Promoting Student Engagement, Wellbeing, and Transfer of Learning through Weekly Check-in Surveys

Ruth Benander, University of Cincinnati, benandre@ucmail.uc.edu

Gene Kramer, University of Cincinnati, krameree@ucmail.uc.edu

Abstract

This multidisciplinary study explores using an intentionally-designed teaching innovation to help students feel more connected and motivated in their classes – both online and in-person. The authors propose these weekly check-in surveys as a low-stakes strategy to improve classroom atmosphere. The anonymous, online check-ins focus on emotional states, with a quick debriefing of the aggregate responses, and address the major concerns documented in the literature on student mental health and achievement. In a two-year study of English and math classes (N=2271), students completed weekly check-ins concerning mental wellness and course concerns through rating scales and open-ended questions. In the qualitative and quantitative data, students reported that they felt less alone, more connected, and more metacognitively aware of their emotional states. In addition, they reported they could transfer specific skills to future courses. No connection was found with retention or persistence, which seemed to be more influenced by life events rather than classroom experiences. The authors recommend a specific structure for these short surveys and ways to debrief the results with students.

Keywords: transfer of learning, student wellbeing, check-in surveys

Introduction

This multidisciplinary study explores a teaching innovation to help students feel more connected and motivated in their classes – both online and in-person. Feeling supported in class helps students be more likely to connect their learning in first-year general

education courses to other courses in their college careers (e.g. Dose, 2021). Positive mood, motivation, and personal wellness check-ins can increase engagement in online participation, promote a climate of care, and foster mutual support for first-year students (Huberty et al., 2021; Jessup-Anger, 2011). In addition, positive mood has been associated with higher academic performance and skills transfer (Brand & Opwis, 2007; Volkaert, et al., 2020). Exploring how to address connection to promote transfer, Buskirk-Cohen and Plants (2019) report that student success is supported by a feeling of belonging, and Rainey et al. (2019) report that the feeling of belonging may have a strong impact on minoritized students. We present evidence that this emotional connection contributes to students being able to retain and transfer knowledge and skills in first-year general education courses.

We propose that weekly check-in surveys are also a low-stakes way to improve classroom atmosphere. These anonymous, online check-ins focusing on emotional states, with a quick discussion of the aggregate responses, are easy to do and address the major concerns documented in the literature on student mental health and achievement. Additionally, implementing this kind of emotional metacognition support in first-year general education courses can help students new to college life practice emotional self-regulation as well as emphasize the expectation of skills transfer to other courses in their careers. The results of this Institutional Review Board approved study are presented here. The study took place at a regional college of a Carnegie Classification Research 1 university. The college primarily offers two-year transfer programs, technical programs, and technical baccalaureates. It serves a wide range of students in a suburban campus.

Background

Mood, motivation, and personal wellness check-ins have been demonstrated to increase engagement in online participation, promote a climate of care, and foster mutual support (Huberty et al., 2021). According to the Active Minds Student Survey, students overwhelmingly report difficulty maintaining a routine and staying connected with others (Active Minds, 2020). Based on this kind of student experience, it seems important to find ways to create connections. In exploring how to address connection, Buskirk-Cohen and

Plants (2019) report that student success can be supported by a feeling of belonging, and Rainey et al. (2019) report that the feeling of belonging, related to the perception that the professor cares about students, may have a strong impact on minoritized students. Bostosik (in Ferlazzo, 2017) writes,

> Transfer of learning occurs when the student is motivated by the topic, motivated to learn, has previous knowledge on the subject, and knows how to connect new information to existing information. (para. 25)

These results indicate instructors need to care about how connected students feel in their courses because this emotional connection contributes to students being able to retain and transfer what they learn from one class to another.

Transfer of learning is a primary component of any general education program and positive mood and motivation play key roles in the transfer of learning. Ideally general education courses should be designed to connect and build upon each other, strengthening critical thinking transfer (Benander & Lightner, 2005). Deci and Ryan (2021) state supporting students' need for autonomy, competence, and relatedness is essential for fostering intrinsic motivation. By providing opportunities for self-directed learning, even in a short reflection such as a check-in survey, educators can nurture students' intrinsic motivation to learn, acknowledge accomplishments, and create a sense of community in the classroom,

Research on mood and emotional regulation also suggests that creating a supportive and positive classroom atmosphere benefits student success. Brand and Opwis (2007) found that students who reflected on positive experiences before problem solving activities performed at a higher level than those who reflected on negative experiences. Students in the positive reflection group also absorbed and acted on new information more effectively. Clearly, cultivating a positive mood can be a useful part of cultivating student success. However, this positive effect may be only available during the course that is explicitly focused on creating a positive environment. Volkaert et al. (2020), working with a younger population than the present study, found that the participants were able to learn emotional awareness and regulation with a short-term positive effect, although those effects did not seem to transfer beyond the experimental tasks and did not have long term

effects. This outcome seems to support using these strategies across department course offerings, rather than in individual courses.

