

First 2 Network
PDSA Template — Cover Information
2024 College Readiness Ambassador

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Institutional Affiliation: First2 Network

PDSA Title (*see p 1 instructions*): **College Readiness Ambassador PDSA 2024**

Change Idea: (*refer to the [First2 Menu of Change Ideas](#)*)

Primary Driver: (*refer to the [First2 Driver Diagram](#)*) STEM students are recruited to engage in leadership experiences that identify systemic issues impeding students' success in STEM, and co-create new solutions to these issues.

Secondary Driver: (*refer to the [First2 Driver Diagram](#)*) students become campus leaders and/or support immersive activities; Institution designates a campus coordinator organizing **student-led** initiatives for First2 students

Date completed: (*Leave blank if PDSA has not yet been completed.*)
9/10/2024

Is this an iteration of a previous high-quality PDSA?:
Yes X No ☐

If yes, please provide its title and a link to the [Change Idea in the First2 Menu](#).

First2 Network College Readiness Ambassadors PDSA Template

Instructions for Completing PDSA Template

This template is designed to support you in testing change ideas through PDSA cycles. It is organized by the 4 PDSA phases: PLAN, DO, STUDY, ACT.

Use the instructions and prompts in the right column to complete the information requested in the left column.

PDSA Cycle—PLAN SECTION

PLAN (**write in this column**)

Describe change Idea: (refer to the [First2 Menu of Change Ideas](#))

Current First2 and other STEM students will act as ambassadors and will visit WV high schools to converse with prospective STEM students about how high school and college are different and what being a STEM major is like. UG student ambassadors will benefit by developing a message that they can take not only to HS students but to leadership at their own institutions. This is also an opportunity to practice public speaking, to practice professional networking and to be of service by connecting with high school students.

Students will prepare a presentation that tells their personal STEM story, practice their delivery with other UG STEM students, and ultimately visit WV High Schools to engage HS students in an interactive dialogue using their presentation, and First2 generated materials. In addition to the PDSA learning questions listed below, there are three main goals of the presentation: 1) to inspire students to consider STEM career paths 2) to articulate the differences between high school and college, 3) communicate the benefits of belonging to First2. Following the presentation, Ambassadors leave information for teachers to continue conversation/exposure to their HS students.

They will assess the impact of their visits on the high school students, the high school teachers, and themselves. First2 Students will reach out to their former highschool teachers and First2 Network Members Deb Hemler and Erika Klose will advertise to Middle and High School Teachers state-wide. Teachers will complete a request form and Ambassadors will claim a request and assume responsibility for determining a time to visit the school. At the conclusion of the presentation, ambassadors will ask students and teachers to complete a short survey to assess impact, and will complete a self-reflection.

Title your PDSA. Add the name of your institution to the end of the title.

College Readiness Ambassador PDSA 2024

Refer to the [First2 Driver Diagram](#) and list the primary and secondary drivers that align with your PDSA.

Primary: STEM students are recruited to engage in leadership experiences that identify systemic issues impeding students' success in STEM, and co-create new solutions to these issues.

Secondary: Recruit students to become campus leaders and/or support immersive activities; Institution designates a campus coordinator organizing **student-led** initiatives for First2 students.

Learning Questions for your test.

1. Process: How many high school teachers will request a College Readiness Ambassador (CRA)?
2. Process: how many schools and students will be reached?
3. Will teachers learn something new about current STEM courses of study and college?
4. To what extent will the Undergraduate Ambassadors report soft skill attainment, as the result of participating?
5. To what extent will high school students learn new ideas that they were previously unaware of regarding life as a college STEM major?
6. What skills will high school students acknowledge that they lack training in?
7. How much impact will the visit have on HS students and their teachers?
8. How much impact will the CRA process have on undergraduate student ambassadors who participate?

Make one or more Predictions for each learning question.

1. Process: 20 high school teachers will request a College Readiness Ambassador (CRA) visit.
2. no prediction
3. 60% of newly visited high school teachers will report learning something new about current STEM courses of study and college.
4. 80% of all undergraduate students will report soft skill attainment, as the result of participating.
5. Teachers will report that 60% of high school students learn something new.
6. 50% of high school students will list at least one skill that they need more practice in through an anonymous Sticker Vote).
7. 80% of high school teachers will strongly agree that the visit was impactful for students and themselves. 75% of students surveyed will agree that the visit had moderate to high impact on them
8. Undergraduate students who participate, will report gains in a sense of social responsibility and citizenship skills, leadership and communication skills, personal development and greater satisfaction with college.

Describe logistics around Implementation.

