

# GAC031 Course Efficacy: Evidence From China and Mexico

Jill McVey and Kristen Phipps

## Introduction

The Global Assessment Certificate (GAC) is a university-preparation program that equips international students with the academic knowledge, skills, and confidence to thrive in an English-speaking bachelor's degree program (ACT, 2026). Through a structured and holistic curriculum, students build competencies in academic English, mathematics, science, business, social sciences, computing, communication skills, and ACT test preparation. In addition, students can earn undergraduate college credit at participating universities, as recommended by the American Council on Education (ACE; American Council on Education, 2026).

One of GAC's recent additions is the GAC031 course, which was added in 2022. This course is designed to strengthen essential skills, often referred to as noncognitive, interpersonal, or 21st-century skills. These are interpersonal, self-regulatory, and task-related behaviors important for academic and workplace success (Camara et al., 2015). Essential skills differ from intelligence and traditional cognitive skills, and decades of research have shown them to be important at all levels of schooling (Durlak et al., 2022; Mammadov, 2022; Robbins et al., 2004), in the workforce (Pletzer & Abrahams, 2025; Young et al., 2018), and for desirable outcomes throughout a person's life, such as life satisfaction and wellbeing (Anglim et al., 2020; Strickhouser et al., 2017).

## About the Course

This course focuses on six core competencies: Sustaining Effort, Getting Along with Others, Maintaining Composure, Keeping an Open Mind, Social Connection, and Acting Honestly. See Appendix A for definitions of each competency. Throughout this course, students learn these skills through explicit instruction and deliberate practice.

As students learn strategies to build their own skills, they also engage with relatable case studies featuring fictional teens. Students offer advice to help the teen characters overcome challenges and move toward their goals before applying these strategies to their own lives. For example, Ahmed is a high school student who sometimes struggles with self-confidence. He has a harsh inner critic and is learning a strategy to rebut and reframe these negative thoughts. Students are asked to provide rebuttals to Ahmed's inner critic by imagining they are good friends of his. What would they say to him if they heard him saying these things to himself? Next, they are asked to think about their own inner critics and develop rebuttals to those negative thoughts.

This scaffolded practice is paired with a real-world project-based learning experience in which students collaborate to answer the driving question “How can we, as a community of students, positively impact our school culture?” As part of the course, teams of students (in groups of three to five) determine areas of their school culture that could be improved. Throughout the course, students develop and implement a product that will ultimately be shared with other stakeholders. For example, students could decide to create an “art hallway” to beautify their school and showcase student creativity. They would then need to create a plan, get feedback from students and staff, and ultimately present their process and results to stakeholders. By designing and presenting original products, students apply essential skill competencies in authentic contexts, strengthening their communication, problem-solving, and collaboration skills.

The learning outcomes emphasize understanding the role of essential skills in school, work, and personal life; applying and evaluating strategies for growth; collaborating to improve school communities; and reflecting on areas of progress and continued development. Ultimately, GAC031 provides multiple opportunities for students to explore how essential skills can enhance their relationships, increase their efficiency, and support meaningful teamwork.

In 2025, GAC031 received ACE’s credit recommendation. As students develop their essential skills, they can also earn three lower-division baccalaureate credits, which may be applied toward an introductory teaching and learning course at many institutions. ACE evaluators highlighted that the course’s learning outcomes, content, and assessments align with standards found in similar university-level courses. To evaluate the rigor of the course learning objectives, ACE evaluators applied Bloom’s taxonomy, a hierarchal framework used to classify the cognitive complexity of learning activities, objectives, and assessments (Adams, 2015). The evaluators determined that the rigor of the GAC031 assessments reflects learning at the foundational levels of Bloom’s taxonomy, Remember and Understand. As learners recall and recognize key information and explain essential skill concepts in their own words through team-based projects and reflective essays, they demonstrate learning at these foundational levels of rigor, building readiness for future academic challenges.

By integrating essential skills with project-based learning and offering college credit, GAC031 teaches students practical skills that help them grow as people and improve their communities while accelerating their academic journeys.

## Research Purpose and Questions

The present study used ACT’s efficacy framework (Mattern, 2019) to examine the impact of the course on several student outcomes. This framework adapts Kirkpatrick’s evaluation model (Kirkpatrick, 1976), which uses four levels of outcomes that begin with the most immediate and end with the most distal. According to ACT’s framework, the efficacy levels for this research would be as follows:

**Level 1: Reaction.** Students find the course engaging, interesting, and relevant.

**Level 2: Learning.** Students acquire the knowledge and skills taught in GAC031.

**Level 3: Behavior.** Students apply what they have learned to their daily practices.

**Level 4: Results.** Students experience benefits in other areas of their lives due to increases in essential skill competencies. Additionally, the course project has improved school culture.

The following questions were used to guide the study, corresponding to Levels 1–4.

1. To what extent do students find GAC031 engaging and enjoyable?
2. To what extent do students report that they learned the course content? Do students show measurable growth on a knowledge test?
3. Which strategies learned in the course, if any, do students report they will continue to use? Do students show measurable change in their attitudes or behaviors?
4. To what extent do students report that this course content will benefit them in their everyday lives? To what extent do students believe that the project has improved their school culture?

## Method

The data used in this study were collected in the 2023–24 and 2024–25 school years. Pre- and post-surveys were sent to students enrolled in the GAC031 course in both school years. The most recent data from the 2024–25 school year contain 126 student responses on the post-survey and 122 responses on the pre-survey. All of the students surveyed in the 2024–25 school year were enrolled in the course in Mexico. While the same students took both the pre- and post-surveys (with the addition of 4 newcomers who indicated they were new to GAC), we do not have identifying information needed to link individual responses. Therefore, any comparisons made between pre- and post-survey results are made at the aggregate level.

The data collected in the 2023–24 school year were more limited, as we have only 13 complete responses from the post-survey, with no matching responses from the pre-survey. All of the students surveyed in the 2023–24 school year were enrolled in the course in China. Given that the two cohorts were composed of students in different parts of the world and the amount of data collected was different for each site, these cohorts will be reported separately in the analyses. One thing to note about many of the analyses is that while totals are reported as percentages, they may not add up to exactly 100% due to rounding.

## Participants

Survey participants were asked to provide demographic information including their country of residence, age, and gender.

## **China**

Thirteen students at a single school in China responded to the post-survey sent in the spring of 2024. These students were enrolled in GAC031 for the duration of the 2023–24 school year, which began in September 2023. Six students (46%) were female, and 7 students (54%) were male. All students reported that they were 17 years old.

## **Mexico**

A total of 122 students from Mexico completed the pre-survey, and 126 students from Mexico completed the post-survey. During the pre-survey, 71 students (58%) identified as female, 50 students (41%) identified as male, and 1 student (<1%) preferred not to say. Student ages ranged from 13 to 17 years old, with most students reporting that they were 14 or 15 years old. Students in this sample came from multiple schools.

## **Background Information**

In order to contextualize the results of the survey, we asked the students how comfortable they were with English, how much effort they put into their GAC coursework, and how interested they were in GAC courses.

### ***Comfort With English***

Because GAC courses are taught in English, students were asked about their comfort level with taking courses fully in English (Figure 1). The response options were on a 4-point scale that ranged from very uncomfortable (1) to very comfortable (4).

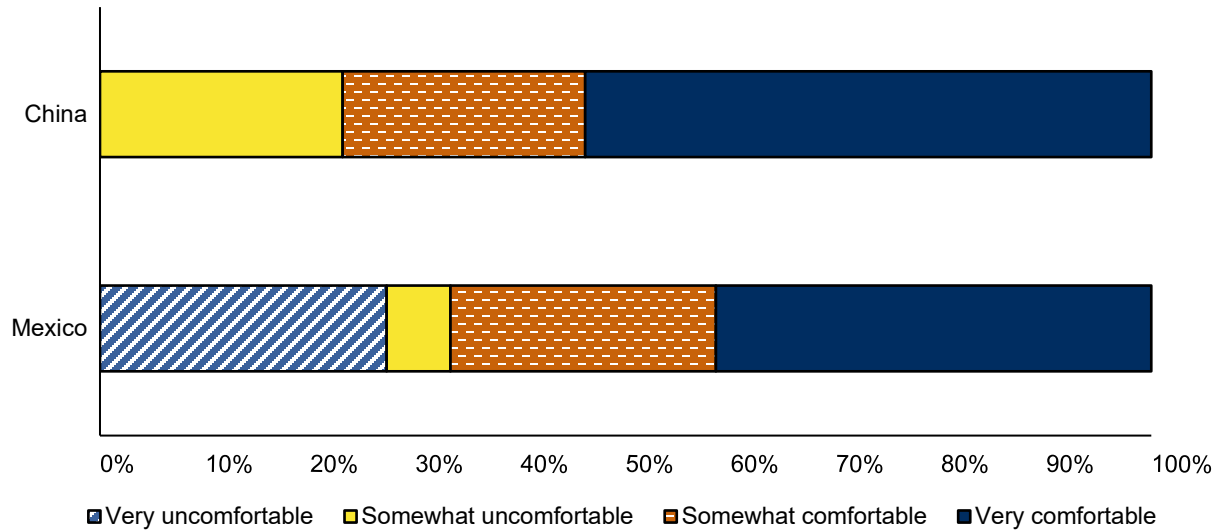
## **China**

Among students in China, 7 students (54%) reported that they were very comfortable taking courses fully in English, and the remaining said they were somewhat comfortable ( $n = 3$ ; 23%) or somewhat uncomfortable ( $n = 3$ ; 23%).

## **Mexico**

Most students in Mexico reported at least some comfort with taking courses in English, with 32 students (25%) reporting that they were somewhat comfortable and 52 students (41%) saying they were very comfortable. However, the remaining 34% felt less comfortable taking courses in English, with 8 students (6%) feeling somewhat uncomfortable and 34 (27%) feeling very uncomfortable.

