politics course stated: “The option for students to choose their path was very effective and helped cater to individual student learning style.”

*What worked well*

In general, the flexibility that the Gameful design allows seems to help students. As several students noted in their course evaluation comments, choosing assignments helped in two interrelated ways. One, students could pick assignments that better worked with their schedules, accounting for other curricular and extra-curricular commitments. Students really appreciated this

flexibility. Two, students were able to focus on courses that emphasized their strengths. This was a common reaction across the semester.

The XP buffer was also a common source of positive feedback. It helped students overcome the fear of "messing up" and focus on learning. Indeed, some students even picked quest paths that did not play to their strengths because of the XP overhead. Students knew they would still earn enough points for their desired grade, so they were willing to challenge themselves on assignment types that they did not consider as their strengths.

Finally, a significant number of students used the full extent of the flexibility that the grading allowed. Rather than stressing over getting an A or an A+, students frequently decided to go just far enough. A comment such as, "I just need a B+, so that's how I'll approach the assignments," was not uncommon. I found this quite liberating and empowering for both the students and myself. In general, I also found myself fielding fewer grade complaints.

*What worked less well*

As I repeatedly indicated, the biggest challenge was to get the students to buy into the novel grading system. The concepts of XP and grade "levels" were alien to the students used to the standard four-point grading system. High-performing students who previously excelled in the "4.0 environment" were especially hard to unplug from the system that they were familiar with and that worked for them well thus far.

I also observed that getting the students to buy into the Gameful system was much more challenging in pre-Covid times. While I only taught one course that started before the pandemic and thus do not have the adequate data to conduct a like-for-like comparison, it at least felt that students in the 2021-2022 academic year were much more willing to experiment. I would ascribe

this to the students' experience with a wide range of educational approaches during the peak of the pandemic, which made them more open to alternative learning strategies.

The final challenge that I struggled to overcome was the student's desire for perfect scores. The Gameful system is explicitly designed to discourage the obsession with earning 100% on everything. However, students seemed especially sensitive to the notion of "losing" points, even if the idea was that they were earning up. I suspect that I encountered this problem at CU primarily because it took me a while to figure out the learning management software (LMS). Some LMS suites are able to accommodate Gameful approaches more easily than others.

For example, suppose your institution's LMS does not allow alternative grading structures or always forces percentages into the digital gradebook. In that case, you may need to budget for more time explaining to students that earning sixty or seventy percent of XP is not the same as earning a D or a C. If your institution allows you to implement GradeCraft, you will likely not have to deal with this concern. But if you cannot utilize the dedicated Gameful tool, taking the extra time to figure out your LMS gradebook during the course design phase will save you a lot of headaches later in the semester.

Bates College

Following my time as a PhD student and instructor at CU-Boulder, I moved to central Maine. I started at Bates in the fall of 2022 and used Gameful design in all my political science courses. In total, I taught fourteen full-semester courses at all three levels (introductory, mid-level, and seminar), and the courses dealt both with substantive topics and political science methodology.

Unfortunately, the Bates course evaluations do not feature as extensive qualitative feedback as the CU-Boulder ones. As such, I am unable to draw from a similarly deep well of anonymous student comments. Instead, for this section of the paper, I will review what worked well

and not so well at Bates from my perspective. Then, I will present the results of text analysis conducted on the compiled and anonymized corpuses of reflection essays in an attempt to provide a quantitative lens to my students' experience.

*What worked well*

Many of the positives that I observed at CU were replicated at Bates. One, students seemed to really cherish the opportunity to choose their path throughout the course. The level of commitment to the assignments that the students decided to complete was high. Moreover, the "multiple paths and optionality" principle allowed me to accommodate different levels of student experiences in the writing-heavy seminar courses.

Two, despite the strong grade focus among the Bates undergraduates (and more on this later), I was able to use Gameful to successfully temper the obsession with grades. Indeed, by removing students' focus from the grade to the learning process, I was able to motivate experimentation and exploration. After explaining the grading structure, the degree of calm in my statistics courses was especially palpable.

Finally, the Bates students seemed especially receptive to the whimsical nature of the syllabus, which was packed with videogame references and memes. Students frequently commented that this was the first time they enjoyed reading the syllabus. Even though I did not make any sweeping changes to the syllabus in terms of contents, it is encouraging to see just how much small acts of "fun" can stimulate student engagement.

