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The "Ticket Home": A Scalable Survey System for Rapidly Identifying Barriers to Learning

Prof. David Coulter Jangraw, University of Vermont

David Jangraw received a BSE in EE from Princeton and a PhD in BME from Columbia. He then served at the NIH for six years. In that time, he studied brain-computer interfaces, fMRI methods, and pediatric mood disorders. Now an Assistant Professor of Electrical and Biomedical Engineering at the University of Vermont, he teaches data science and signal processing for engineers and runs the Grass Brain Lab. The lab uses emerging tech to understand the human brain's response to real-life situations and to promote mental health.

Anneliese Marie Shoudt
Dr. Courtney D Giles, University of Vermont

Courtney Giles is a Senior Lecturer in Civil & Environmental Engineering and Director of Curricular Enrichment in the College of Engineering and Mathematical Sciences at the University of Vermont. Her interests center on curriculum design, the first year experience, inclusive teaching in STEM, and supporting the scholarship of teaching and learning work broadly at her institution.

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Introduction:
Student feedback is usually rare, coming at the midterm and end of a semester in the form of official student course evaluations. This infrequent feedback system does not allow for just-in-time adjustment of teaching style or addressing common points of confusion when it is needed most. For this reason, some instructors choose to implement "muddiest point" reflections, a metacognitive exercise in which students briefly summarize the most confusing concept encountered in class each day [1].

Students respond positively to such reflections [2], and they may improve student performance when used effectively. In one study, muddiest point reflections alone did not improve exam performance, but results did suggest benefits for students whose instructor reviewed widely chosen "muddiest point" topics in class [3], a form of just-in-time teaching [4]. Another study found significant improvements on midterm exams when students added muddiest point reflections to other formative assessments, with greater benefits for marginalized student groups [5]. This suggests that muddiest point reflections can promote equity as well as metacognition.

Feedback has a similar but less explored potential to identify barriers to learning, or challenges that prevent effective learning from taking place. Unreliable internet access, mental health challenges, and insufficient academic support, for example, can prevent a student from reaching their full potential [6]. While the identification of system-wide barriers has received considerable attention and resources [7], fewer studies have focused on small, specific barriers that increase cognitive load in the classroom. Some studies, however, find that lower cognitive load leads to better learning outcomes [8]. This may be explained via Cognitive load theory, which posits that minimizing extraneous cognitive load (e.g., that imposed by suboptimal instructional design) can leave more cognitive resources available for learning [9], [10].

Cognitive load theory also encourages a set of instructional practices that changes over time. When acquiring novel and complex information, explicit instruction and worked examples should be used, but once acquired, that information should be reinforced with practice and problem-solving [11]. Determining when students are ready to transition can be a challenge for instructors, one that can be addressed using formative assessments or frequent student feedback.

Collecting student feedback may also promote inclusive teaching: barriers to learning tend to be more prevalent/severe in students with disabilities, financial disadvantages, or mental health conditions[12]; and students from underrepresented groups are typically more reluctant to raise concerns unprompted [13]. Simply having the opportunity to provide feedback without speaking up in class may contribute to a positive classroom climate, in particular the feeling of belonging and the perception that all students' voices are valued [14], [15].

Though many faculty recognize the various benefits of frequent student feedback, their receptiveness to collecting it can depend on the perceived time commitment involved and the specifics of the feedback system [16]. In this study, we present a large-scale weekly student feedback system that identifies both barriers to learning and "muddiest points". Our pilot

program uses centralized support to minimize instructor time commitment and may provide a model for other initiatives to scale up evidence-based teaching interventions.

To evaluate our system, we sought to answer several questions regarding the system's usability. How often did students and instructors use it? What kinds of instructional preferences, barriers to learning, and suggestions for improvement did students articulate in their responses? And how did instructors use this input? We also addressed several questions about perceptions. Did students perceive it as a means of feedback and/or a metacognitive exercise? Did the system contribute to a positive classroom climate, and would marginalized groups appreciate this contribution more acutely? And would instructors and students want to use the system in their future classes? We also evaluated the efficiency of the system. How much time did it require of students, instructors, and TAs? How did usage change over the course of the semester (e.g., did its novelty wear off and usage decline)?

The sections below will describe the feedback system and our means of evaluating it. We will quantitatively describe its reception by the instructors and students using it, both objectively in terms of usage trends and subjectively in terms of survey responses. We will then qualitatively describe the kinds of comments that students provided to the feedback system, as well as the comments instructors and students used in their exit surveys to describe their experience with the system. Finally, we will describe our intentions for continuing the feedback system given these findings and recent advances in generative AI.