It is not surprising that evidence indicates the reverse is also true: anxiety worsens learning outcomes. Volkaert et al. (2020) noted that while positive affect increased student performance, anxious affect decreased student performance. A positive note here is researchers did not find this to be a long-term effect of the emotional regulation training they gave the participants in the study. Llera and Newman (2020) found similar results in a study using a "laboratory-based worry induction" experiment to document how being anxious and worrying negatively affected students in problem solving activities. Llera and Newman (2020) conclude,

> Data from this study argue that attempting to take a more objective stance when evaluating a problem, and refraining from catastrophic thinking, represents the most effective problem-solving strategies for both high and low trait worry individuals alike. (p. 7)

It appears to be worthwhile to address anxiety levels in our courses as well as try to foster a more positive mood and provide opportunities for emotional awareness to promote overall student success.

This emphasis on being aware of anxiety in our courses is timely and not unwarranted. An Australian study reports that young people, ages 15-24, are reporting increasing psychological distress over the past 15 years. In a study of college students who attended counseling sessions for psychological distress, Kivlighan et al. (2021) found that students' academic achievement improved when their psychological distress was addressed. Warren (2023) has also documented rising rates of depression and anxiety among young people, noting that "60% of youth with major depression receive no mental health treatment"(para. 5). In the 2023 Surgeon General's report, "Our Epidemic of Loneliness and Isolation," Murthy notes that there is a growing trend in Americans reporting that they feel a lack of connection to their community and a decline in people's perception that there are social structures to support them. In direct application to higher education, Murthy (2023) summarizes the research to conclude, "The lack of social connection is cited as a prime reason for leaving a program" (p. 34).

The problem gets more complicated when students comment that they are reluctant to access mental health resources at their institutions. Pompeo-Fargnoli (2022) reviews the significant number of studies documenting college students' perception of stigma associated with seeking help for mental health through counseling services. However, Pompeo-Fargnoli's (2022) study observes that students who have experience with mental health support services have a lower perception of stigma related to seeking help. These results seem to emphasize how important it is that faculty, as a first point of contact for many students, can have an important role in reducing the stigma related to mental health as well as being able to refer students to college services. Kalkbrenner, Jolley, and Hays (2021) interviewed faculty to find out how faculty dealt with psychological distress in their students. The researchers report that the faculty-student relationship was an important factor in a faculty member recognizing and supporting students. They noted that classroom atmospheres and small class size contributed to both faculty and students being more likely to address issues of psychological discomfort. Seeking mental wellness support is not often students' first choice, but they also report benefiting when they do receive help.

Post-pandemic and with varying modalities of instruction, influencing positive mood and motivation is difficult. Positive mood and motivation support student success while overwhelming levels of anxiety can inhibit learning. The purpose of this study was to find an intentionally designed, instructor-friendly method to help students feel more connected and motivated in their classes – both online and in-person. We suggest the inclusion of intentional, short, and timely check-in surveys. These surveys foster a sense of belonging, reinforce motivation, address the bottleneck of being aware of mental health, offer resources for help, and ultimately enhance the transfer of learning both in and outside the classroom.

In this two-year study of English and math general education classes (N=2271), students completed weekly check-ins concerning mental wellness, emotional metacognition, and course concerns through rating scales and open-ended questions. Survey questions addressed emotional wellness, time management, course concepts, and applicability of course material in future situations. Each survey included the following rating questions:

1. Are you confident that you understand the course expectations for this week?
2. How overwhelmed do you feel this week?
3. Do you feel you have sufficient time to deal with your coursework this week?
4. How interested in the course content are you this week?
5. How motivated do you feel this week.

Open ended questions dealt with personal response questions such as, "What do you do that helps boost your confidence in this course?" or "What have you learned so far that you feel you can use outside of this class?"

Participants

The participants in this Institutional Research Boards study were undergraduates at a regional campus, which is part of a larger research university. This regional campus includes technical and transfer programs. These students were in first year math and English composition courses. Class sizes were between 15 and 35 students. The approved study followed the standard practices for student protection outlined by the Board. Due to the anonymous nature of the surveys, demographic data was not collected to preserve the privacy of the students.

The population of this college is comprised of 49% first-generation students and 36% under-represented minorities. In a community experience survey of the student population at the college, 70% agreed or strongly agreed, "My professors care about me."

The courses in this study were both online and face to face but did not include any hybrid courses. Due to the nature of the anonymous surveys, we looked at the responses over the term by week. In English, the in-person responses by week were n=729. In math, the in-person responses by week were n=495. In English, the online responses were n=15, and in Math online the responses were n=863.

Method

Study data were weekly check-in surveys about emotional states and personal insights from more than 300 students in math and English courses from August 2022 through December 2023, that is three 15-week semesters. These check-in surveys ask students about their confidence, feelings of being overwhelmed, feelings about having time to do the work for the course, interest in the course content, and motivation levels. In addition, surveys included open questions about how they might transfer what they learned in the course to other situations. Results presented include trends about student emotional wellness and what they perceive they can transfer from the course.

In addition to the surveys, we interviewed students who had completed both the first and second level courses. We emailed students who completed the second-level course in the semester immediately following the first-level course and offered a gift card incentive to complete an interview. Of the students who completed the second-level course, three agreed to be interviewed, two from English and one from math.

Results

The data for this study comprised quantitative survey results, calculated from the rating questions, and qualitative data from open ended survey questions and interviews.