*What worked less well*

Building on the experience from CU-Boulder meant I knew to take my time explaining the grading structure to the students. As such, I have not seen as much push-back from students

regarding the shift from the 100-point scale to the XP. Nevertheless, I observed—as noted earlier—that the Bates undergraduates seemed especially obsessed with their end-of-semester letter grades. This manifested in two distinct ways.

One, Bates students seemed to convert their XP to letter grades and engaged in "grade predictions" a lot more than the students at CU-Boulder. Admittedly, this could be the feature of a small liberal arts college setting, where students feel much more comfortable approaching their instructor and asking, "What grade am I getting in this class?" Nevertheless, I seem to field many more of these questions at Bates than I used to at CU.

Two, in contrast with the CU-Boulder population, the Bates students seemed to be much more concerned about "acing" the class. The students at CU-Boulder would often do good work that would earn them enough XP to convert to a letter grade they were comfortable with. Even the A-level students would not try to earn every available point. I would also see more students at CU for whom a C or a B was a completely acceptable grade, given their athletic, career, or family commitments. However, the Bates students seem preoccupied with getting the highest grade possible and earning all the XP even if they don't generally need to.

*How do my observations pan out in the data?*

In order to provide a quantitative lens to my teaching approach, I collected all available beginning-, mid-, and end-of-semester reflection essays that students submitted in my courses. I anonymized the responses and compiled them into plain text files to facilitate computational analysis. My text corpuses feature between 310 (beginning-of-semester reflection) and 331 (mid- and end-of-semester reflections) responses. The responses together total almost 230 thousand words. I then used the following R packages that facilitate text analysis:

- *tm: Text Mining Package* by Ingo Feinerer and Kurt Hornik to facilitate text mining (Feinerer, 2008; Feinerer et al., 2008; Feinerer & Hornik, 2024).
- *SnowballC* by Milan Bouchet-Valat, which implements a C stemming algorithm designed by Martin Porter and Richard Boulton to generate natural word roots (Bouchet-Valat, 2023).
- *syuzhet* by Matthew Jockers to generate sentiment-driven plots (Jockers, 2023).

As the first step of the analysis, I wanted to create word clouds depicting the most common words in each reflection essay. To do this, I utilized R to remove all numbers, punctuation, and special symbols. I also removed common English stop words and a list of custom stop words, including those coming from the assignment prompts. Finally, I eliminated all extra white space, converted text to lowercase, and reduced all words to their root form. Figures 1 through 3 depict the plots of the top five most common root words in the individual essays and the accompanying word clouds.

<Figures 2-4 go here.>

As the second step of the analysis, I conducted sentiment analysis using the *syuzhet* package. The package allows a computer to read the student responses and categorize them based on the words' emotional valence. As Figures 4-6 show, the dominant emotions in student responses across the three essays were “trust,” “anticipation,” and “joy.” I interpret these results as the students feeling excited about the new style of teaching, joyful about the playful design of the class, and trusting towards the instructor and his choices. Furthermore, the responses are overwhelmingly positive. On average, about 80 percent of words that students used across their three essays were classified as having positive emotional valence.

One interesting feature of the data is how “fear” fluctuates between the essay responses. In the Quest Log Essay, which students write at the beginning of the semester, fearful sentiment is the

fifth most common among the words used, and the second most common if the "big-3" of trust, anticipation, and joy are set to one side. However, in the Mid-Semester Essay, fearful sentiment rises to the fourth place, followed by anger and sadness. Indeed, the Mid-Semester Essay sees a bump in the negative emotional valence of responses. The trend is reversed in the End-of-Semester reflection, where the positive emotions return to the numbers seen in the first reflection essay. I may be overinterpreting the results, but the analysis appears to capture grade anxiety that some students experience at roughly the mid-point of the semester.

<Figures 5-7 go here.>

**In place of a conclusion, a few takeaways**

I set out to write this paper to compile and summarize my experiences from a half-decade of teaching with the "Gameful" approach to pedagogy. This was never meant to be a one-size-fits-all pedagogy paper, as that approach rarely works anyway. Instead, I hope that this paper gives fellow college instructors a first-hand account of how it is to teach with Gameful. While I can only provide one perspective, readers will hopefully be able to utilize musings and determine whether Gameful is right for them, how students might benefit from Gameful, and what the most common pitfalls might be.