Methods:
Students complete a brief online survey just before they leave the final class of each week; completing the survey is their "Ticket Home". Students are asked three questions (Figure 1):

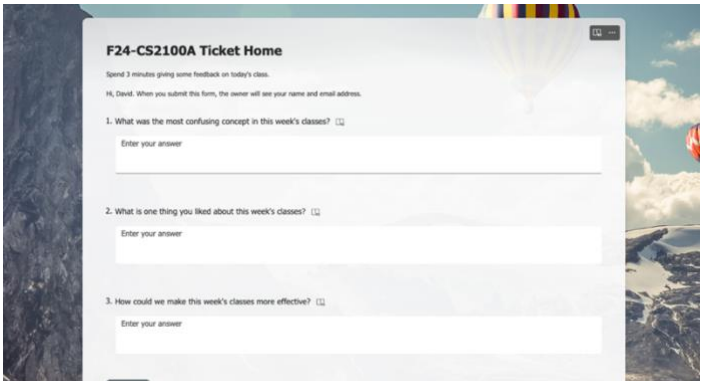

Figure 1. Sample Ticket Home form.

1. What was the most confusing concept in this week's classes?
2. What is one thing you liked about this week's classes?
3. How could we make this week's classes more effective?

Question 1 is a "muddiest point" reflection to promote metacognition and anchor responses in the material [1]. Question 2 encourages positive feedback, which can support self-efficacy and acceptance of feedback [17]. Question 3 solicits barriers to learning. Instructors' substantive use of these survey responses may improve students' sense of belonging by helping students' voices to be heard and valued [14], [15].

We administered this survey at a scale unprecedented in our college. Nine instructors of eleven classes in five departments (primarily Biomedical Engineering and Computer Science), requested to use the Ticket Home system in Fall 2024. These instructors had a range of prior experience soliciting student feedback in their classes, with some previously relying solely on centralized (i.e., college-administered) mid-term and final course evaluation surveys, and others supplementing with in-class polls and quiz or exam wrappers. Instructors received sample

materials to introduce the Ticket Home to their students (Appendix A-B) and were asked to complete a brief weekly survey about their usage of the Ticket Home. One instructor asked to participate but opted not to use the Ticket Home after deciding they did not have the time to implement it, leaving eight instructors of ten classes, teaching 403 students.

We provided centralized support to reduce instructors' time burden. An undergraduate Teaching Assistant (TA) read the responses to each class's Ticket Home and summarized them for the instructor. This summary was provided at least 24 hours before the next class period so the instructor could review it and adjust their teaching. Instructors could also access the individual responses of their students if they chose to do so.

At the end of the Fall semester, we administered exit surveys to instructors and students to assess how the Ticket Home changed teaching style and content, classroom climate, and attitudes towards student feedback. Classroom climate was assessed using the classroom belonging measure, a six-item instrument that has been shown to correlate positively with students' perceptions of their own learning as well as their grades in a class [18].

Results were analyzed using custom Python scripts that converted each Likert response to an integer (e.g., 1-5 for a 5-point Likert scale) before calculating the mean and standard error across individuals. Linear trends were tested for significance using SciPy's stats.linregress function to report Pearson's correlation coefficients and p values from a Wald Test [19]. For binary and Likert score values, we used the mean for each week as a data point. For continuous values like time, we used each response as a data point. To test for group differences, we used a nonparametric Mann-Whitney U test. Due to the exploratory nature of these analyses, we have used 2-tailed tests and reported uncorrected p values to generate hypotheses for future research.

A preliminary qualitative analysis of Ticket Home student exit surveys and TA Ticket Home summaries used ChatGPT to identify common themes. The surveys were first manually anonymized by removing names, then entered into ChatGPT with the prompt "Please summarize these responses to the question: <question>. List the most common themes and how many responses mentioned each of them." While a similar approach has been used successfully for thematic analysis before [20], our approach involves different data and prompts; it should therefore be considered preliminary and subject to a more extensive validation. To assess the approximate accuracy of this approach, a human rater manually identified the four most common codes identified by ChatGPT (real-time feedback, alignment with a class, student reflection, and safe expression) in the student exit survey comments about the benefits of the Ticket Home. The difference between the human rater counts and those of ChatGPT was ≤3 (12.5%) per theme.

Results

Response rates and demographics

Students completed 2,739 Ticket Home responses to 101 sessions over the course of the semester, totaling 87,585 words. The TA completed the weekly update every week. On average, 71.4% of instructors completed the weekly update in each week.