Quantitative Data

The results of the quantitative data show that students in online courses who received summary debriefings in a document perceive the surveys in isolation and report lower levels of motivation and higher levels of feeling overwhelmed. A possible implication is that as a course ends and student motivation flags, students' ability to transfer knowledge to the next course may be inhibited. The in-person students who received immediate debriefings of the survey results report significantly higher levels of motivation, confidence, and interest. Additionally, they reported that while they felt connection with other students

in the class, and they consistently reported a higher level of connection with the instructor as a result of the weekly check-ins.

Table 1

Summary of Survey Responses

English ($p \ll 0.01$)

Question	n	Mean	Variance
Confident	756	3.27	0.57
Overwhelmed	754	2.94	0.71
Time	755	2.98	0.61
Interested	755	2.99	0.58
Motivated	756	2.92	0.81

Math ($p \ll 0.01$)

Question	n	Mean	Variance
Confident	1515	3.09	0.60
overwhelmed	1515	2.75	0.65
time	1514	2.91	0.55
interested	1514	2.81	0.46
motivated	1515	2.91	0.65

Reviewing the summary of survey responses in Table 1, Confidence has the highest mean for both English and math while the other perceptions are generally lower. Feeling overwhelmed and motivation in English and math vary most. The least variable in English is confidence but in math, interest is least variable.

Table 2

Correlation Matrices results of the comparison between questions for English and math

English (p << 0.01)

	Confident	Overwhelmed	Time	Interested	Motivated
Confident	1				
Overwhelmed	0.413168949	1			
Time	0.468537687	0.498926331	1		
Interested	0.44069924	0.236488028	0.371151523	1	
Motivated	0.401082993	0.368344164	0.381838552	0.506810512	1

Math (p << 0.01)

|	Confident	Overwhelmed	Time	Interested	Motivated
Confident	1				
Overwhelmed	0.403456056	1			
Time	0.391023055	0.494810427	1		
Interested	0.350633939	0.271912956	0.278308933	1	
Motivated	0.386610076	0.442079008	0.396955062	0.462748617	1

From the Table 2 correlation matrices, all variables under consideration are positively correlated, regardless of discipline. There are several moderate positive correlations (values between 0.31-0.50) connections, or associations between pairs of the variables under consideration. There is a strong connection between the categories of "Time" and "Feeling Overwhelmed". For example, if a student did not feel like they had time, then they also were more likely to indicate feeling overwhelmed. When the data is viewed by modality (given the low n for online English only math is considered here) the correlations remain positive ($p<<0.01$), with notable differences in the correlation between "Time" and "Feeling Overwhelmed" (online Math: 0.50625984, In-person Math: 0.55110347). As the intensity of overwhelmed is in the reverse order of the other questions, the strong positive correlation between time and overwhelmed would indicate as students put in more time to work on the course, their level of feeling overwhelmed decreases in the same measure. The data also indicates there is strong connection between confidence and feeling overwhelmed in in-person classes but only moderate online (online Math: 0.44428571, In-person Math: 0.53821505). As previously noted, given the reverse order for the

overwhelmed question, there is an indicated connection between an increase in confidence and a decrease in feeling overwhelmed. It should be noted that the correlation is reported stronger in in-person courses. Note that in Figures 1 and 2, week 14 is missing due to the semester holiday break.

Figure 1

Trends in responses of English In-person and online course responses over three semesters of English.