As I noted throughout the paper, students seemed to appreciate the diversity of the available assignments under the Gameful design. So, even if you are not wholly sold on incorporating videogame design and references into your courses, simply allowing your students a degree of choice in how they earn the final grade could increase student engagement. That said, I would urge you to consider making your syllabus more "fun." Students—even those who expressly classified themselves as non-gamers—expressed positive sentiments when seeing the various nerdy references in my syllabi. Again, the students seemed to enjoy the whimsy of the Gameful

syllabus. Since students not reading the syllabi has become such a problem that it is now a recognizable meme, coming up with ways in which students see the syllabus as a fun reading may be beneficial. Even if you are not a gamer yourself, seeking out ways to insert a bit more "fun" into the course design—one that matches your particular flavor of nerdy/geeky—might be worth investigating.

That said, not every aspect of Gameful implementation in your classes will be easy. It certainly was not for me. The umbrella problem I encountered at CU-Boulder and Bates was the students' focus on letter grades and their final grade-point averages. No matter how much distance we place between learning and grading, students seem to find the connection regardless.

We cannot begrudge the students for their fixation on grades. As Blum and others explain in the edited volume *Ungrading* (2020b), by the time students get to college, they have likely lived in the standard grade-based system for at least 12 years. It does not help that graduate programs and employers still focus on GPA as one of the key indicators of student worth. If you embark on the quest of implementing Gameful, you should be ready to explain to your students what they need to do to succeed in your class and why you took specific course design choices.

Finally, I recognize my privilege of working at two institutions that gave me a great degree of autonomy and control over how I design and teach the courses I was assigned. Your program or department may see Gameful or any other approach at ungrading as simply too "out there." In those instances, relying on evidence-based approaches may help. Ultimately, we want our students to learn and succeed. The administrative branch of any higher education institution should respond to this pitch positively, especially if we can demonstrate our outcomes in terms of measurable metrics.