**Figure 1.** How comfortable are you taking courses fully in English?



*Note.* China  $n = 13$ ; Mexico  $n = 126$

**GAC Coursework Effort**

Students were asked how much effort they put into their GAC coursework (Figure 2). The response options were on a 5-point scale that ranged from none at all (1) to a great deal (5).

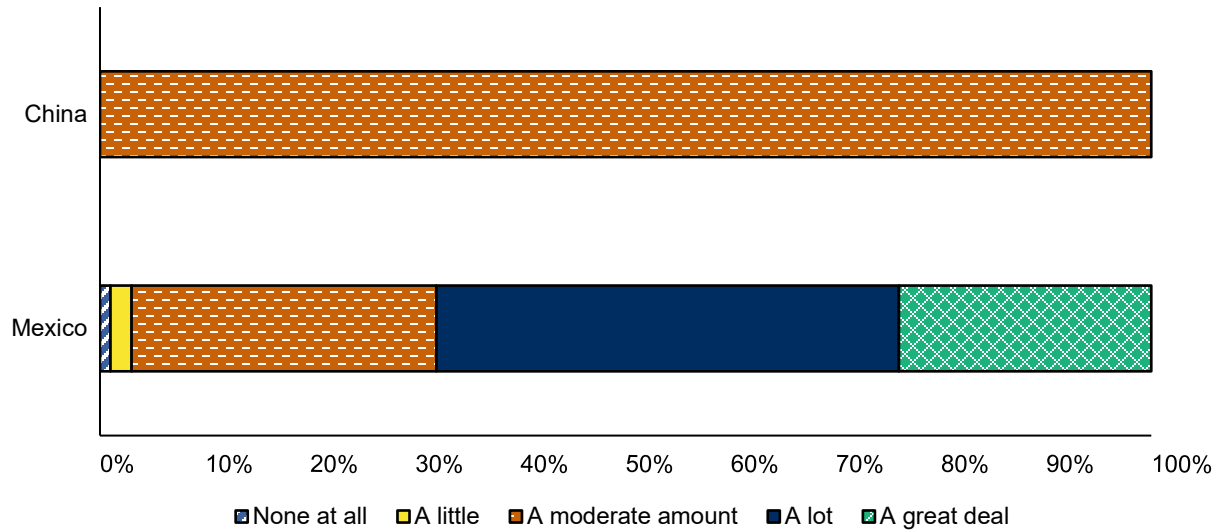
**China**

All students ( $n = 13$ ; 100%) from China indicated that they put a moderate amount of effort into GAC coursework.

**Mexico**

Among students in Mexico, 1 student (<1%) reported putting in no effort, 3 students (2%) indicated that they put in a little effort, 36 students (29%) said that they put in a moderate amount of effort, 56 students (44%) said that they put in a lot of effort, and 30 students (24%) said that they put in a great deal of effort.

**Figure 2.** How much effort do you put into GAC coursework?



Note. China *n* = 13; Mexico *n* = 126

**GAC Coursework Engagement**

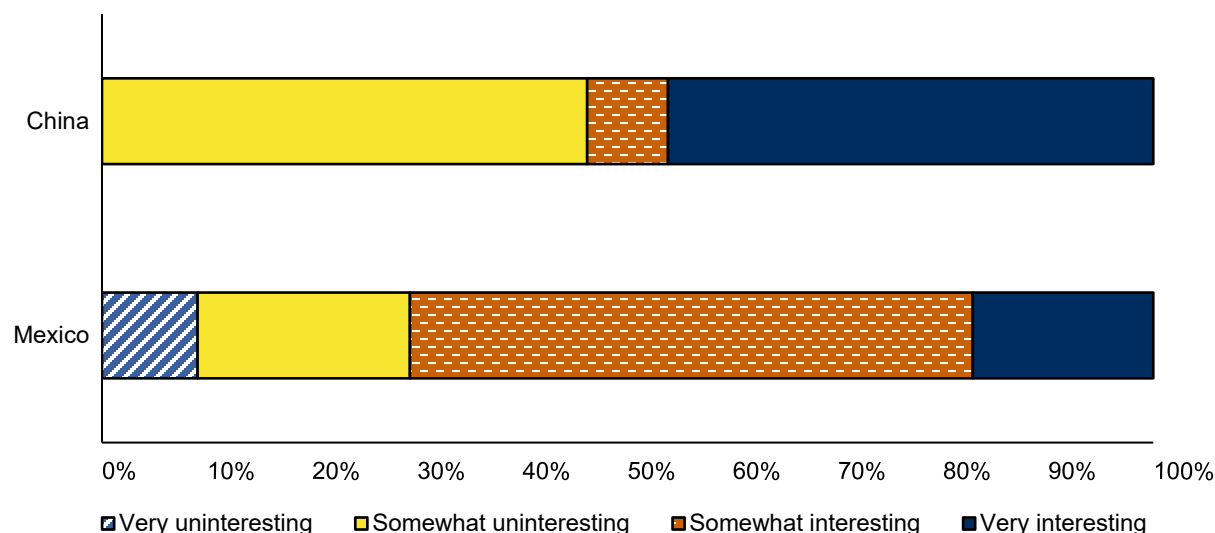
Students were also asked how engaging or interesting they found their GAC coursework overall (Figure 3), allowing us to situate reactions to GAC031 within students’ broader engagement with GAC courses in general. The response options were on a 4-point scale that ranged from very uninteresting (1) to very interesting (4).

**China**

Six students (46%) in China said they found GAC coursework somewhat uninteresting, 1 student (8%) found it somewhat interesting, and 6 students (46%) found it very interesting.

**Mexico**

Among students in Mexico, 11 students (9%) reported that GAC coursework was very uninteresting, 25 students (20%) indicated that it was somewhat uninteresting, 65 students (53%) said it was somewhat interesting, and 21 students (17%) reported that it was very interesting.

**Figure 3.** How engaging/interesting do you find the GAC coursework to be?

Note. China  $n = 13$ ; Mexico  $n = 122$

### Background Information Summary

Though the number of students is small, 77% of students in China ( $n = 10$ ) felt at least somewhat comfortable taking courses fully in English, and no students reported feeling very uncomfortable. Conversely, 27% of the student sample from Mexico reported feeling very uncomfortable with instruction fully in English, and a lower percentage—66%—were at least somewhat comfortable. Taken together, 68% (94 out of 139) of students felt at least somewhat comfortable with instruction in English. For the level of effort, 97% (135 out of 139) reported putting in at least a moderate amount of effort. Finally, 67% (93 out of 135) said they found GAC coursework at least somewhat interesting.

## Results

In the following sections, we organize the results of the students' surveys by the level of efficacy evidence.

### Level 1: Reaction. Students find the course engaging, interesting, and relevant.

This survey included a few questions about students' perceptions of the GAC031 course, including their enjoyment of the course overall and their enjoyment of the students' stories in the course. These questions were asked only during the post-course survey.

### Coursework Enjoyment: Overall Course

The question related to coursework enjoyment (Figure 4) asked students to rate their level of agreement with the statement “I enjoyed this course.” The response options used a 6-point scale that had the following choices: 1) strongly disagree, 2) disagree, 3) somewhat disagree, 4) somewhat agree, 5) agree, and 6) strongly agree. This 6-point agreement scale was also used in many of the remaining questions found in this survey.

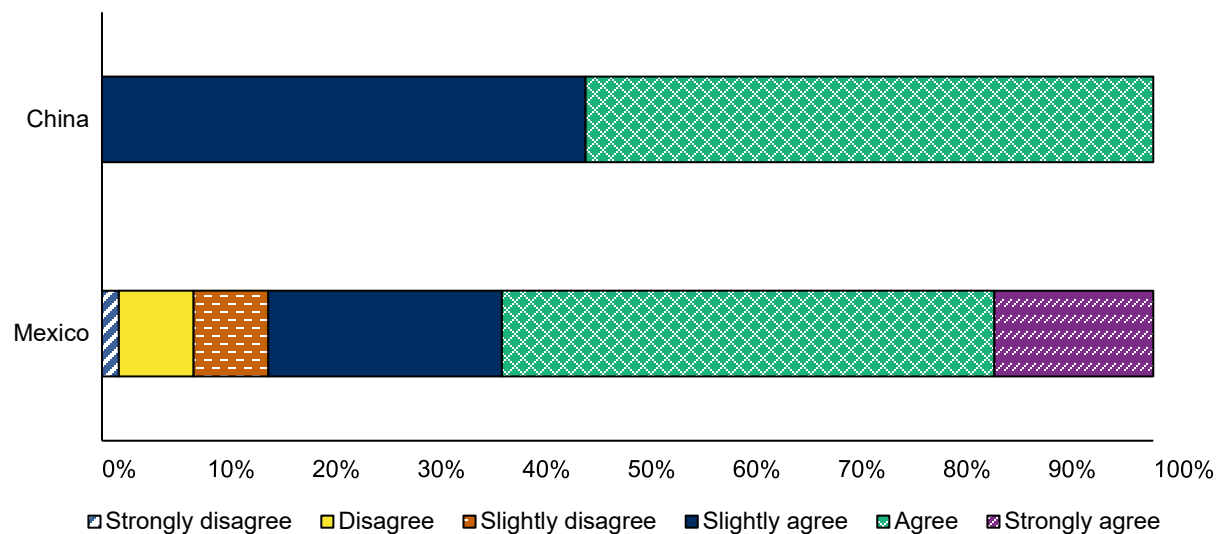
#### China

All the students in China agreed with the statement “I enjoyed this course.” Six students (46%) slightly agreed, and the remaining seven (54%) agreed.

#### Mexico

Among students in Mexico, 2 students (2%) strongly disagreed, 9 students (7%) disagreed, 9 students (7%) slightly disagreed, 28 students (22%) slightly agreed, 59 students (47%) agreed, and 19 students (15%) strongly agreed.

**Figure 4.** I enjoyed this course.



*Note.* China  $n = 13$ ; Mexico  $n = 126$

### Coursework Enjoyment: Student Stories

The next question related to course engagement (Figure 5) asked students to rate their level of agreement with the statement “I enjoyed reading each student’s story to help me learn the course content.”

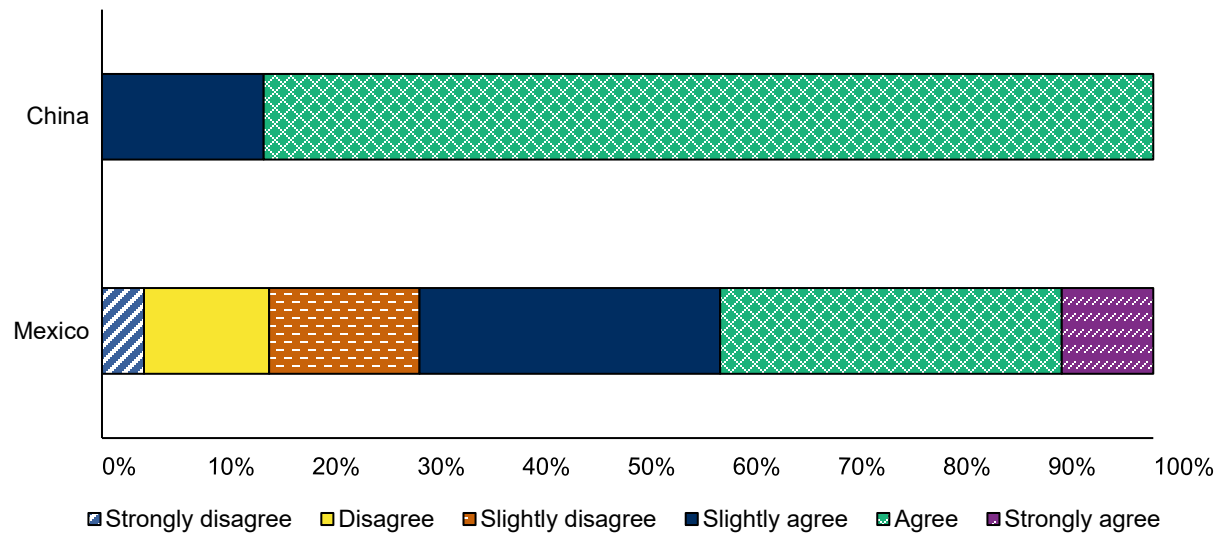
#### China

All the students in China agreed with this statement. Two students (15%) slightly agreed, and the remaining 11 students (85%) agreed.

## Mexico

Among students in Mexico, 5 students (4%) strongly disagreed, 15 students (12%) disagreed, 18 students (14%) slightly disagreed, 36 students (29%) slightly agreed, 41 students (33%) agreed, and 11 students (9%) strongly agreed.

**Figure 5.** I enjoyed reading each student’s story to help me learn the course content.



*Note.* China  $n = 13$ ; Mexico  $n = 126$

### **Level 1 Evidence Summary: To what extent do students find GAC031 engaging and enjoyable?**

Overall, the majority of students in both countries seemed to enjoy GAC031 and the story elements found in the course. When taken together, 86% of the total sample (119 out of 139 students) slightly agreed, agreed, or strongly agreed that they enjoyed the course, and 73% of the total sample (101 out of 139 students) slightly agreed, agreed, or strongly agreed that they enjoyed the story elements.

### **Level 2: Learning. Students acquire the knowledge and skills taught in GAC031.**

This survey measured learning in several ways. Several items asked about students’ perceptions of their learning in the course. Others asked whether students learned any strategies to help them build their essential skills, and if so, which area they grew most in. Finally, students were given a test at the beginning of the course and again at the end to see whether their knowledge of the course content had increased.

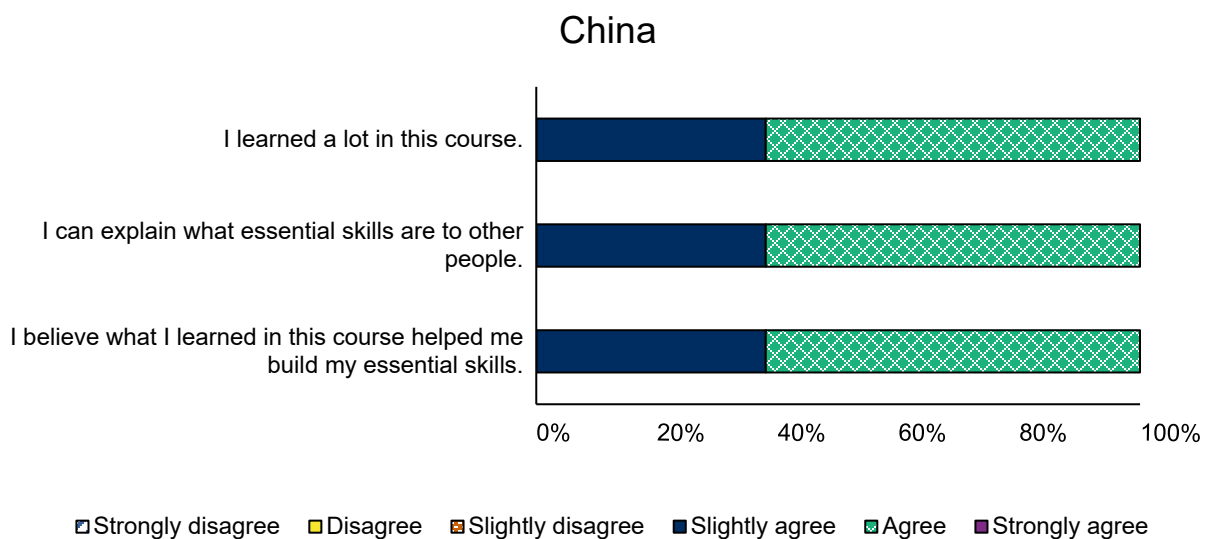
### Perceptions of Learning

Three survey items measured students' perceptions of their own learning. Students were asked to rate their agreement with the following items using a 6-point scale: 1) I learned a lot in this course, 2) I can explain what essential skills are to other people, and 3) I believe what I learned in this course helped me build my essential skills. Responses to these items can be found in Figures 6 (China) and 7 (Mexico) below.

#### China

All the students in China agreed with the statement “I learned a lot in this course.” Five students (38%) slightly agreed, and the remaining 8 students (62%) agreed. All the students also agreed with the statement “I can explain what essential skills are to other people,” with 5 students (38%) slightly agreeing and 8 students (62%) agreeing. Finally, all 13 students agreed with the statement “I believe what I learned in this course helped me build my essential skills,” with 5 students (38%) slightly agreeing and 8 students (62%) agreeing.

**Figure 6.** Chinese Student Perceptions of Learning



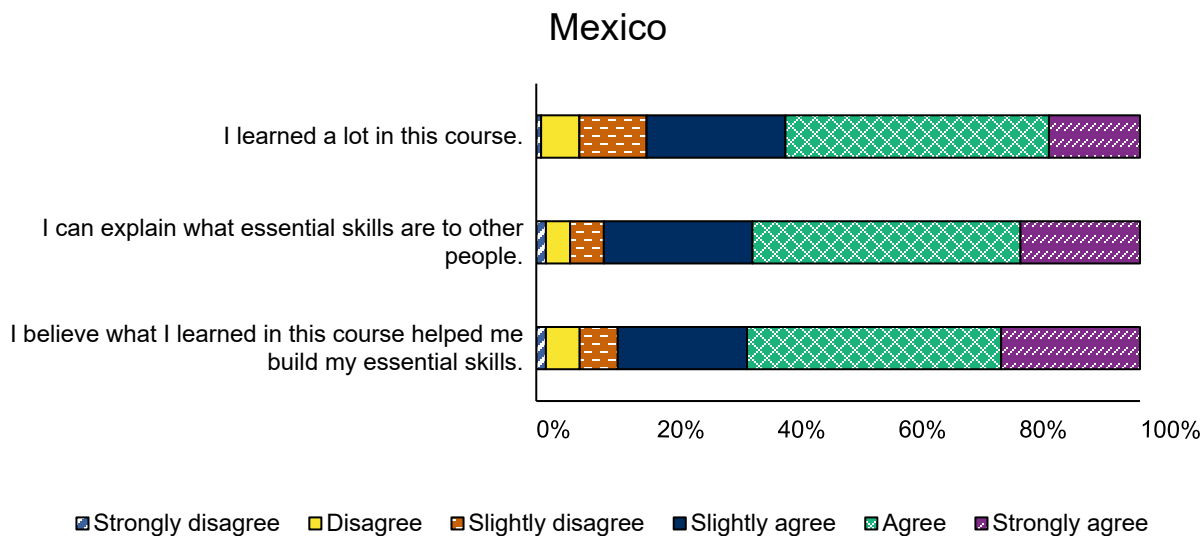
Note. n = 13

#### Mexico

In regard to the statement “I learned a lot in this course,” 1 student strongly disagreed (<1%), 8 students disagreed (6%), 14 students slightly disagreed (11%), 29 students slightly agreed (23%), 55 students agreed (44%), and 19 students strongly agreed (15%). The level of agreement with the next statement, “I can explain what essential skills are to other people,” included 2 students who strongly disagreed (2%), 5 students who disagreed (4%), 7 students who slightly disagreed (6%), 31 students who slightly agreed (25%), 56 students who agreed (44%), and 25 students who strongly agreed (20%). Finally, the breakdown for level of agreement with the statement “I believe what I learned in this course helped me build my essential skills” included 2 students who strongly disagreed (2%), 7 students who disagreed

(6%), 8 students who slightly disagreed (6%), 27 students who slightly agreed (21%), 53 students who agreed (42%), and 29 students who strongly agreed (23%).

**Figure 7. Mexican Student Perceptions of Learning**



Note. n = 126

### Essential Skills Growth

To see whether students felt they had learned practical strategies they could apply to their own lives, we asked, “Did you learn any essential skill strategies that you can use in your life and/or school from this course?” There were three response options: 1) No, I did not learn any strategies, 2) Yes, I learned a few strategies, and 3) Yes, I learned many strategies. The breakdown of responses for both samples can be found in Figure 8.

If students responded to this question affirmatively, they were next asked, “Which competency do you feel you grew the most in from this course?” The response options included each of the six essential skills discussed in the course: Sustaining Effort, Getting Along with Others, Maintaining Composure, Keeping an Open Mind, Social Connection, and Acting Honestly. The breakdown of responses for both samples can be found in Figure 9.

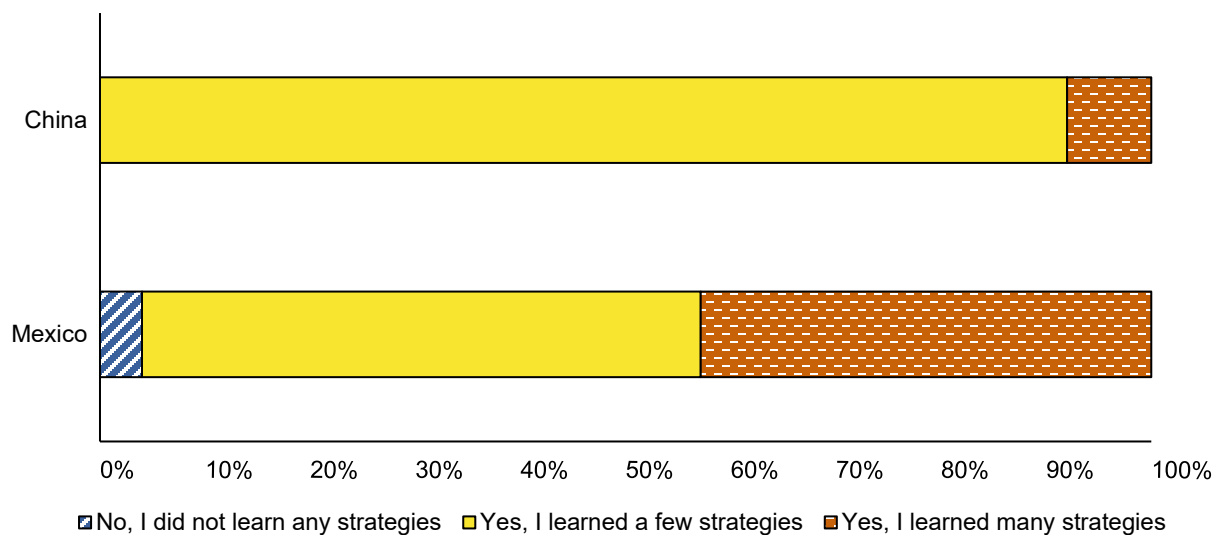
### China

All the students from China felt they had learned at least a few strategies, with 12 students (92%) reporting that they learned a few strategies and 1 student (8%) reporting that they learned many strategies. Regarding which essential skills grew the most from the course, 4 students (31%) reported Keeping an Open Mind, 3 students (23%) reported Getting Along with Others, 3 students (23%) reported Maintaining Composure, and 3 students (23%) reported Sustaining Effort.

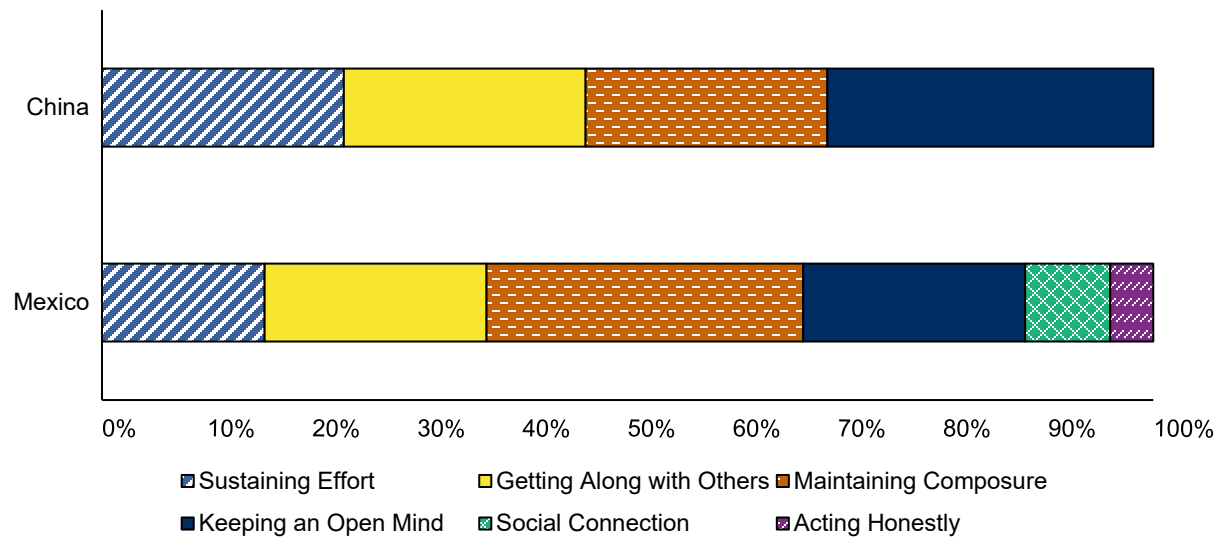
**Mexico**

In Mexico, 5 students (4%) reported that they did not learn any strategies, 67 students (53%) reported that they learned a few strategies, and 54 students (43%) reported that they learned many strategies. Responses to the question about which essential skill grew the most from the course were varied. The most frequent response was Maintaining Composure (35 students; 29%), followed by both Getting Along with Others and Keeping an Open Mind, which were tied (26 students and 21% each), and then by Sustaining Effort (18 students; 15%), Social Connection (10 students; 8%), and Acting Honestly (6 students; 4%). The 5 students who reported that they did not learn any strategies in the course were excluded from this analysis.

**Figure 8.** Did you learn any essential skill strategies that you can use in your life and/or school from this course?



*Note.* China  $n = 13$ ; Mexico  $n = 126$

**Figure 9.** Which competency do you feel you grew the most in from this course?

Note. China  $n = 13$ ; Mexico  $n = 121$

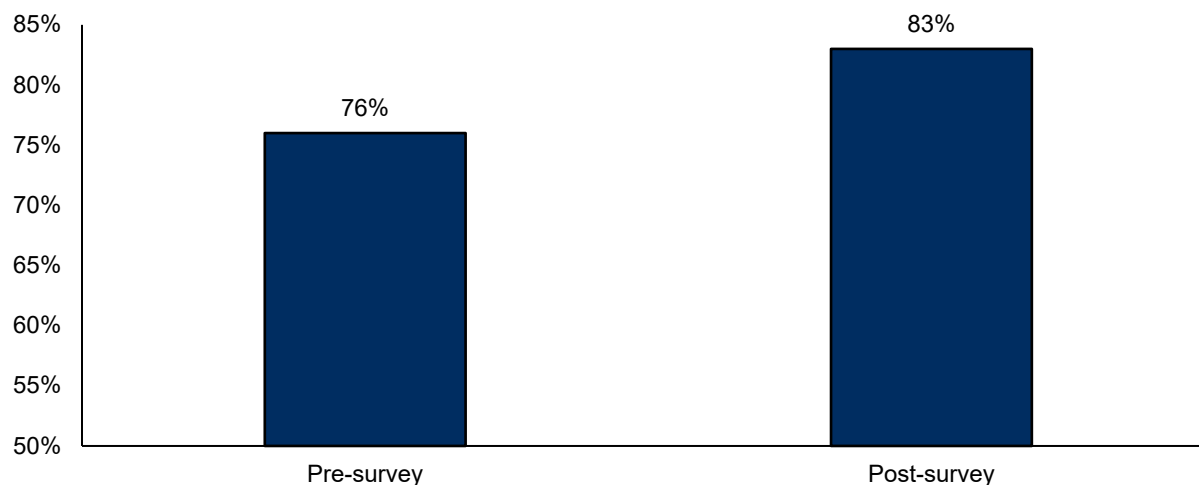
### Knowledge Gains

On the pre- and post-surveys, students were given a six-question knowledge test asking them to identify which examples of student behaviors were associated with particular essential skills. Because we do not have pre-survey information for the students from China, only the results from Mexico are included here.

#### Mexico

On average, student scores grew between the pre-survey and the post-survey. The average percentage correct was 76% on the pre-survey and 83% on the post-survey. To see whether this change was meaningful, we performed an independent samples  $t$  test comparing pre- and post-survey scores. There was a significant difference ( $p = .037$ ) between pre-survey scores (mean = 4.56 items correct, standard deviation = 1.54) and post-survey scores (mean = 4.95, standard deviation = 1.41). The effect size of the difference ( $d$ ) was .28, indicating a small effect.

**Figure 10.** Average Percentage of Items Correctly Answered on the Pre- and Post-Survey Tests



*Note.*  $n = 122$

**Level 2 Evidence Summary: To what extent do students report that they learned the course content? Do students show measurable growth on a knowledge test?**

Students' perceptions of their learning were generally positive, with a majority of students agreeing with each item. When taken together, 83% of the total sample (116 out of 139 students) slightly agreed, agreed, or strongly agreed that they learned a lot in the course. Ninety percent of the total sample ( $n = 125$ ) slightly agreed, agreed, or strongly agreed that they could explain what essential skills are to others. Finally, 88% ( $n = 122$ ) slightly agreed, agreed, or strongly agreed that they believed that what they learned in the course would help them build their own essential skills.

When asked if they had learned any strategies for using essential skills in their own lives, 96% of the total sample (134 out of 139) agreed that they had learned a few or many strategies. That 96% was then asked which essential skill competency they felt they grew the most in. The breakdown included 16% ( $n = 21$ ) who felt they grew most in Sustaining Effort, 22% ( $n = 29$ ) who said Getting Along with Others, 28% ( $n = 38$ ) who selected Maintaining Composure, 22% ( $n = 30$ ) who said Keeping an Open Mind, 7% ( $n = 10$ ) who chose Social Connection, and 4% ( $n = 6$ ) who chose Acting Honestly.

Lastly, students were given a short knowledge test on the pre- and post-surveys that asked them to identify behaviors that exemplified each essential skill. Due to the students in China taking only the post-survey, only the results from Mexico were analyzed. Average scores on this test increased from 76% correct on the pre-survey to 83% correct on the post-survey, a statistically significant result with a Cohen's  $d$  effect size of 0.28.

## Level 3: Behavior. Students apply what they have learned to their daily practices.

To understand the effects of the course on student behavior, we asked whether students would continue to use the strategies they learned in the course. We also offered them the opportunity to respond to an open-ended question that asked them to list any strategies they planned to continue using. Finally, we asked them to rate their agreement with 14 statements on both the pre- and post-surveys related to behaviors and attitudes emphasized in the course. Because the responses from China included only the post-survey, only the responses from Mexico are included in this analysis.

### *Continuing Essential Skill Strategies*

Students were asked to rate their agreement with the statement “I will continue to practice the strategies I learned in this course” (Figure 11). Additionally, an optional open-ended survey question asked them to “list any strategies you learned in this course that you plan to continue using.” A sample of student quotes can be found in Table 1.

#### China

All the students agreed that they would continue to practice the strategies learned in the course, with 3 students (23%) slightly agreeing, 9 students (69%) agreeing, and 1 student (8%) strongly agreeing.

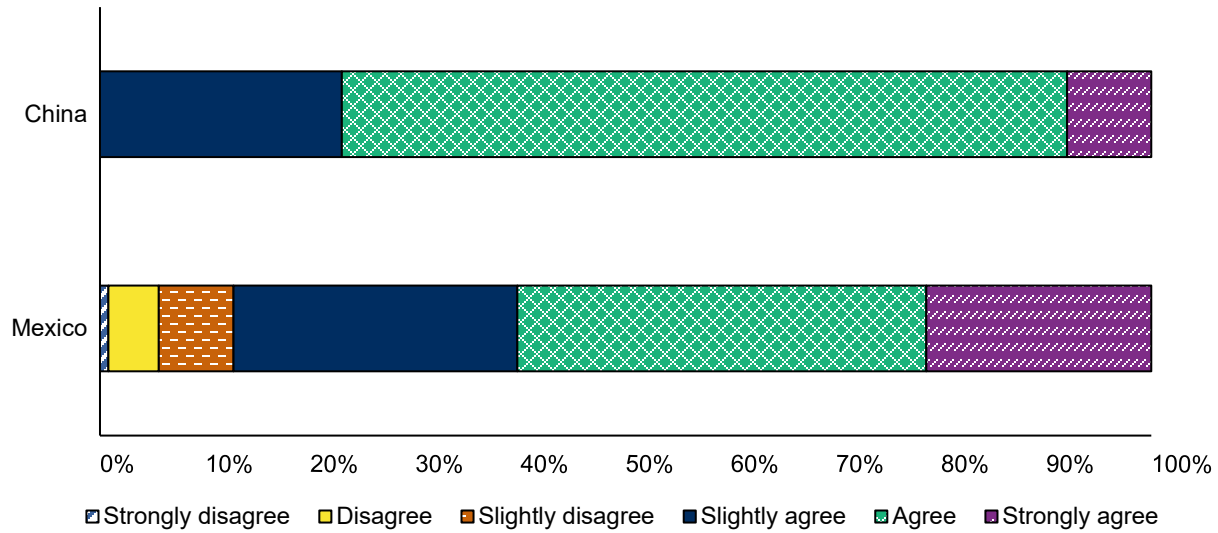
All the students also responded to the open-ended item, which asked students to list strategies they learned that they planned to continue using. The students listed strategies related to the skill areas of Sustaining Effort, Getting Along with Others, Maintaining Composure, and Keeping an Open Mind. Example student quotes for each represented skill are in Table 1. To help with reading clarity, any typos were corrected.

#### Mexico

A majority of the students agreed that they would continue to practice the strategies learned in the course, with 34 students (27%) slightly agreeing, 49 students agreeing (39%), and 27 students (21%) strongly agreeing. Among the students who disagreed, 9 students (7%) slightly disagreed, 6 students (5%) disagreed, and 1 student (<1%) strongly disagreed.

Student responses to the open-ended item ranged from one-word answers listing the skill (e.g., “Social connection”) to more detailed information about which strategies they planned on using. Each essential skill was represented at least a few times, and a sample of a quote relating to each skill can be found in Table 1. To help with reading clarity, any typos were corrected.

**Figure 11.** I will continue to practice the strategies I learned in this course.



Note. China *n* = 13; Mexico *n* = 126

**Table 1.** A selection of student responses to the item “List any strategies you learned in this course that you plan to continue using.”

Skill	China	Mexico
<b>Sustaining Effort</b>	“Making a good plan in the beginning of a project work is essential.”	“Organize my time, calendar with all the semester work including homework and project. The table of what I need to do, what is in process and what I finished.”
<b>Getting Along with Others</b>	“To be [a] good listener and participate actively in a team project is something I still need to improve on.”	“Listening to others without interrupting. Respecting different opinions. Work together to solve problems.”
<b>Maintaining Composure</b>	“Maintaining composure as we constantly face challenges in our life.”	“Breathe when you feel overwhelmed or feel any strong emotion, think of something else.”
<b>Keeping an Open Mind</b>	“Being open-minded is a must-have quality in future life.”	“To always keep open to feedback, to listen to everyone’s ideas, to always say the truth.”
<b>Social Connection</b>	—	“Being assertive.”
<b>Acting Honestly</b>	—	“Acting honestly because you have to say the truth and always with respect.”

## Behavior and Attitude Change

Students were asked to rate their agreement with 14 statements on both the pre- and post-surveys related to essential skill behaviors and attitudes emphasized in the course. These items used the same 6-point agreement scale ranging from strongly disagree (1) to strongly agree (6).

### Mexico

To see whether measurable change occurred, we conducted independent samples *t* tests to compare average levels of agreement on pre- and post-survey items that described some of the behaviors and attitudes that were taught in the course. Mean scores and standard deviations for each item can be found in Table 2 below. One item, “I think it’s important to try new things,” was significantly higher on the post-survey than the pre-survey (two-sided  $p = 0.035$ ), indicating that students were more likely to have higher agreement with this statement after completing the course. The magnitude of the change was an effect size of 0.27. None of the other items showed any significant change.

**Table 2.** Pre- and Post-Survey Means for Behavioral Change Items

Item	Pre-Survey		Post-Survey	
	Mean	SD	Mean	SD
Your intelligence is something about you that you can’t change very much.*	2.72	1.29	2.65	1.38
I prefer work when I can do it easily with no mistakes.*	4.25	1.38	4.21	1.26
I often feel emotionally overwhelmed.*	3.80	1.42	3.67	1.41
I always control my emotions when I need to.	4.16	1.30	4.25	1.19
I feel confident that I can reach the goals I set for myself.	5.06	1.21	5.08	1.22
I keep working on tasks even when they are difficult.	5.04	0.95	5.01	0.96
I work well with other students.	4.83	0.94	4.90	0.95
I try to get along with everyone I meet.	4.79	1.04	4.73	1.20
I think it’s important to try new things.†	5.12	0.93	5.35	0.74
I usually tell the truth.	4.83	0.90	4.92	0.85
I can tell others what I need.	4.04	1.35	4.23	1.19
I am open to feedback from other people.	4.62	1.04	4.71	0.96
I know how to listen actively to others.	5.07	0.92	5.10	0.81
I think it’s important to express gratitude.	5.48	0.73	5.50	0.76

Note.  $n = 122$

\* Due to the way these questions are worded, means on these items are expected to be lower than those for the items that are positively worded. They have not been reversed-scored.

† Change in this item was statistically significant.

### ***Level 3 Evidence Summary: Which strategies learned in the course, if any, do students report they will continue to use? Do students show measurable change in their attitudes or behaviors?***

Most of the total sample agreed that they would continue to practice the strategies learned in the course, suggesting that they will use them in their daily lives. In total, 88% (123 out of 139) of the students slightly agreed, agreed, or strongly agreed that they would continue to use the strategies learned in the course. When asked which strategies they would continue to use, students responded with a wide variety of different strategies they learned. While some students listed strategies from one essential skill, many included strategies that encompassed a range of skills. As one student wrote, “Time habits, school project planning, writing my emotions to know them and try to control them, how to make a CV resume, group working and organizing times in my life.”

The other piece of evidence for behavior change came from responses to 14 items collected on both the pre- and post-surveys intended to measure student behaviors and attitudes. Among students in Mexico, average scores increased significantly on only one item, “I think it’s important to try new things.” This item increased from a mean score of 5.12 to a mean score of 5.35 between the pre- and post-surveys, which is equivalent to a Cohen’s *d* effect size of 0.27. Behavioral changes happen later than either reactions or learning (Mattern, 2019), so it is not unexpected to see less growth in behavioral change than in Levels 1 or 2.

### **Level 4: Results. Students experience benefits in other areas of their lives due to increases in essential skill competencies. Additionally, the course project has improved school culture.**

This survey indirectly measured benefits to other areas of students’ lives using questions designed to capture students’ beliefs about how the course could benefit them in other ways. As part of the course, groups of students were each tasked with creating a plan for improving their school’s culture. Therefore, one question was the extent to which the students felt that their course projects helped improve their school culture. Additionally, students were asked how they felt what they had learned would help them in other areas of their lives.

#### ***Improving School Culture***

As part of this project-based course, students developed a product to improve their school culture (see Appendix B for examples of real student projects from prior years). On the post-survey, students were asked to rate their level of agreement with the following: “I feel like my project(s) helped to improve my school’s culture” (Figure 12).

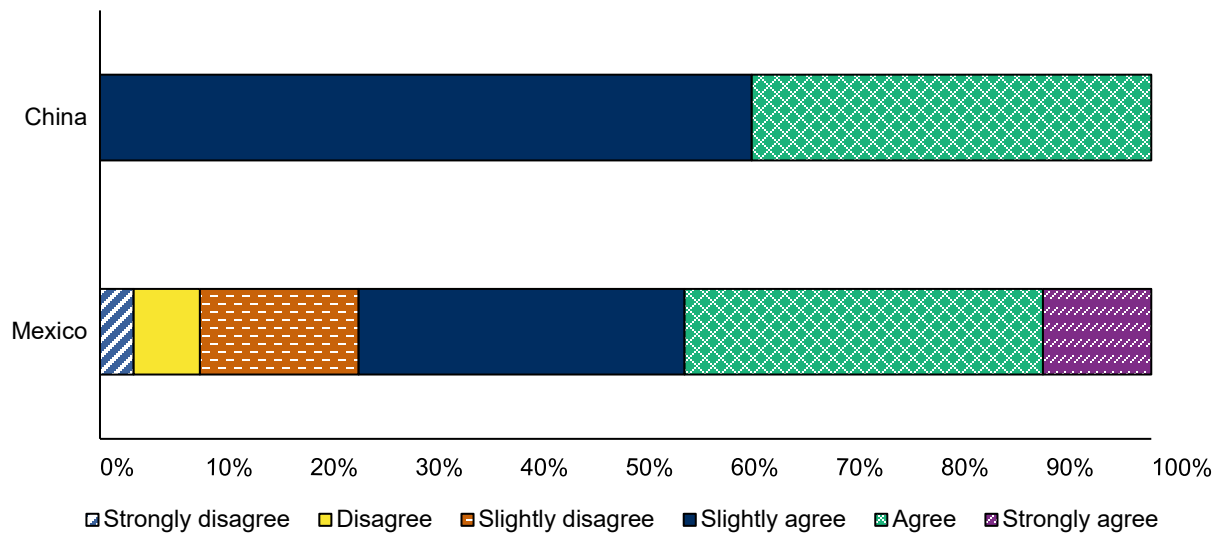
#### **China**

All the students agreed that their course projects helped improve their school’s culture, with 8 students (62%) slightly agreeing and 5 students (38%) agreeing.

## Mexico

A majority of the students agreed that their course projects helped improve their school’s culture. This includes 39 students (31%) who slightly agreed, 43 students (34%) who agreed, and 13 students (10%) who strongly agreed. Among the students who disagreed, 19 students (15%) slightly disagreed, 8 students (6%) disagreed, and 4 students (3%) strongly disagreed.

**Figure 12.** I feel like my project(s) helped to improve my school’s culture.



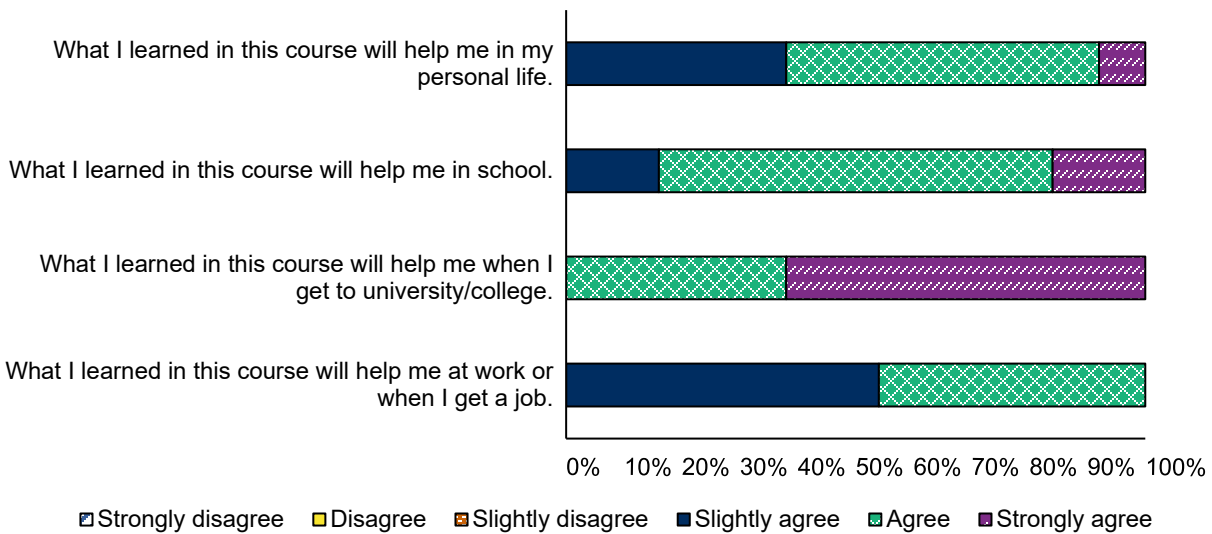
## Benefits to Students’ Lives

As part of the post-survey, students were asked to rate the extent to which they agreed that what they learned in the course would help them in their personal lives, at school, at college/university, and at work. The frequency of responses to each item can be found in Figures 13 (China) and 14 (Mexico).

### China

All 13 students in China agreed with each statement. Regarding the item “What I learned in this course will help me in my personal life,” 5 students (39%) slightly agreed, and 7 students (54%) agreed, and 1 student (8%) strongly agreed. For the item “What I learned in this course will help me in school,” 2 students (16%) slightly agreed, 9 students (68%) agreed, and 2 students (16%) strongly agreed. Five students (38%) slightly agreed and 8 students (62%) agreed with the item “What I learned in this course will help me when I get to university/college.” Finally, 7 students (54%) slightly agreed and 6 students (46%) agreed with the statement “What I learned in this course will help me at work or when I get a job.”

**Figure 13.** Chinese Students’ Beliefs About Course Benefits



Note. *n* = 13

**Mexico**

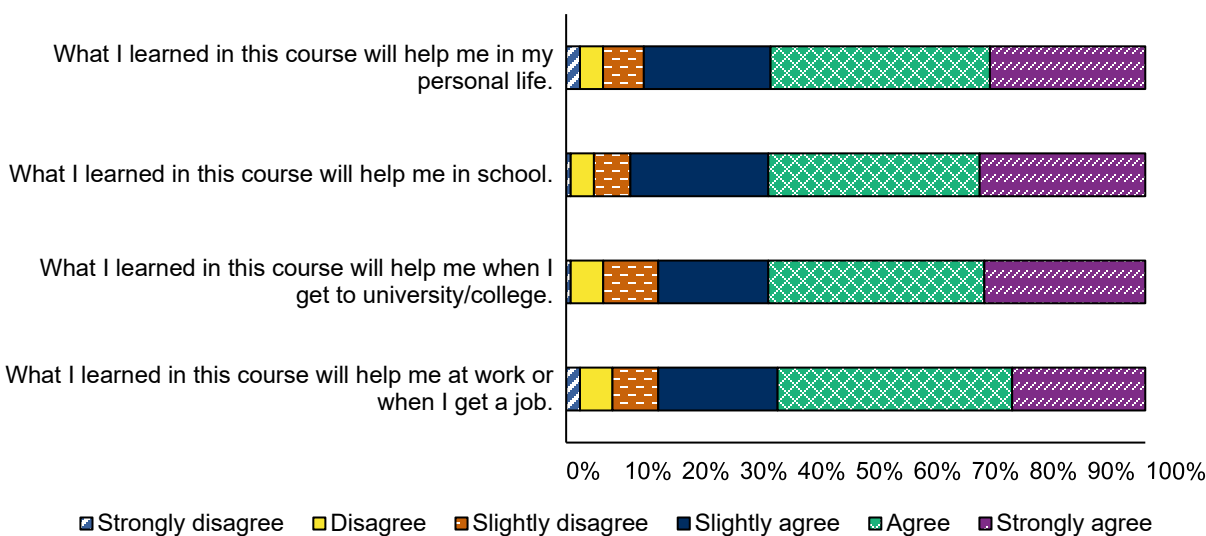
Most students in Mexico agreed with each statement asking how what they learned would benefit them in other areas of their lives. Regarding the item “What I learned in this course will help me in my personal life,” 27 students (21%) slightly agreed, 48 students (38%) agreed, and 34 students (27%) strongly agreed. Among the students who disagreed, 9 students (7%) slightly disagreed, 5 students (4%) disagreed, and 3 students (2%) strongly disagreed.

For the item “What I learned in this course will help me in school,” 30 students (24%) slightly agreed, 46 students (37%) agreed, and 36 students (29%) strongly agreed. Eight students (6%) slightly disagreed, 5 students (4%) disagreed, and 1 student (<1%) strongly disagreed.

Agreement with the item “What I learned in this course will help me when I get to university/college” included 24 students (19%) who slightly agreed, 47 students (37%) who agreed, and 35 students (28%) who strongly agreed. Among students who disagreed, 12 students (10%) slightly disagreed, 7 students (6%) disagreed, and 1 student (<1%) strongly disagreed.

Finally, 26 students (21%) slightly agreed, 51 students (41%) agreed, and 29 students (23%) strongly agreed with the statement “What I learned in this course will help me at work or when I get a job.” Among the students who disagreed, 10 students (8%) slightly disagreed, 7 students (6%) disagreed, and 3 students (2%) strongly disagreed.

**Figure 14. Mexican Students’ Beliefs About Course Benefits**



Note. *n* = 126

**Level 4 Evidence Summary: To what extent do students report that this course content will benefit them in their everyday lives? To what extent do students believe that the project has improved their school culture?**

When looking at both samples together, we see high agreement with both the statement about improvements to school culture and the statements about personal benefits. Most of the total sample agreed that they would continue to practice the strategies learned in the course, suggesting that they will use them in their daily lives. In total, 78% (108 out of 139) of students slightly agreed, agreed, or strongly agreed that their projects helped improve their school culture. Agreement with the items measuring benefits to other areas of students’ lives was also high. Eighty-eight percent (*n* = 122) agreed with the statement “What I learned in this course will help me in my personal life,” 90% (*n* = 125) agreed with “What I learned in this course will help me in school,” 86% (*n* = 119) agreed with “What I learned in this course will help me when I get to university/college,” and 86% (*n* = 119) agreed with “What I learned in this course will help me at work or when I get a job.”

**Discussion**

The results overall provide promising evidence that GAC031 contributes to students’ preparedness for academic, personal, and professional success, reinforcing the importance of teaching essential skills as part of college and career preparation. The importance of essential skills for success in education and the workforce cannot be overstated. In addition to the fact that numerous studies have consistently demonstrated their importance in several spheres of life (e.g., Anglim et al., 2020; Durlak et al., 2022; Pletzer & Abrahams, 2025), essential skills may become even more important in the future as generative AI becomes more commonplace in the workplace.

While it is likely that some job functions will increasingly be done with AI, many essential skills cannot be outsourced to machines. While exploring the future of jobs, researchers from the World Economic Forum (2025) surveyed more than 1,000 global employers to determine what kinds of skills would be “core” for their workforce in the future. Six of the top ten skills identified by employers were clusters of essential skills: resilience, flexibility, and agility (67% of employers); leadership and social influence (61%); motivation and self-awareness (52%); empathy and active listening (50%); curiosity and lifelong learning (50%); and service orientation and customer service (47%).

The findings explored in this study situate GAC031 within a large body of evidence highlighting the value of essential skills for success in rapidly changing educational and workforce contexts. At the same time, interpreting these results requires careful consideration of the study’s scope, design, and data limitations. As with any initial efficacy investigation conducted across multiple international contexts, there are methodological constraints that shape how confidently conclusions can be drawn and point toward opportunities for refinement in future research.

## Limitations and Future Directions

While the initial efficacy evidence for GAC031 is strong, there are important limitations to this study. Results from China were limited to the post-survey, making it impossible to compare pre- and post-course outcomes among these students. Additionally, the sample was small and included students in only one school. The results from Mexico included a larger number of students and schools but also had limitations. While we can compare the pre- and post-survey results at an aggregate level, individual student growth across the school year could not be measured because we lacked the information needed to link individual student responses between time points. Finally, some of our outcomes, such as benefits to school or work, were measured by asking students about perceived benefits rather than by capturing objective measures longitudinally.

The goal of this report was not to compare efficacy evidence between students in different countries, but there is one area where differences may be noteworthy and may warrant more study in the future. While the sample was small, a higher percentage of students from China reported relatively high levels of comfort with receiving instruction fully in English than students in Mexico, which may simply be due to the unequal sample sizes. However, students’ comfort level with English instruction may have played a role in what students were able to take from the course, as well as how interesting they find GAC courses in general. While this report did not explore these questions, they may be worth looking into in the future.

## Conclusion

This study provides initial evidence that GAC031 is an engaging and impactful course for supporting students’ development of essential skills across international contexts. The results indicate positive outcomes across all four levels of evaluation outlined in ACT’s efficacy framework, including student reactions to the course, perceived and measured learning,

intentions to apply strategies beyond the classroom, and anticipated benefits to students' lives and school communities.

These findings suggest that GAC031 offers a valuable credit-bearing learning experience that supports essential skill development while engaging students in meaningful, real-world applications. While there are limitations to the study, the consistency of positive student perceptions toward various elements of the course across contexts is encouraging. Future research should continue to examine longer-term behavioral outcomes, include larger and more diverse samples, and explore how implementation differences across sites may influence student experiences and outcomes.

## References

- ACT. (2026). ACT Global Assessment Certificate (GAC).  
<https://global.act.org/content/global/en/global-programs/global-assessment-certificate-programs.html>
- Adams, N. E. (2015). Bloom's taxonomy of cognitive learning objectives. *Journal of the Medical Library Association*, 103(3), 152–153. <https://doi.org/10.3163/1536-5050.103.3.010>
- American Council on Education. (2026). *The ACE national guide*.  
<https://www.acenet.edu/National-Guide/Pages/default.aspx>
- Anglim, J., Horwood, S., Smillie, L. D., Marrero, R. J., & Wood, J. K. (2020). Predicting psychological and subjective well-being from personality: A meta-analysis. *Psychological Bulletin*, 146(4), 279–323. <http://dx.doi.org/10.1037/bul0000226>
- Camara, W., O'Connor, R., Mattern, K., & Hanson, M. A. (Eds.). (2015). *Beyond academics: A holistic framework for enhancing education and workplace success* (Research Report 2015-4). ACT. <https://www.act.org/content/dam/act/unsecured/documents/RR2015-4-beyond-academics-a-holistic-framework-for-enhancing-education-and-workplace-success.pdf>
- Durlak, J. A., Mahoney, J. L., & Boyle, A. E. (2022). What we know, and what we need to find out about universal, school-based social and emotional learning programs for children and adolescents: A review of meta-analyses and directions for future research. *Psychological Bulletin*, 148(11–12), 765–782. <https://doi.org/10.1037/bul0000383>
- Kirkpatrick, D. L. (1976). Evaluation of training. In R. L. Craig (Ed.), *Training and development handbook: A guide to human resource development* (2nd ed., pp. 301–319). McGraw-Hill.
- Mammadov, S. (2022). Big Five personality traits and academic performance: A meta-analysis. *Journal of Personality*, 90(2), 222–255. <https://doi.org/10.1111/jopy.12663>
- Mattern, K. (2019). *ACT's efficacy framework: Combining learning, measurement, and navigation to improve learner outcomes* (Insights in Education and Work R1749). ACT. <https://www.act.org/content/dam/act/unsecured/documents/R1749-efficacy-framework-2019-06.pdf>

- Pletzer, J. L., & Abrahams, L. (2025). Personality and job performance: A review of trait models and recent trends. *Current Opinion in Psychology*, 65, ID 102054. <https://doi.org/10.1016/j.copsyc.2025.102054>
- Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. *Psychological Bulletin*, 130(2), 261–288. <https://doi.org/10.1037/0033-2909.130.2.261>
- Strickhouser, J. E., Zell, E., & Krizan, Z. (2017). Does personality predict health and well-being? A metasynthesis. *Health Psychology*, 36(8), 797–810. <https://doi.org/10.1037/hea0000475>
- World Economic Forum. (2025). *Future of jobs report 2025* (Insight Report). [https://reports.weforum.org/docs/WEF\\_Future\\_of\\_Jobs\\_Report\\_2025.pdf](https://reports.weforum.org/docs/WEF_Future_of_Jobs_Report_2025.pdf)
- Young, H. R., Glerum, D. R., Wang, W., & Joseph, D. L. (2018). Who are the most engaged at work? A meta-analysis of personality and employee engagement. *Journal of Organizational Behavior*, 39(10), 1330–1346. <https://doi.org/10.1002/job.2303>

## Appendix A

### Essential Skill Competencies

Skill	Definition	Examples
Sustaining Effort	How one's actions demonstrate diligence, effort, organization, self control, and compliance with the rules	<ul style="list-style-type: none"> <li>• Complete tasks on time without needing reminders and even during difficult circumstances</li> <li>• Keep all of your materials organized</li> </ul>
Getting Along with Others	How one's actions demonstrate positive interactions and cooperation with others, as well as kindness, friendliness, and tactfulness	<ul style="list-style-type: none"> <li>• Consistently show compassion or empathy for others in a variety of circumstances</li> <li>• Work pleasantly with others following conflict</li> </ul>
Maintaining Composure	How one's actions demonstrate relative calmness, serenity, and the ability to manage emotions effectively	<ul style="list-style-type: none"> <li>• Recognize when you are being affected by stress and take steps to reduce stress</li> <li>• Successfully manage stress related to activities or tasks</li> </ul>
Keeping an Open Mind	How one's actions demonstrate open-mindedness and curiosity about a variety of ideas, beliefs, people, and experiences	<ul style="list-style-type: none"> <li>• Generate new ideas or solve problems in new ways</li> <li>• Ask questions when trying to discover the answer to a question or solve a problem</li> </ul>
Social Connection	How one's actions demonstrate a preference for social interaction, assertiveness in social situations, and optimism	<ul style="list-style-type: none"> <li>• Actively share your own ideas during group tasks</li> <li>• Offer potential courses of action during group work</li> </ul>
Acting Honestly	How one's actions demonstrate genuineness, integrity, truthfulness, fairness, modesty, and acceptance of responsibility	<ul style="list-style-type: none"> <li>• Complete tasks you said you were going to complete</li> <li>• Provide open and constructive feedback</li> </ul>

## Appendix B

### Examples of Student Work

The following information and images from China and Mexico were provided by schools and are examples of real student work done in the first year the course was offered (the 2022–23 school year). Any information that identified individual students or staff was removed from these images.

#### ***China***

Students in China created a plan to revamp the café in their school as a way to improve their school culture. When they surveyed students and staff, they found that most people felt hungry during working or learning hours in school. Additionally, most respondents felt that there was not enough resting space in the school. In order to help with both issues, these students created a plan for snack and drink options as well as additional seating at the existing café. Using input from the survey, the students created a purchasing list and budget, as well as a visual diagram of the updated café. Pages 28–30 contain a few slides from their presentation to stakeholders.

#### ***Mexico***

Students in Mexico created a plan for a school newspaper in order to create social bonding with the student community, thereby improving school culture. Through their survey of other students, they found that most people were interested in a school newspaper and wanted to see more information than just “official messages,” such as academic advice, word games, and music recommendations. The students created an issue cover and a plan for including students and teachers on a newspaper committee. Pages 31–33 contain a few slides from their presentation to stakeholders.

## Sample Student Work From China

# Solution

We want to renovate the cafe area that already exists and make it into a facility that actually can be used as a cafe. We will provide new services and food that will improve the school's atmosphere for both the students and staff.



14

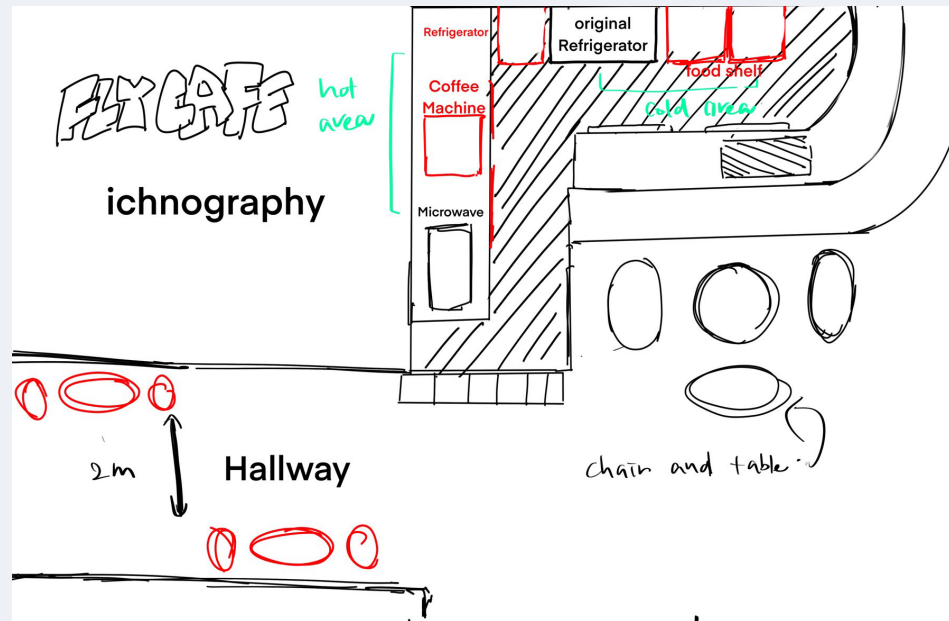
# Purchasing List

Product	Unit	Cost	total number	price per unit	
亲嘴烧 (spicy gluten)		3	152.7	120	50.90
乐事薯片(Lay's chips)		3	110.4	12	36.80
奥利奥(Oreo)		3	158.4	24	52.80
一根葱 (puffed food)		2	43.6	60	21.80
小鱼仔 (Fish)		3	89.7	40	29.90
魔芋爽 (spicy konjak)		2	136	84	68.00
鱼豆腐 (fish tofu)		1	34.9	100	34.90
脆升升薯条 (crisp French fries)		3	86.4	20	28.80
趣多多 (cookie)		2	119.8	44	59.90
三得利 (tea)		4	228	15	57.00
阿萨姆 (milktea)		4	211.6	15	52.90
可口可乐 (cococola)		4	175.6	20	43.90
雪碧 (sprite)		4	195.6	24	48.90
Food shelf		2	295.6	1	147.80
Chairs and Tables		2	796.2	1	398.10
Nespresso coffee maker		1	399	1	399.00
Refrigerator/120L		1	730	1	730
Total cost (Budget) :		3963.5			



• Budget: 3963.5

# Our cafe



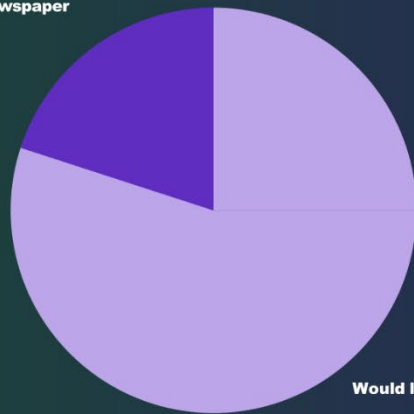
- Black part- facility they already have
- Red part- facilities we added

## Sample Student Work From Mexico

### Process it took to decide our product:

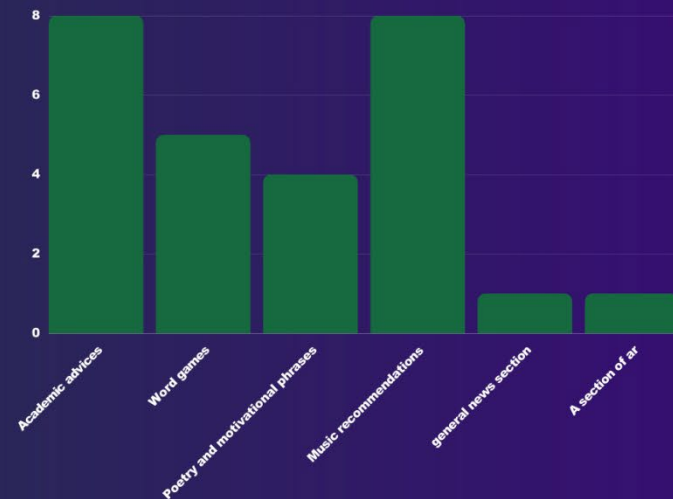
8 of 10 students want an academic newspaper

Are not interested on a newspaper  
20%



Would like a newspaper  
80%

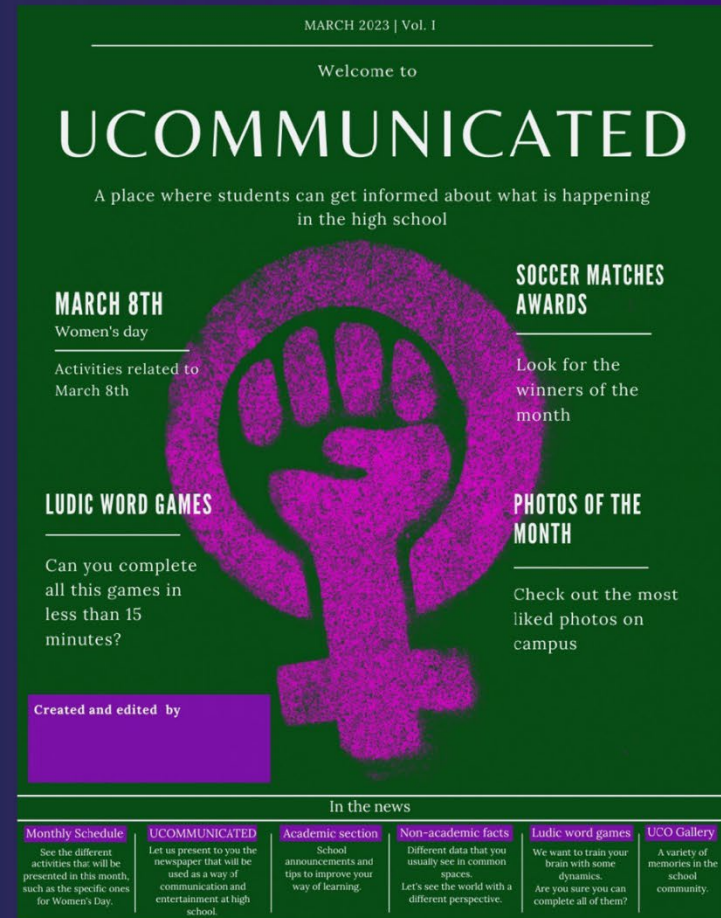
People want to go further than just official messages



# UCommunicated

Newspaper:

- Essential information (Fills how school's official information is delivered)
- Interactive Activities (Changes the interactiveness students have with information given)
- School's Instagram account highlights (Recognizes extracurricular activities)



**UCO**  
PREPA CONTEMPORÁNEA  
Hacia y desde aquí para construir

## Be part of the UCommunicated committee

EXPRESS YOURSELF BY USING THE ART OF WORDS AND  
CREATE THEN SCHOOL'S NEWSPAPER

Supervisor	Editors	Writers	Designers	Photographers
1	2	3	3	2

**FOR MORE INFORMATION SCAN THE QR**

\*Being part of the committee will provide "one academica" (+0.2 decimals) in any GAC subject for GAC students, and in English subject for contemporary students.

\*Every semester there will be a new convocatory for the committee.

## We want you to be part of the UCommunicated Committee!

- From 8 to 12 people
- 2 Teachers
- 1 group leader per semester minimum (3)
- 1 student counselor per semester minimum (3)
- 1 or more students per semester without a specific charge (3)



## ABOUT ACT

ACT is transforming college and career readiness pathways so that everyone can discover and fulfill their potential. Grounded in more than 65 years of research, ACT's learning resources, assessments, research, and work-ready credentials are trusted by students, job seekers, educators, schools, government agencies, and employers in the U.S. and around the world to help people achieve their education and career goals at every stage of life. Visit us at [www.act.org](http://www.act.org).