In-person responses over term by week (n = 739)
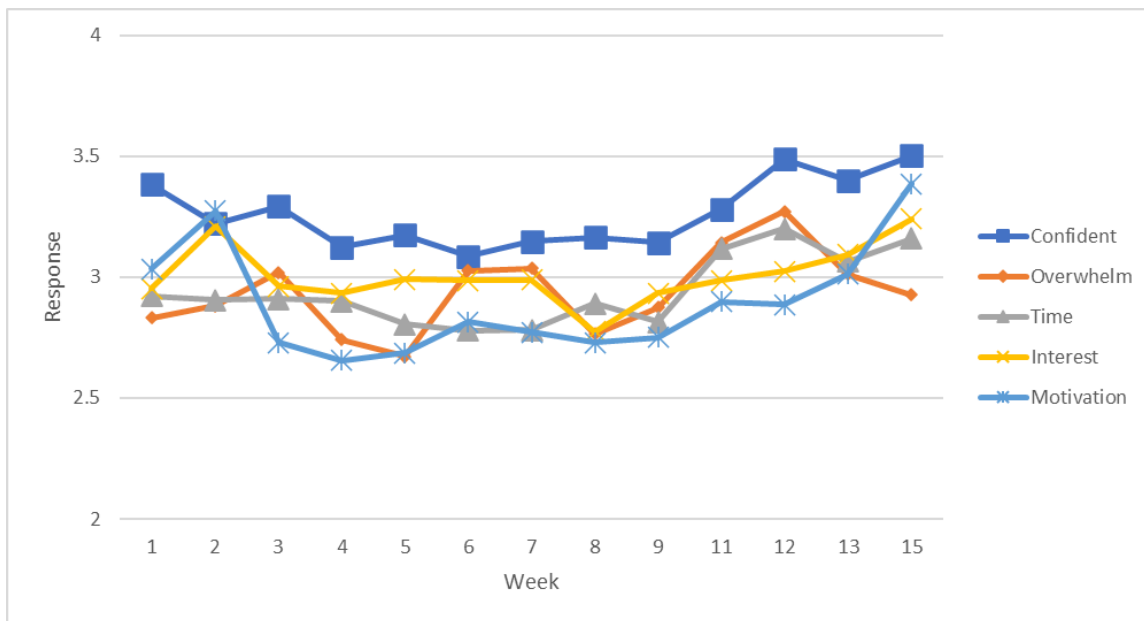
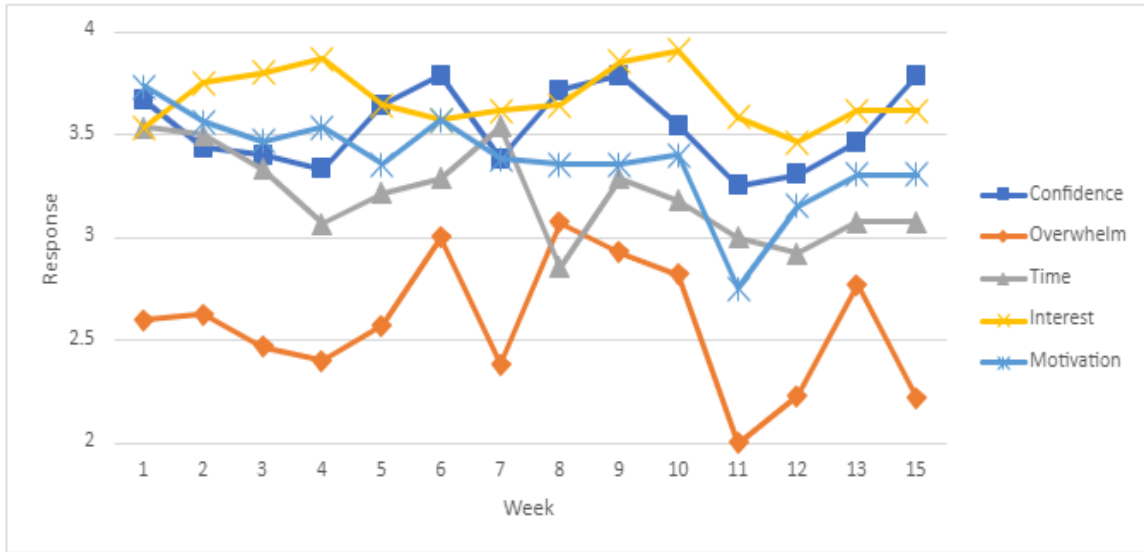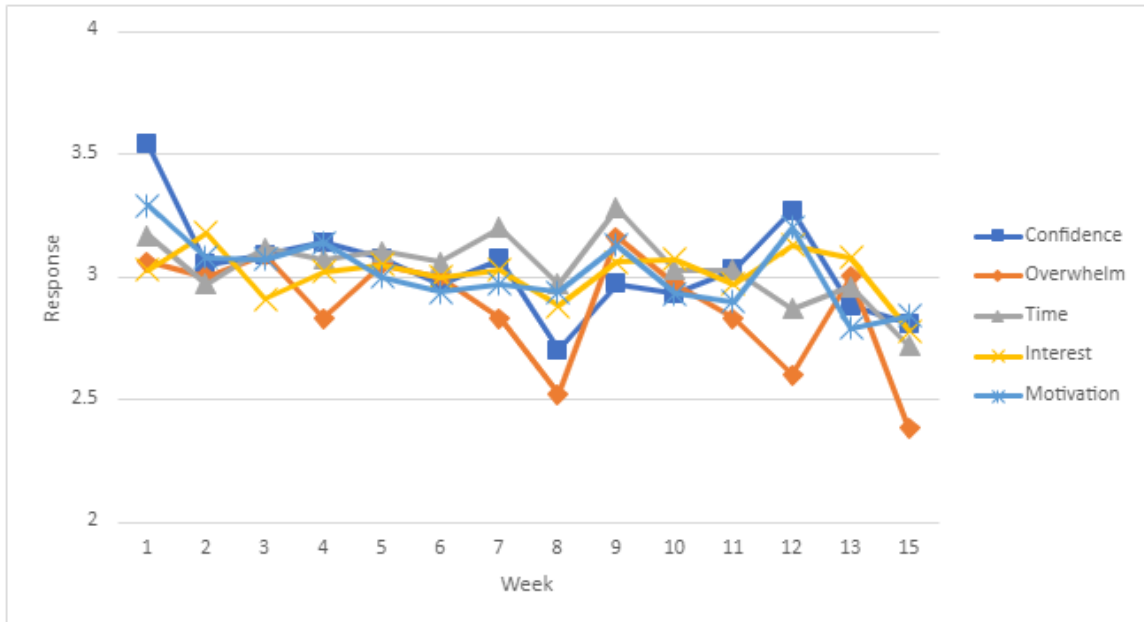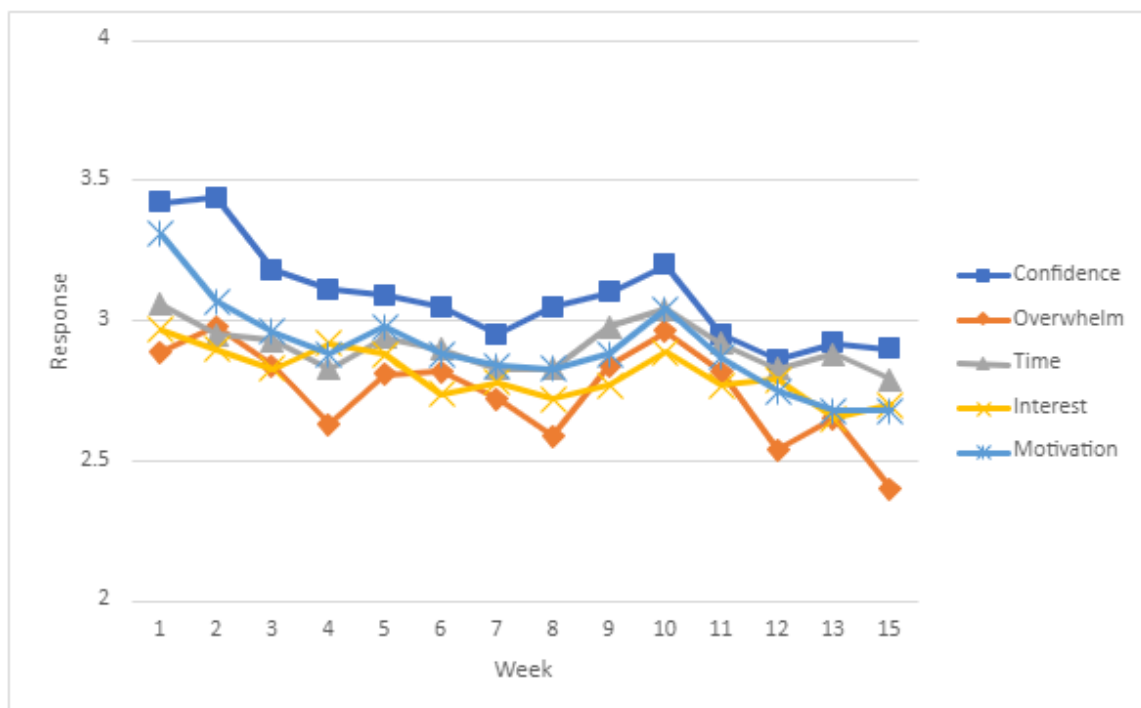*English, online responses over term by week* (n = 15)