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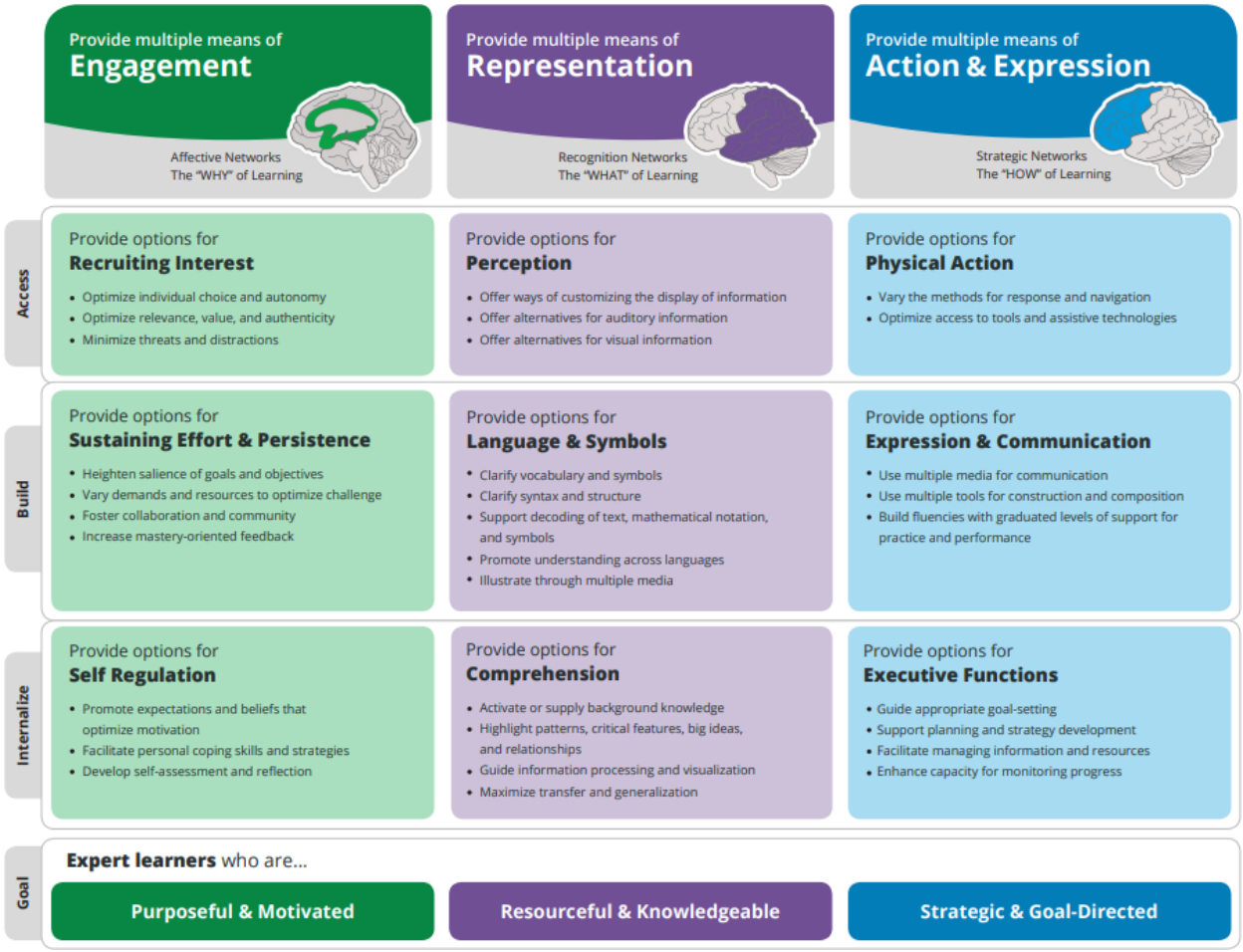
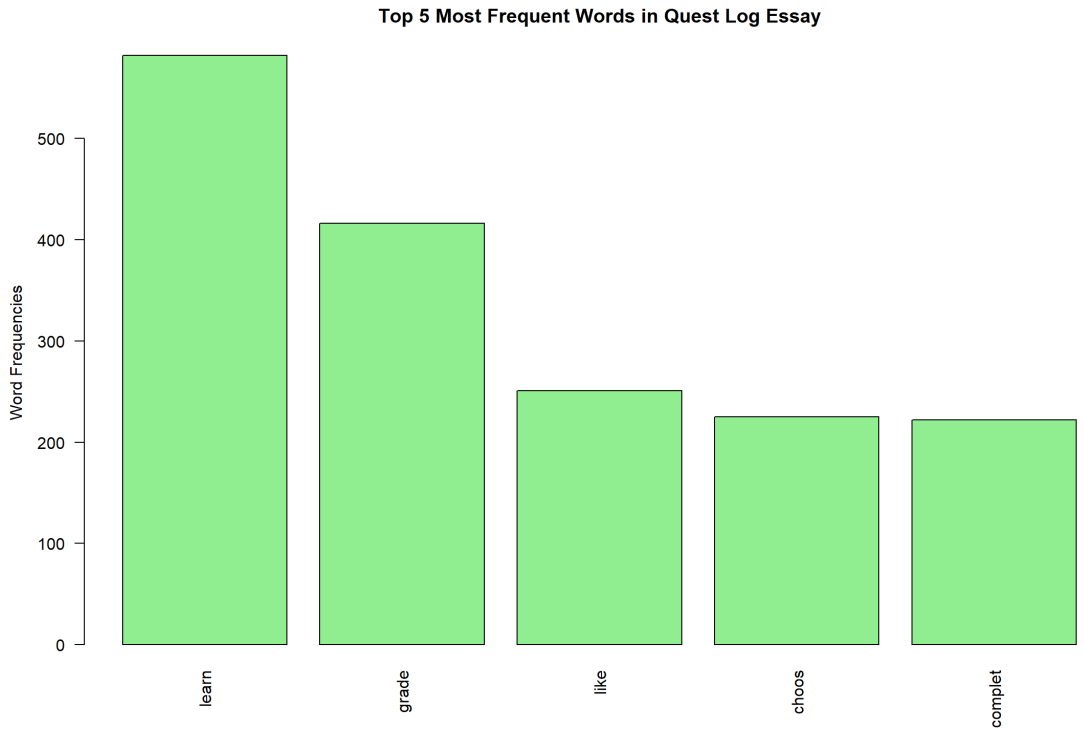
Figure 1: Universal Design for Learning Guidelines