November:

- CRA learn the goals of the CRA visits to high schools and co-create the essential elements of a presentation and or activities that will accomplish the goals.
- CRA examine and revise [resources](#) and templates
- CRA establish a calendar of availability to visit schools and learn the procedure for claiming visits. CRA reach out to hometown schools that they can easily visit during their school breaks.
- First2 assistance in recruiting teachers to request visits (The tester posts announcements to the WVSTA listserv and FB, and the WVCMT listserv)
- Teachers complete request form to request a visit (ongoing)
- CRA complete draft presentations/activities and practice. Presentations include an interactive segment using the “20 things I wish I knew” handout. ([CRA review Ambassadors’ survey data from previous years](#))
- Resources are [here](#)

November-March 31:

- CRA claim visits to schools- correspond with teacher to set up day and time
- CRA visit schools
- Post visit: Followup with teacher and students to complete surveys
- CRA complete reflection questions
- CRA study data

[Instructions/Checklist for students is here](#)

Describe logistics around Data Collection.

November-March:

- CRA claim visits to schools- correspond with teacher to set up day and time
- CRA visit schools
- Post visit: Followup with teacher and students to complete surveys. Surveys collect minimal/no personal ID information and are google surveys. Teachers gather their students' perceptions through a heads-down hands up method to prevent bias. No ID information is collected.
 - CRA will send [thank you letter](#) to teachers with survey link and follow up one week later
 - [Teacher Survey](#)
 - [Student Survey](#)
 - [CRA complete reflection survey](#)
 - Student Application surveys (how did you find out about the opportunity)
 - NoteBene: Take note of impact versus age of High School students.

March-May:

- Students and PDSA Coach(es) will conduct joint Study session and complete Study portion of PDSA
- Students will complete Act section of PDSA

Describe your required supplies, materials, and resources.

- Teacher request form: <https://forms.gle/bTAKSxmK6BVZUFqNA>
- Someone to stay on top of request form responses
- Powerpoint to be created by each ambassador. [Example](#)
- [20 Things.pdf](#) Copies of this handout
- Copies of First2 Handout. [See Resources](#)
- Zoom if a virtual visit
- Links to all surveys.
- Transportation funding if a face-to-face visit
- Time to plan, practice before visiting schools
- High School/College comparison on this First2 [webpage](#)

PDSA Cycle—DO SECTION

DO (write in this column)

Describe what happened when implementing the test.

34 First2 students collaborated on 18 engaging presentations that adhered to the goals of presenting a personal STEM story, and relating the differences between college and high school. These presentations were approved by the PDSA coach.

Students visited high schools and gave the presentations and collected data for this PDSA.

Describe what happened when collecting data.

LQ1: 16 Teacher requests were completed using the form. Other ambassadors reached out directly to their former teachers and encouraged them to complete the form.

LQ2-7: Data collection relied on feedback collected in part during the ambassador visit and teacher feedback. Student feedback was collected for **1105 students**. They were asked to raise their hands to respond to a question "how impactful was this visit today, from 1 = no impact to 5 = very impactful" "Raise your hand if 1 = no impact, 2, 3, 4, 5 = very impactful".

Student Data Spreadsheet: <https://docs.google.com/spreadsheets/d/1hGp8eo0hK4W7tQW7HtsCnRQjSeJovAzJ4u2tGzePrQ8/edit?usp=sharing>
We received feedback from 65 classrooms in 8-10 schools (2 entries had no school identification).

Teacher Feedback was also requested via survey. Eight Teachers responded. Teacher Data Spreadsheet.
https://docs.google.com/spreadsheets/d/18vJx_JCEglB85YQdRgSiaC0JJ3TC1nWBmmQpuez6X2k/edit?usp=sharing

Ambassador Reflection: 17 students completed the post visit reflection. Data is here:
<https://docs.google.com/spreadsheets/d/1lo9NiqvnfU2mklrEcTnlvGIRIUJWmGnr0md8N52smyA/edit?usp=sharing>

List anything that was unexpected or surprising.

PDSA Cycle—STUDY SECTION

STUDY (write in this column)

Document what you observed about your data.

On High School Teachers and Students:

LQ1: The number of teacher requests = 16. We predicted 20 for this year.

LQ3: We predicted that 60% of newly visited high school teachers will report learning something new about current STEM courses of study and college. All Teachers were asked to rate on a scale of 1-5 "Did you learn anything new about the ways in which college and high school learning expectations differ?" All responses were 3 and above. Comments included:

- I learned useful information I can share with my students about the First2 Network.
- Learned about some ways lab work can be useful in college
- She reinforced many of the realities of college that I've tried to impart to my students and I found that very helpful as a teacher.
- Their passion towards the program and how it helped was inspired
- I remember going to WVU and how the information the presenter gave would have been helpful for me when I was a freshman there.
- I learned more about the First2 program that I wasn't aware of.
- realization of my students' lack of knowledge of how college works

*LQ 4,5: We predicted that teachers would report that 60% of high school students would learn something new. **All responding teachers indicated that students learned something new***

Popular free responses by teachers who asked students about things they learned were that programs existed for first-gen students, the importance of office hours and time management, availability of research programs, the mechanics of scheduling classes, adding and dropping classes etc.

LQ6: We predicted that 80% of high school teachers will agree that the visit was impactful for students and themselves. Seven of eight teachers reported high or very high impact(87.5%). 1071 of 1155 students (according to teachers) ranked the visit as having moderate to high impact, rating 3, 4 or 5 (32%, 51% and 10% for moderate, substantial and high impact respectively)

IMPACT on AMBASSADORS:

LQ3: We predicted that 80% of all undergraduate students will report soft skill attainment, as the result of participating.

LQ7: We predicted that 90% of all undergraduate students who participate, will report gains in a sense of social responsibility and citizenship skills, leadership and communication skills, personal development and greater satisfaction with college.

We have been using an Ambassador Reflection Survey since 2021 for this PDSA. A total of sixty-nine Ambassadors have completed the [Reflection Survey](#). In 2024, 17 Ambassadors completed the survey. On a scale of 1-5 with five being highest impact, the average impact score was 3.9 among all 2024 ambassadors.

Overall, when we asked how being an ambassador impacted them, 7 (41%) students specifically mentioned soft skills like communication, and presenting skills. Eight of 17 reported impact related to service or their sense of value in what they did: “Rewarding, fulfilling, Giving back, making an impact in students lives” are words/phrases that represent this common thread.

A less common but pervasive theme described the chance to reflect on their own journeys.

Document how you interpreted your data.

The data clearly show that the Ambassador program makes an impact on students, teachers, and on many of the Ambassadors themselves.

As a change idea designed to better prepare future students for college, in the short term, there seems to be value in it.

The activity is fulfilling for most Ambassadors but not all.

As a change idea designed to improve First2 student leadership and development, Ambassadors indicated pretty high impact but when asked to describe the impact, it did not always indicate soft skill attainment.

Describe whether your prediction came true (in full or in part).

See above. In most cases, our predictions came true.

We impacted a good number of high school students, even though only a few schools were visited.

Describe your team's key learnings from this test.

Some ambassadors have real difficulty finding a teacher/classroom to visit. This is the biggest obstacle to the implementation of the visit.

The data clearly show that the Ambassador program makes an impact on students, teachers, and on many of the Ambassadors themselves.

As reported by veteran ambassadors, student engagement was improved over previous years.

As a change idea designed to better prepare future students for college, in the short term, there seems to be value in it, and the activity is fulfilling for most ambassadors but not all.

As a change idea designed to improve First2 student leadership and development, which in turn improves their own success, the data are less clear. We should improve the Ambassador survey to ask the [nine common questions and leadership questions](#).

Ambassadors had excellent advice for the next crop of ambassadors:

- Start early. Getting the presentation done over the break is the best way to do it because it's much easier to get time during the school day to present and teachers are much more willing to host you close to a break than in the middle of the semester.
- Be prepared that students will not want to ask questions. Some students may sleep through the presentation and some may not be happy that you are there. Some students will want to know more but may be afraid of what their friends will think. I feel like it is important to prepare yourself for all sorts of situations and it may be useful to have a time period where students can approach and ask questions after class.
- Do include personal life information and talk about college schedules
- Don't be discouraged by younger students being unappreciative. Most of them aren't thinking of college at that point.
- Plan for more time than necessary, especially for virtual presentations. The ambassador presentation that I did should take about 20 minutes to complete, but I allotted 30 minutes for technical issues. Even with this extra 10 minutes, I was rushing through the end. I think that ambassadors should at least ask for a 40 minute time block, although an hour would be better.
- It is important to just be comfortable and be yourself.

- Make sure to be very clear with the teacher what you need for the presentation, like a Smart Board, projector, and if you need a USB drive to put your slides on.
- Practice your presentation lots of times before you go so you have the gist of what you want to say and don't feel bound to notecards (like me haha). Also, include gift bags/prizes because it really engages the students in your presentation and it makes you look cool.
- Be prepared and practice the slides a little bit before you present.
- Reach out to your teachers early and do not be afraid of asking the students questions.
- Make sure to practice the presentation beforehand so that it goes smoothly.
- Try to get the kids excited or interested
- I will be sure to ask more questions to prompt engagement.
- It would probably be helpful to bring something to bribe the kids to ask more questions because we only had 2 students ask anything.
- Include aspects of your personal experiences/perspectives about college.
- Some of the high schoolers won't be paying attention. That's okay. Sometimes high schoolers are just like that. Reaching even one student is a win.
- Be prepared to answer some questions that you might find silly and know how to answer them correctly so that the student doesn't feel embarrassed.

PDSA Cycle—ACT SECTION

ACT (write in this column)

Decide whether your team will recommend to Adapt, Adopt, or Abandon the change idea. Include your reasons for this decision.

Adapt:

1. Better Ambassador Reflection Survey. Add leadership development questions to Ambassadors' reflection survey. Ask process questions to find out how ambassadors incorporated the 20 things and other handouts in their presentations.
2. Better teacher handout to perhaps get some follow-on activities going on to improve college readiness
3. Find other venues where Ambassadors can interact with high school students (EG science fair and olympiad etc).

These and other changes would improve the fourth iteration of the change idea.