Figure 2

Trends in responses of math In-person and online course responses over three semesters

Math, In-person responses over term by week (n = 495)

Math,   online   responses   over   term   by   week   (n   =   863)

As noted in the summary presented in Table 1, most responses are around 3 on the scale (i.e., somewhat confident, a little overwhelmed, enough time, somewhat interested, and somewhat motivated). The trends are similar by discipline and modality. Spikes follow patterns of when traditional summative or high stakes assessments are offered in courses, such as papers or exams. Of note, however, is that the spikes may not correlate to a high stakes assessment taking place in the particular course being presented here but may be occurring in another course the student is taking.

Halfway through the term, the survey included questions asking students to reflect on if participating in the weekly surveys made them feel more connected to fellow students and/or the instructor. Students reported that the surveys did create a sense of connection to peers and the instructor. For connection with peers, on a four-point scale from 1 – strongly disagree, to 4 – Strongly Agree, the mean was 2.88 for math (n = 1514, p <<0.01)) and 3.00 for English (n=754, p<<0.01). Similarly, the mean value was 3.33 for math (n = 1514, p <<0.01)) and 3.41 for English (n=754, p<<0.01), indicating students agreed that participating in the surveys made them feel more connected to the instructor.

Retention and Persistence

Through the institutional research office, we followed students from the first-year courses to their second-year courses. Over two years, about 15% of students who took the first-year course moved on to take the next course in the series for both English and math courses. Of the students who did move on to the next course, their grades were about the same in the first course as in the second course.

Discussion of the Quantitative Data

The variance of responses is low and the average across all categories is about 3. This means that students feel reasonably stressed but also reasonably in control over the course of the semester, regardless of whether it is math or English. There may be variations over each of the weeks of the semester, but the data indicates that this variance seems to be affected by the course work or the tests occurring each week across all their courses, such as midterm or during finals. In our experience, the variance is often one or two students who may be particularly struggling. Since these are weekly check-ins, the class can come together to support students who may be responding with 2 or 1, while most of the class indicates 3 and 4 on the surveys. This pattern generally describes In-person classes, but online students don't have the opportunity to support each other. The support is more instructor-driven. This can be reassurance in the form of announcements or individual emails given the responses to open-ended questions and student support services.

The gaps don't tend to be consistent, but in general students report positive levels of motivation, confidence, and time. Students tend to say they are overwhelmed throughout the semester with spikes of feeling more overwhelmed in weeks 8 and 12 since this is when midterms and finals take place.

In terms of retention and persistence, it seems that pressures beyond the courses we observed may have affected students continuing to the next course. In a study involving first-year students in English at our institution, we found that students indicated financial

concerns, work, and transportation were the principal barriers to educational success regardless of how supported they felt by their instructors in their first-year general education courses (Refaei et al., 2022). This situation seems to be reflected in this data where students who were able to take the next course in the series did as well in the second course as the first, but fewer were able to move on to the next course, possibly due to life circumstances.