(CAST, 2018)

Figure 2: Quest Log Essay (beginning of semester)



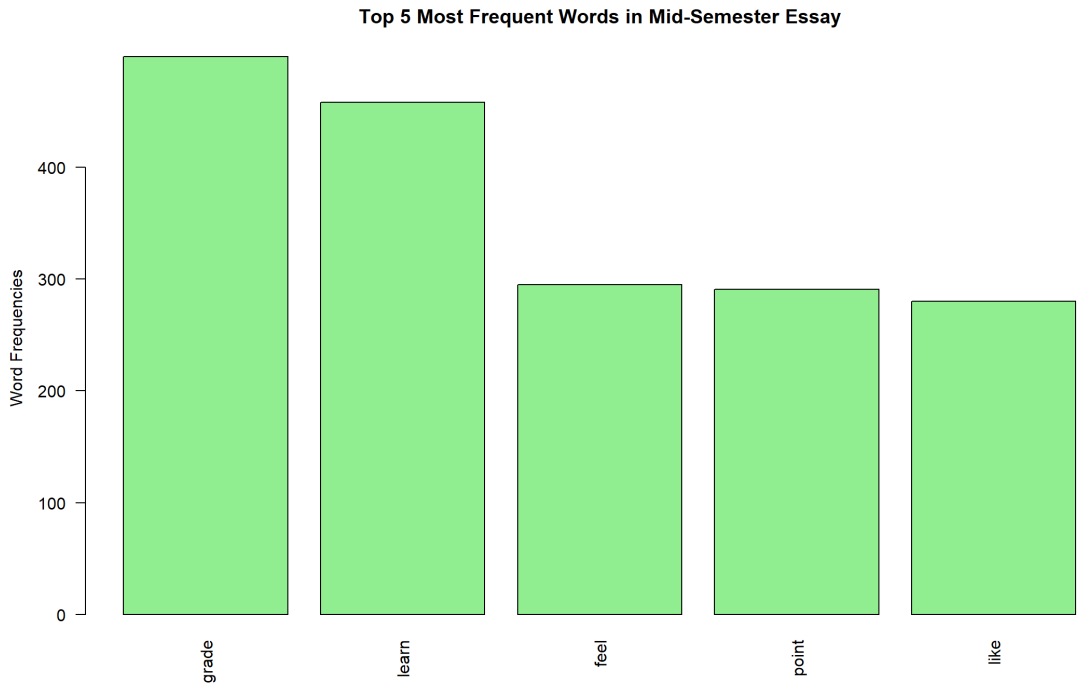


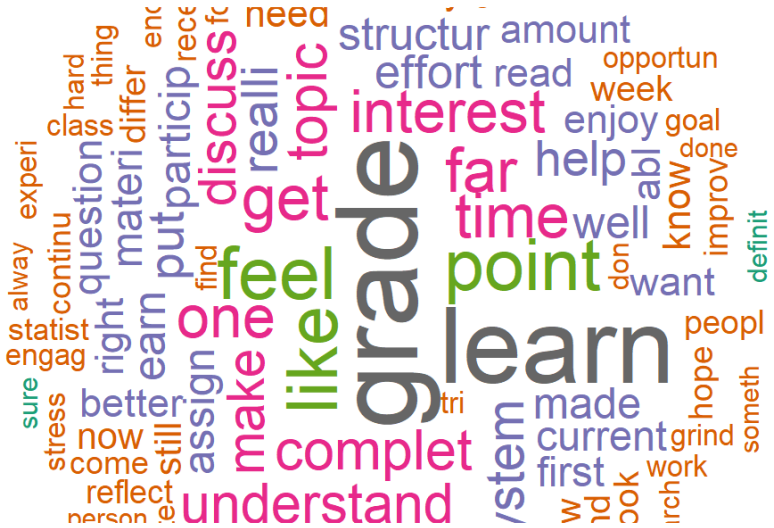
Note: World cloud displays only the top-100 most common words.



https://doi.org/10.33774/apsa-2025-wpql4 **ORCID:** https://orcid.org/0000-0003-0338-1534 

Figure 3: Mid-Semester Check-In Essay




Note: World cloud displays only the top-100 most common words.