Of the 403 students enrolled in the participating courses, N=100 students responded to the exit survey. Forty-seven percent (47%) were female, 38% were male, 6% were nonbinary or gender-fluid, and the remainder chose not to answer. Eighty-one percent (81%) reported being white, 5%

Hispanic, 5% Asian, and 3% Black. The mean ± standard error (ste) age was 21.0 ± 3.4 years. Forty-one percent (41%) were in their 3rd year, 27% in their second year, 24% in their fourth year, 2% in their first year, and 1% were continuing education students. Forty-seven percent (47%) of students majored in biomedical engineering, and 30% in CS. All other majors were represented in 3% or less of the responding group.

Of the eight instructors leading the participating sections, N=7 instructors responded to the exit survey. Fifty-seven percent (57%) were male, 43% were female, and 100% were white. The mean ± ste age was 42.1 ± 8.9 years. The mean ± ste years of teaching experience was 9.4 ± 7.9 years.

Ticket Home content

In the 101 TA summaries of Ticket Home responses, the following common (>10%) themes were identified by ChatGPT as common responses to "How could we make this week's classes more effective?":

1. More Examples and Practice (50 mentions)
2. Slowing Down (15 mentions)
3. Breaks and Time Management (12 mentions)
4. Guidance and Clarifications, especially for labs & activities (12 mentions)
5. Interactivity and Engagement (10 mentions)

The following common themes were identified by ChatGPT as common responses to "What was one thing you liked about this week's classes?":

1. Live Coding and Demonstrations (23 mentions)
2. In-Class Activities and Collaboration (21 mentions)
3. Examples and Practice Problems (19 mentions)
4. Visual Representations (14 mentions)
5. Time to Work on Labs and Projects (13 mentions)
6. Structure and Organization (11 mentions)

A similar analysis of common responses to "What was the most confusing concept in this week's classes?" found that results were highly specific to each course's content. We have therefore omitted them here.

Exit survey scores

The response of the seven instructors completing the exit survey was universally positive. All instructors agreed (i.e., selected "agree" or "strongly agree") with the statements "'The Ticket Home helped me to identify barriers to learning," "The Ticket Home helped me identify points of confusion," "The Ticket Home helped my students feel heard and valued," and "I would like to keep using the Ticket Home in my future classes."

Most student responses were also positive. Seventy-six percent (76%) of students agreed with the statement "'The Ticket Home helped the instructor identify barriers to learning," and 85% agreed with the statement "The Ticket Home helped the instructor identify points of confusion." Responses about the benefits of metacognition were more mixed: 54% agreed with "The Ticket Home increased my awareness of my own barriers to learning," and 57% agreed with "The

Ticket Home increased my awareness of the topics/concepts I was struggling with." Negative reactions were rarer: no more than 13% of students disagreed with the statements above.

Classroom climate results were also positive. The mean score on the Classroom Belonging measure was 5.76/7. When prompted, students linked this feeling explicitly to the Ticket Home: 66% of students agreed (10% disagreed) with the statement "I felt more heard & listened to in this class than in my other classes due to the Ticket Home."

Sixty-one percent (61%) of students agreed (6% disagreed) with "I would like to keep using the Ticket Home in my future classes."

Qualitative analysis of student comments
In the student exit surveys, the following common (>10%) themes were identified by ChatGPT in student responses to a question about the benefits of the Ticket Home (one "mention" = one student's exit survey response):

1. Consistent, real-time feedback (41 mentions)
2. Helps instructors align their approach with a class and new instructors fine-tune their approach to teaching (18 mentions)
3. Encourages students to reflect on their understanding of the material and revisit challenging material (18 mentions)
4. Provides a safe, semi-anonymous space to express opinions and struggles without speaking up in class (14 mentions)

The following common themes were identified in responses to a question about the drawbacks of the Ticket Home:

1. Time and Effort (e.g., takes time, feels rushed, hard to find time, tedious) (36 mentions)
2. Difficulty in Reflection (e.g., hard to remember struggles, not always something to say, pressure to provide an answer) (30 mentions)
3. Impact and Instructor Response (e.g., feedback not acted upon, changes not noticeable, concerns overlooked) (20 mentions)
4. Forgetting to Complete (e.g., easy to forget, need reminders) (18 mentions)
5. Grading and Mandatory Nature (e.g., graded for participation, feels like an extra assignment) (12 mentions)

The following common themes were identified in responses to a question about the impact of the Ticket Home on classroom climate:

1. Increased Student Voice and Representation (e.g., feeling heard, having a voice, opinions being acknowledged) (22 mentions)
2. Fostering an Open and Inclusive Environment (e.g., more inclusive, democratic, or safe to express confusion or concerns) (19 mentions)
3. Improved Instructor Responsiveness and Adaptation (e.g., professor adjusting teaching methods, addressing struggles) (17 mentions)
4. Encouraging Reflection and Communication (e.g., promoting reflection, easier to discuss challenges) (13 mentions)

5. Community Building (e.g., fostering collaboration, reducing tension, creating a sense of community) (11 mentions)

In addition, 17 out of 200 students mentioned the Ticket Home in their anonymous teaching evaluations in questions related to classroom climate and open-ended feedback. Ticket Home was not specifically mentioned in either of the question statements. Fifteen (15) of these were in response to the question "Please provide examples of when the instructor cultivated an inclusive and respectful classroom or provide recommendations for improvement." All mentions were positive.

Utility for underrepresented groups

Part of the motivation for the format of an online form is to solicit feedback from underrepresented minorities that might feel less inclined to speak up about barriers to learning or points of confusion. We therefore wanted to test the hypothesis that the Ticket Home improved classroom climate by helping underrepresented students feel more heard and listened to.

Our predominantly white population of respondents made it difficult to tell if students or instructors identifying as underrepresented minority races/ethnicities had different responses to this intervention. Our responding group did have a large proportion of female students, who remain underrepresented in engineering majors [21]. At the authors' institution, female students represent 55% of enrollments in the Biomedical Engineering B.S. and 20% of enrollments in the Computer Science B.S. However, there was no significant difference between male and female students' Likert ratings of the statement 'I felt more heard & listened to in this class than in my other classes due to the Ticket Home' (Mann-Whitney U = 783, n_1 (number of female respondents) = 47, n_2 (number of male respondents) = 38, p = 0.298), or 'I would like to keep using the Ticket Home in my future classes' (Mann-Whitney U = 877, n_1 = 47, n_2 = 38, p = 0.878).

Qualitative analysis of instructor comments

All instructors that responded to the exit survey (N=7) indicated that they changed something about their course as a result of using the Ticket Home. When asked what they changed, five instructors indicated different approaches to address points of confusion, including revisiting muddy points during class, providing new practice problems in preparation for quizzes, and creating a new group problem-solving activity. Two instructors changed something about the classroom audio/visual setup, noting student comments on color schemes, text size, and screen placement. Two instructors indicated slowing the pace of their lectures in response to Ticket Home feedback.

When asked about the biggest benefits and drawbacks of the Ticket Home, instructor comments echoed those of students. When asked about benefits, four instructors indicated increased frequency of feedback, three indicated it being useful for identifying points of confusion, and four commented on the value of giving students an avenue for regular feedback, particularly from students that may be "quiet" or "shy". When asked about the biggest drawbacks, five instructors commented on the time it takes to deploy the surveys. Of these, two instructors specifically noted the tension between incorporating active learning strategies and the pressure to cover content in their courses. Other drawbacks included instructors' "mental load" of adding another "thing to do" and student dissatisfaction with the requirement to complete the survey.

When asked in what ways the Ticket Home changed the classroom climate, five instructors commented on students knowing that their voices were heard, and two commented on transparency in teaching and providing a customized learning experience for students.

When asked how using the Ticket Home changed their perspective on frequent student feedback, four instructors indicated previous perceptions that student feedback might be "overwhelming", that they did not previously have a good way to collect student feedback, and that they "realized that there was not a good way (before this) to get student feedback from the whole class". Instructors also commented on the value of the TA summaries and the value of a standard approach for larger class sizes.

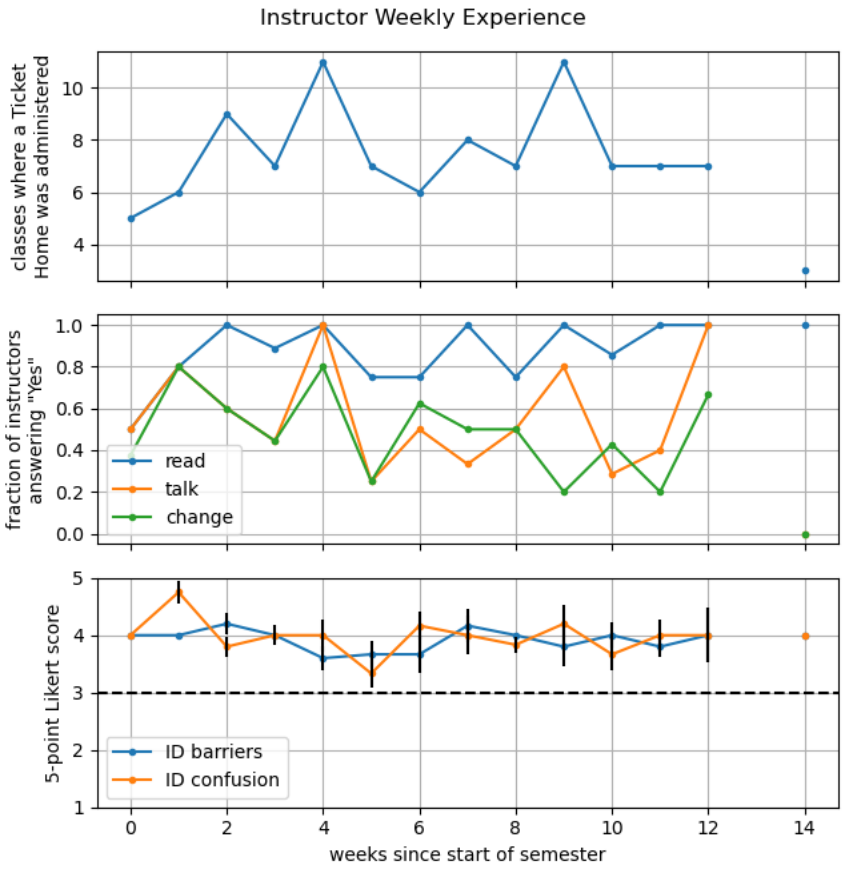

Figure 2. Instructor weekly survey results, plotted as a function of weeks from the start of the semester. Week 13 was a break week with no classes. Top: number of classes in which an instructor solicited a Ticket Home. Middle: fraction of instructors who said they read the Ticket Tome summary ("read"), talked about Ticket Home results in class ("talk"), and changed something about how they taught as a result of the Ticket Home ("change"). Bottom: mean ± ste Likert score of instructors' agreement with the statements "The Ticket Home helped me to identify barriers to learning this week" ("ID barriers") and "The Ticket Home helped me identify points of confusion this week" ("ID confusion").

Trends in usage over time

With the exception of the first and last week, both instructor usage (i.e., the number of times an instructor solicited ticket home responses) and student response rates remained above 50% each week throughout the semester (Figure 2). There was no linear trend in instructor usage, or in instructor perceptions of utility: instructors continued to answer that they had read the Ticket Home, and that it helped them identify barriers to learning and points of confusion, throughout the semester. In exit surveys, three of seven instructors commented on changes in usage over time. One indicated stopping use once project work and student presentations began, and another indicated that they preferred the raw student responses over the TA-provided summaries. One instructor said they began to focus more on points of confusion as a method of preparing exam review sessions and focused less on issues that students seemed to disagree on.

Student response rates, however, had a significant linear decline with week (Slope = -1.66 %/week, Pearson's $R^2 = 0.386$, $p = 0.0177$) (Figure 3). Such a decline could be a simple reflection of student time pressures increasing and the system's novelty wearing off. More substantively, it could indicate that students' concerns are being addressed and they have fewer

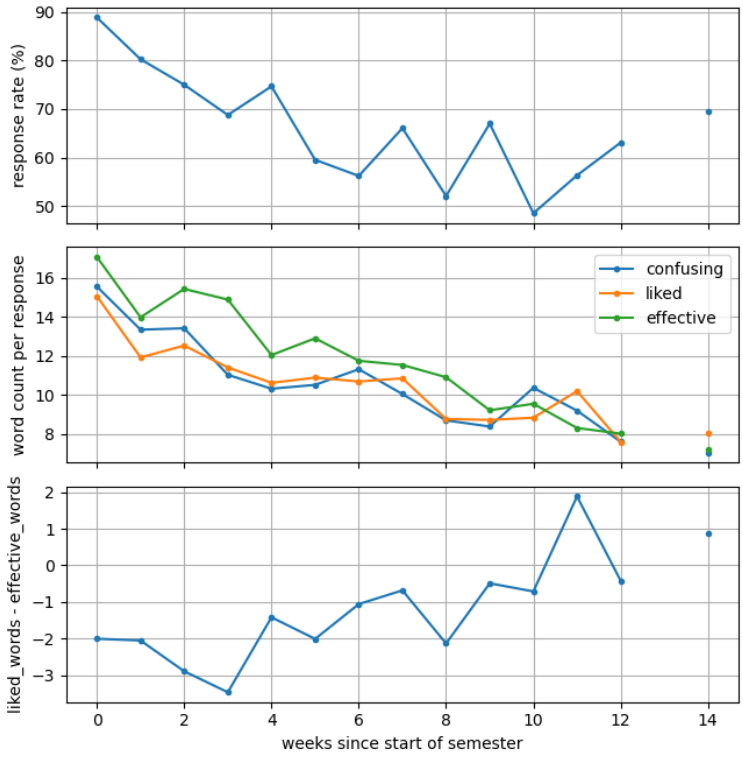

Figure 3. Changes in student responses over time. Top: percentage of students responding to a Ticket Home administered in their class. Middle: words per student response over time for the Ticket Home questions "What was the most confusing concept in this week's classes?" ("confusing"), "What is one thing you liked about this week's classes?" ("liked"), and ("How could we make this week's classes more effective?" ("effective"). Bottom: difference between the "liked" and "effective" word counts, used as a proxy for student positivity about instructional methods.

things to suggest, or that they are losing confidence in the Ticket Home as a means of making change. To give some insight into these two substantive possibilities, we analyzed the words submitted by each student as a function of time.

Results showed that those students who did respond each week responded with fewer words as the semester advanced. There was a significant downward linear trend in total words (Slope = -1.62 words/week, $R^2 = 0.0765$, $p = 1.31*10^{-44}$). However, this decrease was more pronounced in responses about making the class more effective than it was in responses about what students liked: the difference between the word count of the "liked" question and that of the "effective" question became more positive with time (Slope = 0.268 words/week, $R^2 = 0.00788$, $p = 9.36*10^{-6}$).

Time commitment

In their weekly updates, instructors who used the Ticket Home in each week reported spending a mean ± ste of 4.76 ± 0.21 minutes per week in class and 5.73 ± 0.49 minutes per week out of class on the Ticket Home (Figure 4). The TA reported spending 68.7 ± 5.5 minutes of their time reading and summarizing Ticket Home responses, and 3.21 ± 1.01 minutes on other aspects of the Ticket Home (debugging, assisting instructors, etc.). The time the TA spent reading and summarizing Ticket Home responses declined with time (Slope = -3.51 minutes/week, $R^2 = 0.521$, $p = 0.00354$). No other time commitments showed a significant linear trend with time ($p>0.05$).

Students spent a median of 1.33 minutes responding to the Ticket Home, as measured by the time between the start time and submission time reported by Microsoft Forms. The median response time decreased as the semester went on, with a significant linear trend (Slope = -3.27 seconds/week, $R^2 = 0.907$, $p = 1.49*10^{-7}$).

Discussion and Conclusion:

In this paper, we presented a system called the "Ticket Home" for frequent student feedback and scaled it to eight instructors of ten courses in a single semester. This led to 2,739 Ticket Home responses to 101 class sessions. Student Ticket Home responses most often requested examples and practice, slower paces and more breaks, more guidance on assignments, and more active learning exercises. Students praised the inclusion of these same items, as well as compelling

visuals and course organization. While many of these comments may mirror those found in midterm and end-of-semester anonymous surveys, the Ticket Home offers a much more rapid feedback loop between students and instructors. It also offers a "muddiest point" reflection that promotes metacognition from students and targeted instruction from instructors.

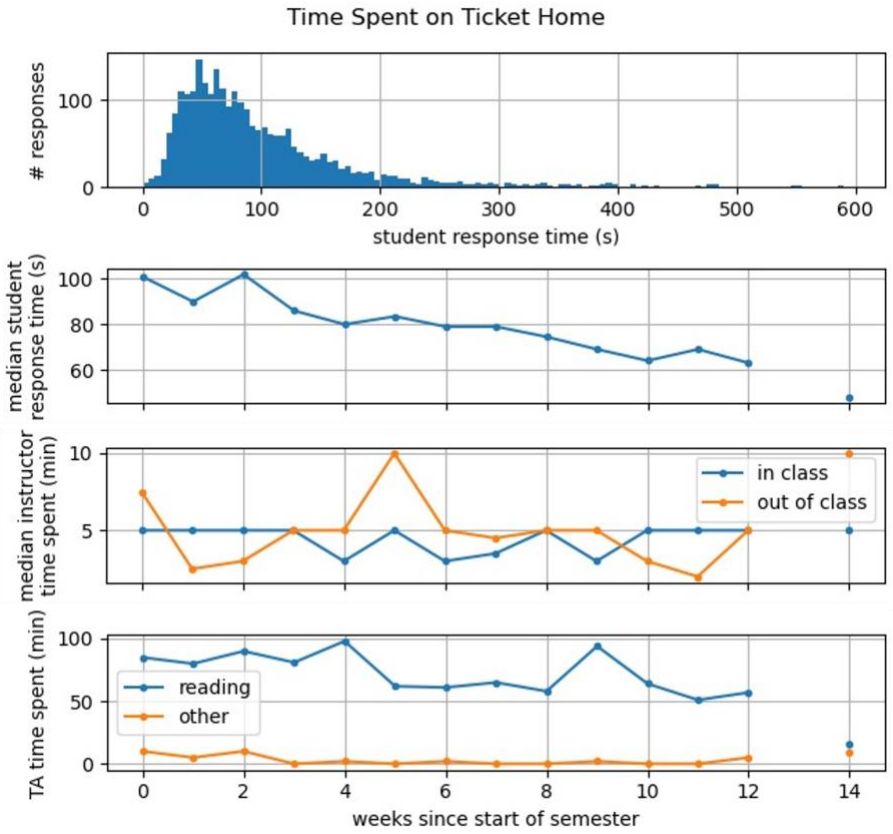

Figure 4. Time spent on the Ticket home by students, instructors, and TAs. Row 1: histogram of student response times to the Ticket Home. Row 2: median student response time for each week of the semester. Row 3: median instructor report of in-class time spent on the Ticket Home ("in class") and out-of-class time spent reading and using the responses/summaries ("out of class"). Row 4: time spent by TA each week reading and summarizing the responses ("reading") and on other aspects of the Ticket Home ("other").

The reception from instructors was universally positive, and they continued to administer the Ticket Home and read the responses consistently throughout the semester. Exit surveys suggested that instructors saw the value of the Ticket Home for identifying barriers to learning, identifying points of confusion, and improving classroom climate. Although some acknowledged the challenge of making time for the tool each week, all instructors wanted to keep using the Ticket Home in their future courses.

The reception from students was also positive, but less so. Student Likert scores and comments supported the utility of the Ticket Home for identifying barriers to learning, identifying points of confusion, and improving classroom climate. Anonymous surveys most frequently mentioned the Ticket Home in response to a question about classroom climate and inclusivity. Sixty-one percent (61%) of students wanted to keep using the Ticket Home in their future courses, and only 6% did not.

Student response rates declined over the course of the semester (~23% over 14 weeks based on a linear fit). Their word counts also declined slightly, but this decline was more pronounced for comments about improvements than for positive elements of the class, suggesting that instructors were successfully responding to students' suggestions.

Attempts to minimize time commitment were largely successful. Student spent about 80 seconds filling out each Ticket Home, instructors spent about eleven minutes/week on the Ticket Home, and the TA spent about 72 minutes/week to cover ten classes. Time commitments for students and TAs declined with weeks as they became more efficient at their tasks.

Despite these efforts, the largest perceived drawback was time commitment (for both instructors and students). At our recommendation, the instructors made the Ticket Home mandatory for their students (typically as part of their participation grade). Some students commented that they disliked this choice. But this certainly has implications for response rates, and it remains unclear how making the Ticket Home optional for students would affect its response rates, content, and utility.

The Ticket Home was perceived by many students and instructors as a means of increasing inclusivity and amplifying the voices of students who might feel less inclined to speak up in class. Quantitative and qualitative results both support this outcome. However, we did not find that women and men perceived the Ticket Home differently, and our sample lacked the racial/ethnic diversity to test the differential impact of the Ticket Home for other underrepresented minorities.

The absence of a control group makes it difficult to assess the specific contribution of the Ticket Home to metrics like the classroom belonging measure, teaching evaluation scores, or student learning and test scores. Future work could attempt a randomized trial, but our group of instructors currently lacks the scale to implement and analyze such a trial effectively. Such a study should ideally address the fact that effectiveness depends on many interacting factors, including students, instructors, and institutions.

The rise of large language models (LLMs) and generative AI has made it possible to outsource the summarization of student responses to an LLM, cutting the time commitment for TAs. However, the potential for identifiable information to be included in Ticket Home responses makes it difficult to send these responses to the most popular LLMs like ChatGPT and Google's Gemini, which require sending data to company servers. Locally running LLMs, like Meta's Llama, can keep this data private. At the time of this project's planning, they tended to be less accurate and user-friendly, requiring additional expertise or training for the instructors or TAs who use them. Rather than rely on LLMs to generate the weekly TA summaries in real time, we used ChatGPT only for analysis, to derive preliminary themes in student responses. We plan to conduct manual coding and theme identification to validate the AI-generated qualitative analysis [22] following a second semester of data collection, which began in January 2024. As the landscape of LLMs continues to change rapidly, we anticipate using tools like Ollama, which runs locally in a web browser, for Ticket Home summaries in the future.

Taken together, these results suggest that the Ticket Home can be scaled to multiple courses and maintained over the course of a semester. We are currently offering the Ticket Home to instructors for their Spring semester courses. Several instructors will use the system a second time, testing the effect of multi-semester experience with the system. Results will be used to inform future offerings of the Ticket Home and other scalable teaching interventions.

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Appendices:

Appendix A: Instructions that we recommended be provided to students about the Ticket Home

Course Feedback:
Our goal is to make this a great course that is challenging and rewarding for students. Your feedback is crucial to making quick adjustments to better achieve that goal.

At the end of each class or week, you will be asked to fill out a 3-question survey called the "Ticket Home" about what you found confusing, what you liked, and what could be improved. Your responses will help us to:

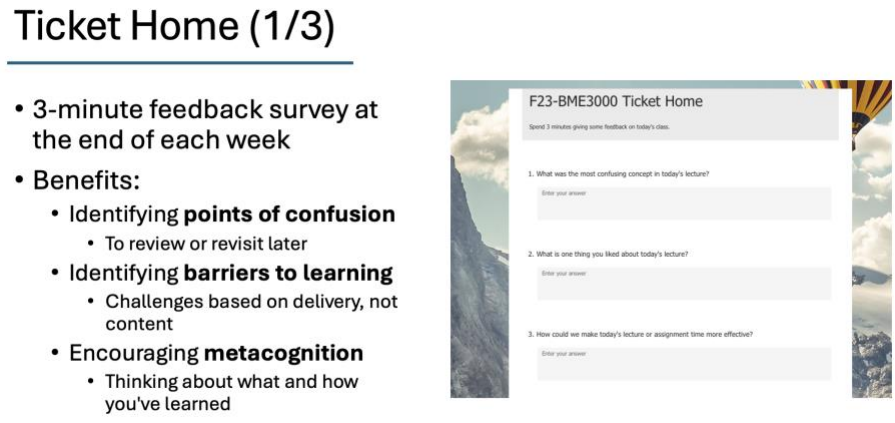
1. Identify common points of confusion that we can review together in class
2. Identify barriers to learning that might prevent you from focusing your full attention on the material
3. Demonstrate to students that they are heard and valued
4. Encourage metacognition, that is, thinking about what and how you've learned

Several CEMS courses will use the Ticket Home this year. These results will be used by the Ticket Home project lead and a TA to assess how it changes the student and instructor experience and see if we want to continue scaling it up. Anonymized responses and aggregate results may be shared with other CEMS faculty and included in a scholarship of teaching and learning publication on the Ticket Home.

To encourage participation, you may receive points for completing these surveys. These surveys are not anonymous so that the instructor can follow up and ask clarifying questions, but your answers will not be held against you in any way.

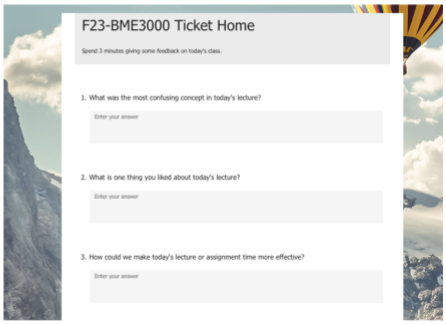
Students are also expected to complete an official UVM course evaluation at the end of the semester. These evaluations will be anonymous and confidential, and the information gained will be used to improve the course.

Appendix B: Slides that we recommended be shown to students before the first Ticket Home:



Ticket Home (2/3)

- Your results will be summarized by a Ticket Home TA and sent to me
- I will use it to adjust how and what I teach or discuss my reasoning
- **Responses are required**
  - May factor into your participation grade
- End-of-semester survey on your experience with the Ticket Home
- Not anonymous – please keep it civil!
- Your responses can be read by me, the Ticket Home TA, and the Ticket Home project leader
  - Anonymized responses and aggregate results may be shared with CEMS faculty (to see if we want to scale it up) or used in a "scholarship of teaching and learning" paper



Ticket Home (3/3)

- Find the Ticket Home link in our class's Teams General Channel.
- I will remind you and try to end class 3 min early to allow time to fill it out.
- Please fill it out right at the end of class while it's still fresh!