In the midterm questions of how connected students felt as a result of taking the survey, it is interesting to note that students, both online and in-person, indicated a close connection to the instructor and the other students in the class. As noted in the data, both were statistically significant, with a stronger perceived connection between the student and the instructor. Having the instructor immediately debrief the surveys in the in-person class, or summarize them in the online classes, seemed to communicate that the instructor cared about the students. Therefore, the students perceived a stronger connection to the instructor as the instructor explicitly acknowledged students' responses such as how the students felt each week.

Qualitative Data

Qualitative data for this study included open-ended answers on the weekly check-in surveys and interviews with students after the courses were completed.

Survey open-ended questions

In the qualitative data, students indicate a clear feeling of inclusion. Representative student comments include:

- The weekly check-ins helped me let the instructor know how I felt during the week. I liked them because if I was stressed, I could see that others were in the same boat as me. I could see that I'm not alone. I liked them because the check-ins were anonymous. People didn't have to know how I specifically felt.

- Weekly check-ins made me feel less alone. They let me know that I wasn't the only one feeling the way that I was, it was very reassuring, and your kindness made it much more manageable.

These representative comments indicate that students felt their challenges were acknowledged in the debriefings, which helped them feel they could endure these challenges rather than succumb to them.

In addition, students reported clear ideas of how to transfer skills from the course they are in to future courses. Representative sample student comments include:

- [I can transfer] time management skills, how to analyze if a source has valid information, how to make an infographic etc.
- [I can transfer what I learned about] the graphs for drug doses being administered and the rate at which they metabolize. [This] could definitely be used outside of the classroom. You can use this equation to find out how long a medicine you take will be in your system and that may be useful.

Interestingly, students are less likely to report how they might transfer concepts from the courses. A common theme among all students is a feeling of fatigue and falling motivation as the course progresses even as they report sustained interest and confidence.

Interviews

In the interviews, the principal themes students identified included valuing the personal engagement of the surveys, perceiving the professor to acknowledge their struggles, and a feeling of not being alone. In terms of transfer, principal themes included an increased understanding of how the course content applied to other courses and the struggle to remember information from one course to the next, particularly when there is a semester of separation between courses.

All three students who participated in the interviews indicated that they valued the check-in surveys as an opportunity to communicate safely with the professor about their

emotional state. One student summarized this value, which was communicated by all three students:

> *I loved [the surveys]. I thought it was a really great way for me to tell you how I was feeling without having to actually tell you because that can be a little bit daunting to e-mail professor and be, like, I'm really stressed out about this, but we always were able to tell you that way, and our responses were anonymous, but you share them, so we all knew how each other were feeling, and we knew our feelings about being stressed out, it's not just me, we all are feeling it.*

Another student expressed similar appreciation of the direct request about the students' states in the class. This student commented,

> *[It seemed like] you were, like, more open to accepting questions rather than, like, [our] having to reach out and maybe get a response from a professor or maybe not.*

 All three students indicated a hesitancy to contact the professor, and the check-in surveys were a safe way to indicate that it was safe and welcomed to contact the professor.

In terms of the classroom atmosphere, all three students commented on how the check-in surveys were comforting, acknowledged their experience of struggle and anxiety, and helped them feel less alone. One student summarized the experience as,

> *You can sort of get out that anxiety, and sometimes just talking about it is enough to get it out, but when you think you're the only one experiencing it, it can be hard to talk about, so the survey check-ins really helped.*

From the instructors' point of view, the improved classroom atmosphere was a clear benefit. The instructors had a strong desire to support students but found it difficult to support people who wouldn't talk about their problems. The above student comment illustrates how the surveys allowed the students to express their difficulties, which allowed the instructors to offer resources and referrals to the whole class.

The surveys not only asked about students' mental health but also had open-ended questions that prompted students to think about what they took away from the course to apply later in other courses. In the interviews and in the open-ended survey questions, students nominated specific skills such as time management, citation, problem-solving, and article analysis as transferable skills. In the interviews, these students completed the first and next courses in the series, having completed the courses for at least two semesters. As these students looked back at their experiences, they nominated concepts that were familiar in the next course such as business analytics, composition in multiple genres, and the multiple-draft composition process. They said the survey questions that prompted them to think about what they could transfer to another course helped them realize the transfer was possible. However, they did note that when there was a large gap of time between the courses, it was harder to remember the skills and concepts that might transfer. One student mentioned that referring to the eportfolio she created in the first class helped her remember what she did for the next class in the series.

In none of the survey questions or interviews did the students indicate dissatisfaction with the process in either math or English. However, one student who was interviewed did provide the single negative perception recorded in the study. This student commented, "I liked the surveys, but some people thought it was a waste of time and would rather work on the assignments." Also, although the institutional course evaluations were not included as data in this study, we noted that no negative commentary related to the check-ins appeared in the course evaluations for the sections included in this study.

Discussion

The sense of belonging fostered by the instructor caring about how students feel may create an atmosphere of confidence that allows students to take the idea of transfer seriously rather than seeing the course as a box to check and then move on. Students saw the surveys as a normal part of the class. None seemed negative, and responses they gave indicated that they took the task seriously. However, if the instructor does not give feedback to students about the results of the survey, students may see the surveys as a meaningless task and not take it seriously. It seems that the debriefing period of the

survey, whether online or in-person, is important for students to not only take the task seriously but also benefit from the insights of the debriefing and feel a connection to the instructor.

From our data, a principal recommendation is to implement short check-ins since they clearly promote a feeling of connection with the instructor. A second recommendation is to explicitly ask students to think about how they can transfer skills from this course to the next. The final recommendation is to explicitly ask students how they can transfer concepts from the course, since this is the most difficult metacognitive task for students and a key goal for general education courses. The implication for transfer is that creating an atmosphere of care for the students' experience may help them feel more confident and interested in the course, thus making transfer more likely. Additionally, making the expectation of transfer clear helps students be aware of the possibility and not compartmentalize the information of the course as unique to that course (Lightner et al., 2008).

These short check-in surveys also provide an important window into how students are doing, not just in the course, but in dealing with the general skills of being a student. The Community College Survey of Student Engagement (Spring, 2023) for our college indicates that most students do not report that mental health issues affect their academic work (37%), although 30.9% of students indicated that mental difficulties did affect their academic performance for 1-2 days.

Table 3

Summary of CCSSE survey for the college considering mental health and well-being (MHWB)

		Home College	Medium Colleges	MHWB Cohort
13. In the past 4 weeks, how many days have you felt that emotional or mental difficulties have hurt your academic performance?	1 – 2 Days	30.3%	25.5%	25.5%
	None	37.4%	44.5%	44.5%
14. How likely is that issues with mental health or emotional well-being would cause you to withdraw from class(es) or from this college?	Somewhat likely	27.0%	21.7%	21.7%
	Not Likely	56.1%	63.0%	63.5%

Significance testing not provided. 39 colleges make up the Medium Colleges group for these items.

About half of the students surveyed indicated that they preferred to bring their mental health issues to a friend, partner, or family member. The data from the student engagement survey seems to indicate that students do not generally attribute the responsibility for their mental health issues to their course instructors. In student interviews and in-class surveys, the mental wellness concern students attributed to their course was finding time to do the course work, and collaterally, meeting course deadlines. Yet in the college community survey, the classroom survey responses, and interviews from students where the check-ins were conducted, they consistently commented that these check-ins concerning their mental health from week to week helped them feel connected, supported, and cared for. This data suggests that these short surveys can have a big impact, and this impact is not discipline specific.

In their article, "Being smart is not enough to ensure success: Integrating personal development into a general education course," Whitehall et al. (2016) note that the college experience needs to prepare students beyond discipline-specific knowledge and help students develop themselves. This personal awareness helps students be ready to deal with the fast-paced changes of our society. Part of this development is the skill of emotional metacognitive awareness and the knowledge that they can transfer knowledge and skills from one context to another. Often this development is given to general education courses that provide a broad exposure to academic skills. This emphasis on personal development and transfer can also be embedded in general education courses, such as English and mathematics, where the principles of responsibility for action and a sense of self can be reinforced. We argue embedding this reinforcement in general education courses does not need to take a lot of time away from course content and results in increased benefit to the course and to the courses to which students can transfer their skills. The check-in surveys are simple and effective ways to help students cultivate a knowledge and skills transfer mindset as well as practice personal emotional awareness. These are life skills that cross disciplinary boundaries (Fink, 2013).

Limitations and Future Directions

A principal limitation of this study is the lack of direct evidence that students do transfer knowledge from these courses to the next. Although students indicated in the surveys and interviews that they transferred skills to their other courses, we do not have evidence from those courses that the skills did transfer. Further research would include following students to the next courses to see if their course work does reflect transfer of knowledge and skills from the previous courses. In addition, it would be interesting to assess student work at the end of their programs to see what students expect to transfer from their programs to their careers.

Additional limitations include the small sample size and the continually changing number of students who showed up to take the surveys. Results may be skewed by students who consistently managed their lives to make it to class regularly. An additional concern was

the low number of students who take a sequence of courses in order and consecutively. There is less opportunity or ability to transfer information from one course to another when there is a large gap of time between courses. Finally, students did comment that while the check-in surveys were helpful in these courses, they perceived the check-in surveys as a unique experience in their fragmented experience of undergraduate coursework. Future research directions might include implications for capstone courses as opportunities for students to reflect on their courses, the transfer of metacognitive strategies across courses, and ways to make the undergraduate experience more coherent across programs.

References

Active Minds (2020). *The numbers behind the impact of Covid-19 - Active Minds*. Active Minds. Retrieved December 2, 2022, from https://www.activeminds.org/wp-content/uploads/2020/04/Student-Survey-Infographic.pdf

Benander, R., & Lightner, R. (2005). Promoting Transfer of Learning: Connecting General Education Courses. *JGE: The Journal of General Education*, *54*(3), 199–208. https://doi-org.uc.idm.oclc.org/10.1353/jge.2006.0001

Brand, S., & Opwis, K. (2007). Effects of mood and problem solving in dyads on transfer. *Swiss journal of psychology*, *66*(1), 51-65.

Buskirk-Cohen, A. A., & Plants, A. (2019). Caring about Success: Students' Perceptions of Professors' Caring Matters More than Grit. *International Journal of Teaching and Learning in Higher Education*, *31*(1), 108-114.

Dose, J. J. (2021). Shared Learning and Unity of Knowledge: Connecting a First-Year Core Course and the Major Curriculum. *JGE: The Journal of General Education*, *70*(1/2), 27–49. https://doi-org.uc.idm.oclc.org/10.5325/jgeneeduc.70.1-2.0027

Ferlazzo, L. (2017). Response: Ways to Promote Transfer of Learning (Opinion). *Education Week*, Retrieved from https://www.edweek.org/teaching-learning/opinion-response-ways-to-promote-transfer-of-

learning/2017/05#:~:text=Transfer%20of%20learning%20occurs%20when%20the%20student%20is%20motivated%20by,apply%20it%20to%20new%20learning.

Fink, L. D. (2013). *Creating significant learning experiences: An integrated approach to designing college courses.* Hoboken: John Wiley and Sons.

Huberty J, Green J, Puzia M, & Stecher C (2021). Evaluation of Mood Check-in Feature for Participation in Meditation Mobile App Users: Retrospective Longitudinal Analysis. JMIR Mhealth Uhealth 9(4):e27106. doi: 10.2196/27106

Jessup-Anger, J. E. (2011). What's the Point? An Exploration of Students' Motivation to Learn in a First-Year Seminar. *JGE: The Journal of General Education*, *60*(2), 101–116. https://doi-org.uc.idm.oclc.org/10.5325/jgeneeduc.60.2.0101

Kalkbrenner, M. T., Jolley, A. L., & Hays, D. G. (2021). Faculty Views on College Student Mental Health: Implications for Retention and Student Success. *Journal of College Student Retention: Research, Theory & Practice*, *23*(3), 636-658. https://doi.org/10.1177/1521025119867639

Kelly, K., & Nicholas, J. (2024, February 11). *Number of young Australians in psychological distress continues sharp rise*. The Guardian. https://shorturl.at/h5wLN

Kivlighan, D. M. III, Schreier, B. A., Gates, C., Hong, J. E., Corkery, J. M., Anderson, C. L., & Keeton, P. M. (2021). The role of mental health counseling in college students' academic success: An interrupted time series analysis. *Journal of Counseling Psychology, 68*(5), 562–570. https://doi.org/10.1037/cou0000534

Levin, D. Z., Kurtzberg, T. R., Phillips, K. W., & Lount Jr, R. B. (2010). The role of affect in knowledge transfer. *Group Dynamics: Theory, Research, and Practice*, *14*(2), 123.

Lightner, R., Benander, R., & Kramer, E. F. (2008). Faculty and student attitudes about transfer of learning. *Insight: A Journal of Scholarly Teaching*, *3*, 58-66.

Llera, S. J., & Newman, M. G. (2020). Worry impairs the problem-solving process: Results from an experimental study. *Behaviour Research and Therapy, 135*, 103759.

Love, K., Healy, L., Miller, S., Jones, K. (2023). Community College Survey of Student Engagement and Community College Faculty Survey of Student Engagement: Spring 2023 Administration. [PowerPoint Slide Presentation].

Murthy, V. (2023). *Our Epidemic of Loneliness and Isolation: The U.S. Surgeon General's Advisory on the Healing Effects of Social Connection and Community.* Department of Health and Human Services. https://www.hhs.gov/sites/default/files/surgeon-general-social-connection-advisory.pdf

Pompeo-Fargnoli, A. (2022). Mental health stigma among college students: misperceptions of perceived and personal stigmas. *Journal of American College Health : Journal of American College Health*, *70*(4), 1030–1039. https://doi-org.uc.idm.oclc.org/10.1080/07448481.2020.1784904

Rainey, K., Dancy, M., Mickelson, R., Stearns, E., & Moller, S. (2019). A descriptive study of race and gender differences in how instructional style and perceived professor care influence decisions to major in STEM. *International Journal of STEM Education*, *6*(1), 1-13.

Refaei, B., Benander, R., Shade, D., Peplow, A., Bauer, L., Chege, M., ... & Clason, S. (2022). Two-Year College Students' Perspective on Equity and Inclusion Supports and Barriers. *The Journal for Research and Practice in College Teaching*, 7(1), 97-111.

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness.* The Guilford Press. https://doi.org/10.1521/978.14625/28806

Volkaert, B., Wante, L., Van Beveren, M. L., Vervoort, L., & Braet, C. (2020). Training adaptive emotion regulation skills in early adolescents: The effects of distraction, acceptance, cognitive reappraisal, and problem solving. *Cognitive Therapy and Research*, *44*, 678-696.

Warren, D. (2023, October 26). The State of Pediatric Mental Health in America 2023 Report. Office Practicum. Retrieved from https://www.officepracticum.com/blog/the-state-of-pediatric-mental-health-in-america-2023-report/

Whitehall, A. P., Hill, L. G., Yost, D. M., & Kidwell, K. K. (2016). Being Smart Is Not Enough to Ensure Success: Integrating Personal Development into a General Education Course. *The Journal of General Education*, *65*(3–4), 241–263. https://doi.org/10.5325/jgeneeduc.65.3-4.0241