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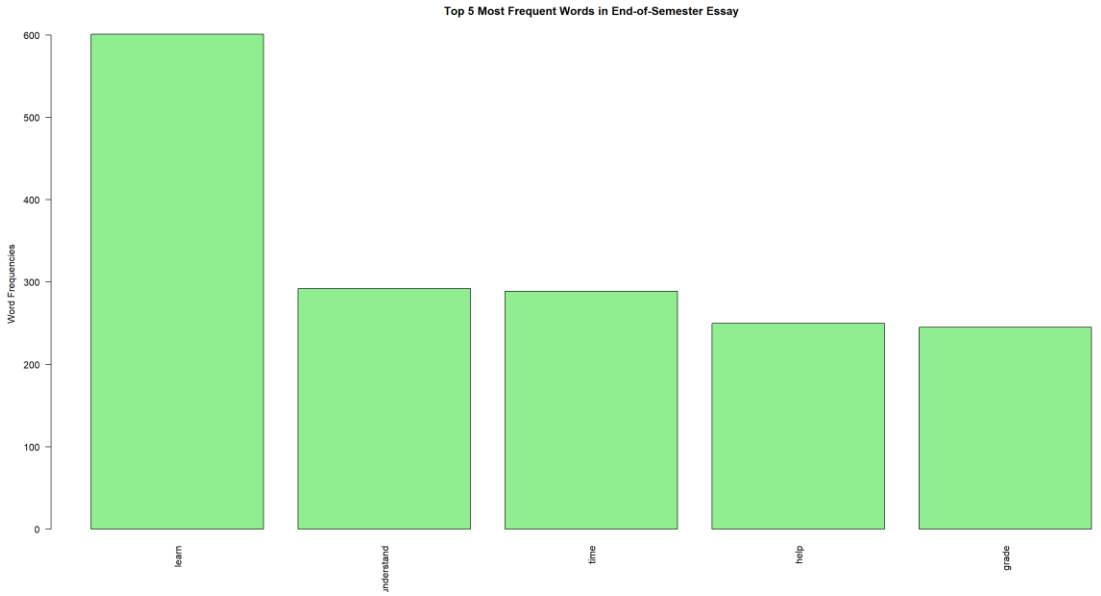
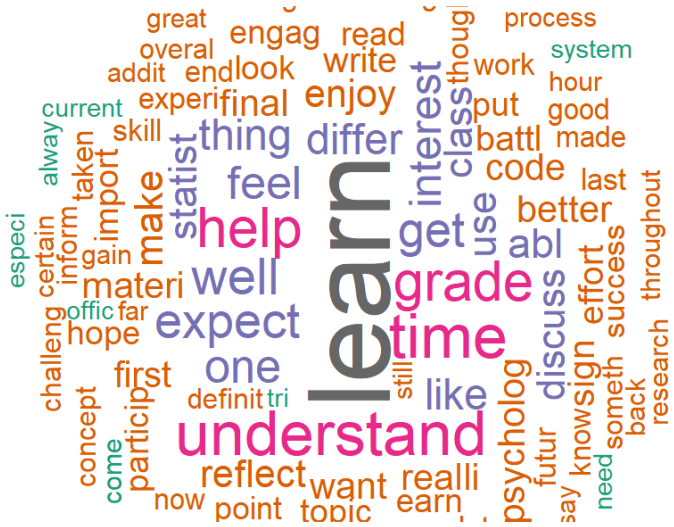
Figure 4: End-of-Semester Reflection




Note: World cloud displays only the top-100 most common words.



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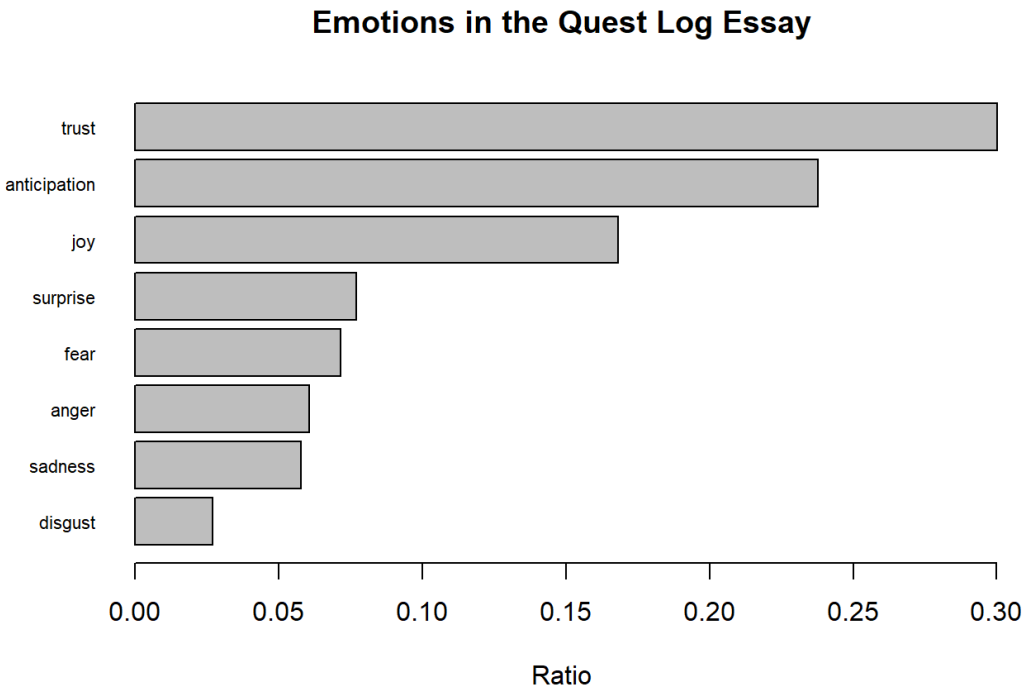
Figure 5:



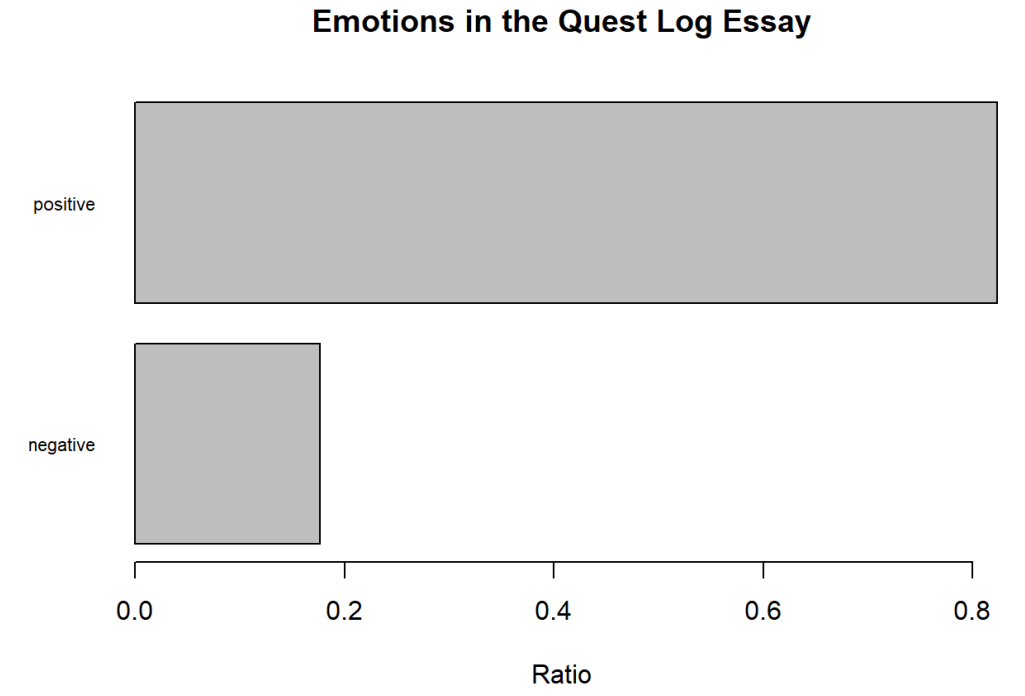
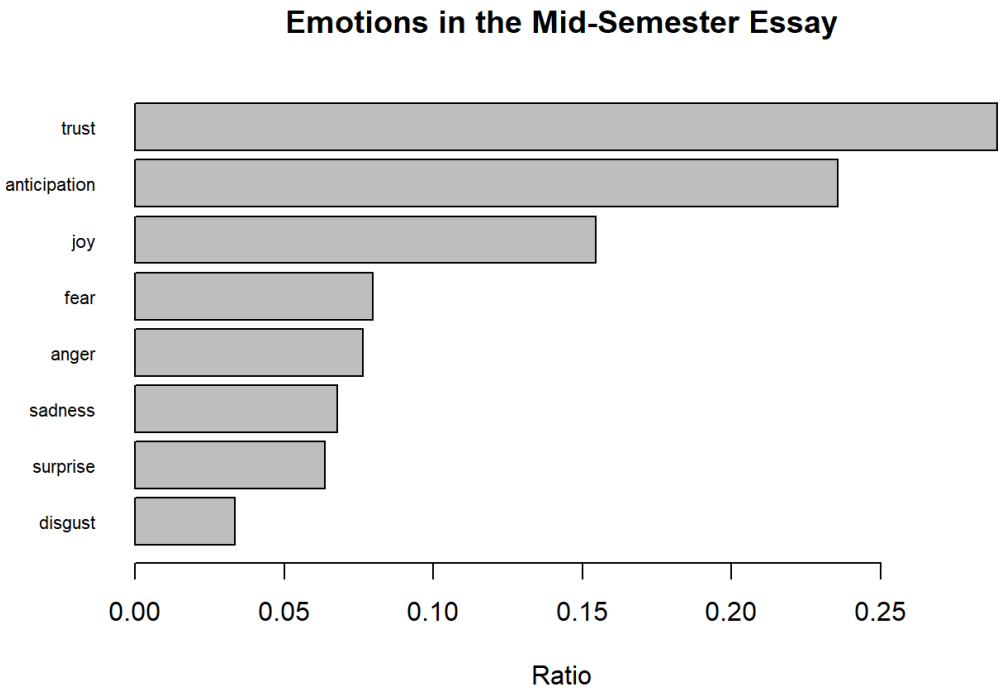



Figure 6:



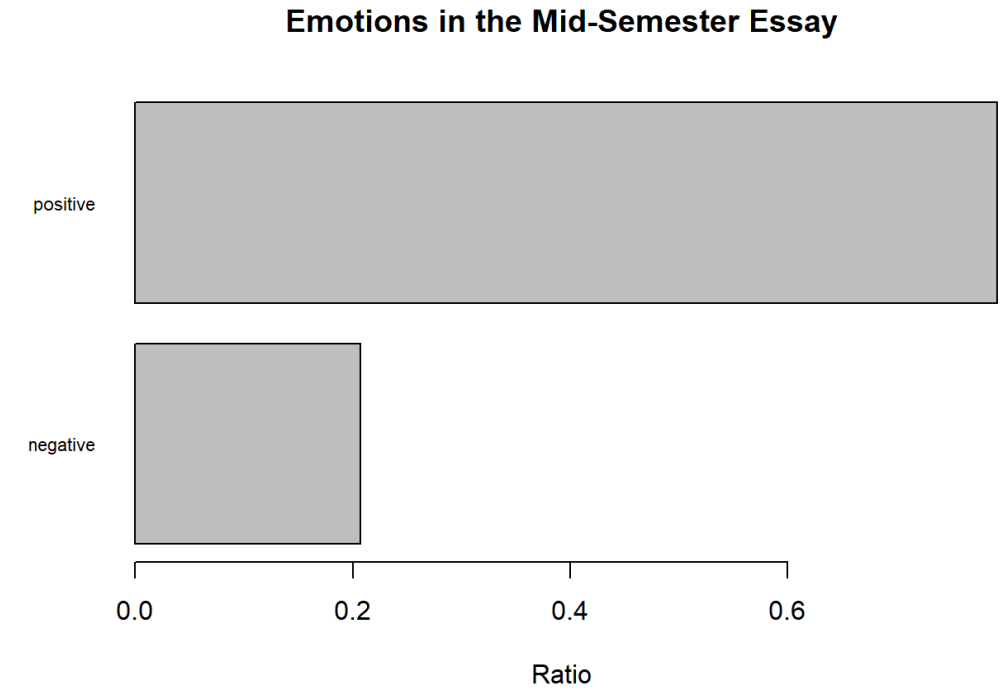



Figure 6: