

Student Researchers as Instructional Influencers:
How Participatory Action Research Validates Student Voice

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Abstract

A student-led action research project was implemented in a 9th grade English classroom in Connecticut, beginning during the 2018-2019 school year. Eight students provided direct input into implemented strategies over the course of three months. They read current research on selected instructional strategies, generated survey questions and analyzed quantitative and qualitative results to assess grade 9 students' perceptions of the implemented strategies' effectiveness in their English class for the 2018-2019 school year.

Data analyses results revealed: 100% of students identified asking questions was helpful; 100% of students said telling their side of the story is helpful; 98% of students found teachers who made life enjoyable was effective. Other results include communication, being interactive, breaks, sharing opinions, in-person discussions, and a less stressful environment as essential. Student researchers drafted the data analyses sections for their self-selected strategy. Researchers partnered to analyze and document patterns identified within the open-ended responses.

During the 2019-2020 school year, the project and its results were shared with EWHS staff. First, Dr. Hellerich presented an overview of the project in December 2019. In January 2020, the student researchers presented their findings to the entire EWHS staff. Two of the student researchers completed an independent study during the Spring 2020 semester and analyzed data collected from staff as part of the students' presentation. The school-wide sharing of instructional strategies deemed effective, based on the students' research, validated students' voices.

This co-authored research paper describes how participatory action research enables student voice as Part I. When the action research was shared with staff, in Part II, the paper

examines the validation of student voice through the school-wide sharing of student-identified instructional strategies.

Part I: Participatory Action Research Enables Student Voice

In association with a New England College Ed.D. Comprehensive Project, IRB approval was received prior to inviting student participants. Eight students enrolled in grade 9 English at East Windsor High School were invited to participate in a student-focused action research project. Student researchers were invited based on their: demonstrated writing abilities during their 2018-2019 English class; dependability with completing assignments in a timely manner; ability to successfully work collaboratively with peers; and focus on assigned tasks. Selected students represented each of the teacher's five class sections. Parental informed consent, along with student assent, were received prior to students' participation in the action research project. Consent paperwork included the expectation that the co-authored paper will be submitted for publication.

The research question guiding the action research project is: What are ninth grade students' perceptions of selected strategies' effectiveness in their English class during the 2018-2019 school year? Students self-identified instructional strategies of interest. They recommended additional implementation of instructional strategies and activities from March through May 2019. Students read and paraphrased research articles based on their self-selected topic. Students designed the wording on the implemented anonymous survey and analyzed the quantitative and qualitative data collected via Survey Monkey. Students' parents were provided the option to opt-out of the anonymous survey if they chose to not have their child's anonymous data be analyzed for the purposes of a potential publication. One students' parent signed the opt-out form, but was withdrawn from EWHS before the survey was implemented.

Literature Review

Teachers can employ various strategies to make learning interactive and meaningful for their students. Interactive strategies include brain breaks (Stevens-Smith, 2016), in-person discussions (Dykman & Davis, 2008), mindfulness (Anand & Sharma, 2014), and Socratic seminars (Polite & Adams, 1996). Teachers can also make learning meaningful through community circles (Silverman & Mee, 2018), formative assessments (Bonwell, 1997), and growth mindset approaches (Bates, 2016; Ng, 2018). Incorporating these types of strategies can also benefit personal connections within the classroom (Silverman & Mee, 2018). Teachers' willingness to employ varying strategies can heavily influence students' learning in their classrooms.

Brain Breaks and Activities

According to Stevens-Smith (2016) it states a lot about how fun is good and bad in school and if it's good or bad for education. Brain breaks, and activities help students when they need a break after a long session of working and maybe it will wake them up and get them for energetic. Some evidence that leads me to think this way is when it says "Scientists have discovered that movement stimulates the neurons and electrical wiring that facilitate children's ability to take in information and learn" (Stevens-Smith, 2016, p. 4). Activities stimulate the brain which gets the students ready to get back to work. Movement and physical engagement enable oxygen to be carried to the brain for efficient functioning and learning (Stevens-Smith, 2016).

Integrated activities are also great activities because they include the subject your learning and a game or a hand on activity. So, students basically are getting a break and learning at the same time. If teachers do activities with their students, it will make the students more

excited to come to school and make them happier when they enter your class knowing there going to get to move around.

Community Circles

Community circles in class was beneficial to all. Kids who are normally shy finally gets a chance to speak and be heard without interruptions. The students and teachers get to connect on a personal level and really get to know them. It's beneficial to the student on some level.

Especially when they talk about how different topics in the circles can open every kid. Kids working together who aren't used to each other or necessarily vibe with each other. Cultures can connect with one another "and safely discuss most sensitive and charged topics" (Silverman & Mee, 2018, p. 3). A significant part of circles is "allowing every voice to emerge and gives each member opportunities to connect and appreciate other's contributions" (Silverman & Mee, 2018, p. 10). Everyone gets to speak and have the chance without interruptions. Starting circles can break down walls between students. Everyone has a chance to speak and let everything all out. It can be what they can't wait to do this weekend, their favorite movie, their goals in life, etc. Students can even discuss some struggles they have if they feel open enough to share.

Formative Assessments

Using formative assessments is one way to show your students understandings and opinions in a non-graded format. Formative assessments give students the chance to create questions for said formatives creating new test taking abilities for students. As they start to understand the difficulties of creating exam questions, it can cause students to learn the content in a different way and make it easier for them to comprehend and answer questions on a summative assessment (Bonwell, 1997). Having more formative assessment gives students the

chance to form their own opinions about a subject; rather than factual information, which can force a deeper understanding of a topic.

There are many ways to involve students with different forms of formative learning activities. Having students create questions for their own formatives and then having them respond to the questions as if it is a formal exam is one way to give students an active learning option. Students can also do peer assessments, think pair share, and role play scenarios based on your teachings. Using a value line can also show students understanding by having them form opinions based on the themes covered in class (Bonwell, 1997).

When summative assessments are used, criteria needs to be concise. Many times students will need to understand what is being asked of them in order for them to complete a summative. This may involve teaching the students how to complete the summative by modeling how their responses or essays could meet and exceed the criteria (Bonwell, 1997). Even when students are taught how to complete an assessment, teachers need to make sure they check in on a student's progress. Helping students identify their issues with an assessment and receiving support with said problems can create the skills they need to work through the same or similar problems on different assessments.

Growth Mindset

Growth mindset is detailed by Carol Dweck as intelligence being “pliable” and “can be increased through one's efforts” (Dweck, 2000, p.3 as cited in Bates, 2016, p.1). Growth mindset embraces mistakes. Students should say “not yet” (Bates, 2016, p. 30). Fixed mindsets are afraid of mistakes, so they don't try. Mistakes prove that you are trying (Bates, 2016). Teachers should use the phrases, too. Students would embrace it so they show they learned from mistakes.

Growth mindset is the key to progression. In order to improve, you must be open to learn. A person with a growth mindset uses everything as an opportunity to learn, especially mistakes. Mistakes are the main reason some people have a closed mindset. A closed mindset is someone who doesn't take learning opportunities as someone with a growth mindset would. A closed mindset restricts people from improving and using mistakes as a motivation to learn from them (Ng, 2018).

Techniques teachers can use to advertise growth mindsets are simple. Teachers can use certain words. For example, when a student gets a question wrong, they could simply say, nice try and tell them what they did wrong. Words of motivation are key. Teachers need to push students to have them learn from their mistakes. If the student doesn't receive the motivation, this could lead to a closed mindset. Which means the student won't develop like peers with a growth mindset would (Ng, 2018). Therefore, a growth mindset needs to be advertised by the teacher for the student to use every opportunity possible as a learning opportunity.

Growth mindset is beneficial to kids most ages. It gives them the opportunity to rework things such as quizzes and makes them want to strive to accomplish their first goal. People with growth mindset take what they did wrong as an opportunity to do better and having the change to is very helpful to them (Schmidt, Shumow, & Kacker-Cam, 2017). Knowing what areas are needed to be fixed also helps boost not just the grade but a skill set too. "Having that underlying belief that you're in control of your own destiny" (SkillsYouNeed, n.d.) shows if kids believe they can play a part in their outcome they WILL do it. To add on, growth mindset is putting in effort to improve the ability to do something. Students are persisting to make something wrong...better. The brain is most active when being told what to do. So if students are being told what to do they can better understand errors.

Socratic Seminar

In a study taken at a middle school in Chattanooga, Tennessee students reacted very well to the use of Socratic seminar. Polite and Adams (1996) state, “Overall findings suggest that the Socratic seminar increased students cognitive and social functioning” (p. 1). This means that Socratic seminars help children have more educational conversations and have an impact on their learning. It can also teach students to conflict and resolve situations. Socratic seminars are best used in middle school because this is the beginning of the Piaget’s formal operational stage of development. But, on the other hand, it is can also apply to the 9th grade curriculum. Students have abstract thinking and critical thinking skills, which are “vital...for lifelong learning” (Polite & Adams, 1996, p. 3). The most important thing when participating in a Socratic seminar is relation to students’ own life experiences, because this keeps students engaged in the conversation. In conclusion Socratic seminars are a very important tool in learning because it boosts students’ critical thinking and improves conflict resolution skills and makes students the best learners they could be.

Stress and Mindfulness

School clearly is a major factor of stress in young kids. A research study showed 90% of children faced moderate to severe levels of stress (Anand & Sharma, 2014, p. 18). Mindfulness activities have helped children with anxiety, reduce stress and calm themselves down when they are out of control. Anand and Sharma’s (2014) study included mindfulness sitting, meditation, and mindful listening. They found lowered stress levels and greater well-being for adolescents. They found it was easy to implement the mindfulness program in schools to reduce stress. People have paid attention to the stress of adults and parents. We need to focus on the stress of teenagers and what they have to do.

Teaching Online

Teaching online does not help with communication because if a student is asking a question or a teacher is trying to give instruction there are limited ways for expectations to be reached. There is also no human contact to be understood (Dykman & Davis, 2008). Online, things can be more confusing and it takes more effort to look things up. Whereas being with the teacher, students can get the answers they are looking for. They can talk to the teacher if they need more practice or if they want to redo an assignment or even if the teacher wants to give out more.

Methodology

Grade 9 students had already completed a paper version of surveys in September 2018 (beginning of the year) and January 2019 (mid-year). Dr. Hellerich used the survey results to inform her instruction, also serving as part of her district-wide professional learning goal. The action research project group reviewed the mid-year data compiled by their English teacher. They determined strategies of interest for their research, their teacher found articles aligned to their selected interest, and students recommended the implementation of several strategies from March through May 2019.

Recommended strategies included: additional brain breaks; additional physical activity; Kahoot! online review games with incentive points; incentive plan so classes can earn free time in three classes lacking incentives; continue incentive plan in two selected classes; Socratic Seminars, defined by the group as a discussion activity where students identify and ask questions, facilitated by a student; additional group work, with specifically, strategically assigned groups for two selected class periods. These recommended strategies reflect the students' self-identified topics of interest.

Several strategies that had been implemented throughout the year were recommended to continue: continue community circle conversations; mindfulness music; brain breaks; activities where students moved to various locations (agree/disagree continuum). The action research group recommended scheduling a brain break/physical activity/Kahoot!/community circle/Socratic seminar twice during any given week. The suggested strategies were implemented by the English teacher. She consulted with action research project group members as needed after implementation occurred to gather additional recommendations for subsequent implementation (ex: students raise hands for one particular class period during second Socratic Seminar).

A drafted end of year online survey was initially generated by the grade 9 English teacher. Revisions were made according to students' suggestions. The teacher created the anonymous online survey using SurveyMonkey. It was administered to all students whose parents did not complete an opt-out form during a part of their English class. Survey results were retrieved from Survey Monkey and provided to the student researchers. Students initially reviewed the results independently, noting: What jumps out as significant? When looking at your specific topic, are there any results that are notable? Does anything surprise you? The open-ended responses were collectively coded and patterns identified as a group. Patterns were then compared with the quantitative data results initially noted by students.

Results

Quantitative data, coupled with qualitative open-ended responses, were collected from 73 students, whose completion rate totaled 95%. Quantitative data results revealed significantly positive responses related to the student-led group's suggested strategy implementation.

Specifically, when reviewing the quantitative data results, the following were identified as notable by the student researchers:

Table 1

Quantitative Data Results

Notable Results
<p>Brain Breaks:</p> <ul style="list-style-type: none"> ▪ 84% of students found brain breaks effective <p>Growth Mindset:</p> <ul style="list-style-type: none"> ▪ 100% of students indicated that asking questions was helpful, with more than more than 47% of students selecting “Most Helpful” ▪ 60% of students reworked an assignment or turned it in early for feedback <p>Online Teaching:</p> <ul style="list-style-type: none"> ▪ 97% of students said in-person class discussions were effective ▪ 88% of students would rather have in-person (not online) class discussions ▪ 72% of students said they would <i>not</i> prefer an online program to teach English lessons <p>Stress:</p> <ul style="list-style-type: none"> ▪ More than 98% of students found it helpful for the teacher to make the classroom life enjoyable on a regular basis, with around 60% finding it “Very Helpful” <p>Socratic Seminar:</p> <ul style="list-style-type: none"> ▪ 86% found Socratic seminars to be effective, with around 22.5% finding it “Most Effective” <p>Community Circles:</p> <ul style="list-style-type: none"> ▪ 91% of students said it was effective to use circles to give feedback on activities ▪ 100% of students found that telling their side of the story was helpful

Furthermore, the qualitative data results for several questions were analyzed by student researchers. The student-created questions the researchers selected to analyze were: “What did you value most in English this year?”; and “What was it about English class that made you feel LEAST stressed this year?” When reviewing the qualitative data results, the following were identified as notable by the student researchers:

Table 2.

Qualitative Data Results: Open-ended Responses

What was Valued in English	Applied Qualitative Codes
<ul style="list-style-type: none"> ○ Teacher-student relationships help students to learn better and to be motivated 	“Connect,” “Understanding,” “I like my teacher”
<ul style="list-style-type: none"> ○ Freedom to share thoughts allows for class and individual growth 	“Rework assignments,” “Free seating,” “Fix mistakes”
<ul style="list-style-type: none"> ○ Interactive lessons and learning will allow for face-to-face communication and better understanding 	“Good discussions,” “Interactive with each other,” “Tied together”
<ul style="list-style-type: none"> ○ Making class meaningful will motivate students to work harder 	“Fun” “Took the time to teach and not be a lazy teacher,” “Story was good for the unit”
What Made English LEAST Stressful	Applied Qualitative Codes
<ul style="list-style-type: none"> ○ The comfortable environment, getting ideas out, knowing each other, and breaks helped make English less stressful 	“Knowing my classmates,” “Feeling comfortable in the room,” “The teacher,” “The teacher helping me get through the year,” “Able to work with the teacher to work things out,” “I knew that we would take care of it,” Music: “Made the room feel not empty,” “Peaceful”
<ul style="list-style-type: none"> ○ Planning of our work and a chance to make it better made it less stressful 	“Work was really understandable,” “Had a chance to get better,” “Telling us ahead of time,” “Knowing I could rework assignments”

Discussion and Recommendations

Based upon the classroom data collected June 3, 2019, a majority of students in the 9th grade English class found Socratic Seminars to be effective, either somewhat or most

effective. Perhaps students enjoyed the verbal debate within the Socratic Seminars. According to a student researcher's experience in the classroom, a majority of students like to talk. It is their strength. However, students still need the skill of working with others and participating in the whole group during an academic activity. When looking at the research, it suggests that Socratic Seminars increase critical thinking and working together (Polite & Adams, 1996). It is recommended that teachers use Socratic Seminars in their activities on a monthly or bi-monthly basis.

Community circles are effective in the classroom. Based on the survey, 91% of students found circles effective. Teachers should have a circle at least once a week. Also, 100% of students found that telling their side of the story was helpful. Student researchers identified this as really great feedback because it shows that the classroom energy is fair when a situation occurs. 84% of students say brain breaks are effective. If they are used, kids will not be tired of sitting and not moving so they can move around.

Our results show 84% of students found brain breaks and activities effective. Research shows movement and physical activity enable oxygen to go to the brain (Stevens-Smith, 2016). Teachers should give kids a brain break 1-2 times a week for 10-15 minutes so students can move around.

Having more formative assessment gives students the chance to form their own opinion about a subject (Bonwell, 1997). 97% of our students found Kahoots effective. Teachers should use more formative assessments when teaching to show understanding rather than tests and quizzes.

Kids should have the option to rework assignments. People do better when they are told what they did wrong so they know what to fix. Reworking assignments gives them a chance.

Teachers should show an example of how reworking even a couple of papers can affect grades a decent amount.

Open-ended responses about what made students feel least stressed in English showed three different ideas: environment, time and work, and breaks. With environment, we found a lot of people benefitted from the less stressful, more calm climate. Students were never stressed about doing work because they knew what they were doing and also had a chance to improve. The teacher allowed the students to have time, which made it easy for students to get their work done stress free. When times were starting to get stressful, the teacher allowed the students to have breaks to regroup. The comfortable environment, getting ideas out, knowing each other, and breaks helped make English less stressful. Planning of our work and a chance to make it better made it less stressful. Teachers should allow their students to work let the students work with a good amount of time so it is less stressful. Teachers should allow students time to regroup and relieve stress when there is some.

An overview of the recommendations based on the quantitative and qualitative data analyses is described in Table 3. The student researchers' recommendations were based on survey results, coupled with the literature they had read as part of the literature review.

Table 3.

Recommendations Based on Quantitative and Qualitative Data Analyses

Recommendation	Based on Data/Evidence
Teachers should enjoy teaching and use growth mindset language to motivate students	<ul style="list-style-type: none"> • 100% of students found it helpful when they perceived the teacher enjoyed teaching, with 59% finding it “Most Helpful” • More than 98% of students found it helpful when the teacher made an effort to make school meaningful, with 54% finding it “Very Helpful” • Open-ended response pattern: Making class meaningful will motivate students to work harder

Recommendation	Based on Data/Evidence
Teachers should have more class discussions and limit online program usage to have everybody participate	<ul style="list-style-type: none"> • Open-ended response pattern: Freedom to share thoughts allows for class and individual growth • 97% of students said in-person class discussions were effective • 88% of students would rather have in-person (not online) class discussions • 72% of students said they would <i>not</i> prefer an online program to teach English lessons • Open-ended response pattern: Interactive lessons and learning will allow for face-to-face communication and better understanding
Teachers should be kind, caring, open-minded, trustworthy, and understanding	<ul style="list-style-type: none"> • Open-ended response pattern: Teacher-student relationships help students to learn better and to be motivated
Teachers should try having at least one circle a week because it lets everybody have a chance to share what's on their mind and communicate with their peers	<ul style="list-style-type: none"> • 91% of students said it was effective to use circles to give feedback on activities • 100% of students found that telling their side of the story was helpful
Teachers should use Socratic Seminars in their activities on a monthly or bi-monthly basis	<ul style="list-style-type: none"> • 86% of students found Socratic Seminars as effective • Polite and Adams (1996) state, "Overall findings suggest that the Socratic seminar increased students cognitive and social functioning" (p. 1).
Teachers should give kids a brain break 1-2 times a week for 10-15 minutes so students can move around	<ul style="list-style-type: none"> • 84% of students found brain breaks effective • Movement and physical activity enable oxygen to go to the brain (Stevens-Smith, 2016)

Limitations

During the course of this action research project, a few limitations were experienced. First, almost 40% of students felt that breathing exercises at the beginning of circle conversations were not effective. The teacher did not implement breathing exercises as often as she had implemented other student-recommended strategies, such as Socratic seminars and/or Kahoot activities. So the responses are based on limited experiences with the breathing exercise strategy.

Also, students' survey-taking behaviors may include some limitation. On average, students completed the survey within eight minutes; two students completed the survey within three minutes. Those particular students left several questions blank, electing not to provide their opinions about several strategies. However, all provided data was analyzed by the action research group. While several limitations presented themselves, the action research group's data analyses represent the opinions that were shared through the anonymous survey.

Summary of Part I

The goal of our action research study was to find out what students think about teaching strategies used in their English class during the 2018-2019 school year. We found communication is a big part of effective teaching. Students want to be more interactive. Sometimes students need a little break. We like sharing our opinions during circles. The majority of students said Socratic seminars and in-person discussions are effective. Students enjoy a less stressful and calm environment. Student researchers believe that music is relaxing and the teacher's positive attitude is important to a calm environment. Receiving and giving feedback are essential for running the classroom in a way that is effective for both teachers and students.

Part II: The Validation of Student Voice: School-wide Sharing of Student-Identified Instructional Strategies, 2019-2020

During the 2019-2020 school year, the strategies identified by the student research group were shared in various ways with teachers at East Windsor High School (EWHS) in Connecticut. By sharing the students' research recommendations, the co-authors of this paper intended to provide teachers with: an understanding of the student-led participatory action research project engaged by the students during the previous school year; the students' perceptions of strategies they deemed successful within their 2018-2019 English class; a chance to hear from the student researchers themselves; and an opportunity to provide feedback and reflections as a way to provide meaningful, targeted professional development for strategies highlighted by the student researchers. The opportunity for students to voice their suggested strategies was provided, allowing for the students' action research to potentially influence teachers at EWHS. Throughout the course of the 2019-2020 school year (through early March), professional development opportunities followed the process outlined in Figure 1.

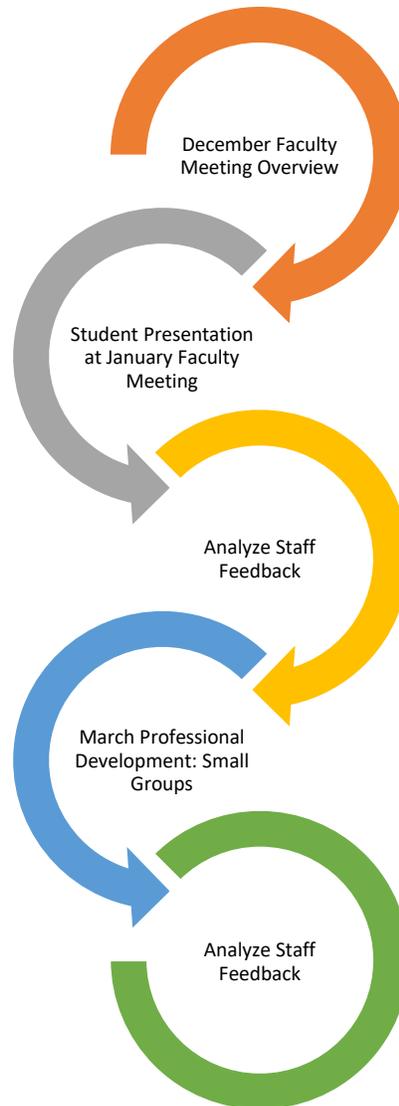


Figure 1. Process used to share student-identified strategies with staff at East Windsor High School during the 2019-2020 school year.

December 2019 Faculty Meeting Overview

In preparation for the student presentation to staff at the January 2020 faculty meeting, an overview of the student-led participatory action research project was provided to staff. The presentation initiated with engaging staff to reflect on ways they currently provide opportunities

for student voice within their classrooms, modeled using a student-recommended activity (via Kahoot!). The reflective questions were: a) I plan activities that encourage a lot of student talk; b) During my classes, I build in opportunities to let students ask a lot of questions; c) I regularly ask students for their feedback on lesson activities; and d) I incorporate student feedback/input into upcoming activities.

Next, the process used to garner student feedback and voice throughout the year was shared with staff. This process is demonstrated by Figure 2:



Figure 2. Integrating student feedback process currently used in a ninth grade English classroom in East Windsor, Connecticut

In conjunction with the feedback process used within the English classroom, the approach used for the comprehensive project was foundationally built upon the concept of participatory action research (PAR). Staff were provided with a brief overview, including that PAR embraces student researchers' voices, which provide "unique perspective on learning" and should "actively shape their education" (Rodriguez & Brown, 2009, p. 22). PAR also

empowers student presence (Cook-Sather, 2006), providing voice to those who would not usually be heard (Lind, 2007). Providing staff with a general overview of PAR framed the explanation of the student-led action research project, which followed the process outlined in Figure 3.



Figure 3. Process for student involvement in action research classroom-based project

As depicted in Figure 3, students reviewed mid-year data, researched strategies used in high schools, review/revise questions for their own survey, collaboratively analyzed the quantitative and qualitative data, and articulated their perceptions of successful strategies. The action research project itself allowed for students to share their voices, including the student researchers as well as their grade level peers. It provided the student researchers with opportunities to practice research and writing skills in a real-world context, promotes student voice through the process, and allowed students to identify instructional strategies deemed valuable from students' perspectives.

While staff were informed that the student researchers' selected area of focus would be shared in January, some additional data was presented for staff consideration. The select data that

was shared during the December meeting highlighted students' perspectives on approaches they felt were helpful within their English class:

Table 4. Student survey data results regarding perceptions of their English teacher's actions.

Survey Questions	Anonymous Student Survey Results
How helpful was it that your teacher...	Perceived Helpfulness
Listened to your side of the story	100% (4.46)
Let you ask a lot of questions	100% (4.37)
Held classroom discussions that encouraged a lot of student talk	92.5% (4.07)
Held you accountable for your work	100% (4.22)
Made an effort to make school meaningful	98.5% (4.30)
Made an effort to make classroom life enjoyable on a daily basis	98.5% (4.43)
Admitted she was wrong sometimes	98.5% (3.96)

These data points were selectively shared since they provide an overview of the types of responses the action researchers' surveys gathered. The specific data relating to the student researchers' specific topics were reserved for their own presentation to the faculty, scheduled for January 2020. In preparation for their presentation, staff were informed of the student researchers' perceptions of engaging in the action research project.

Using an anonymous survey, the student researchers indicated their sentiments regarding what was most successful about the action research project itself. Responses included: "Getting our voices heard for what works for us and our peers"; "How we came together as students and a teacher"; and "Coming together to work with you." When asked what they valued most, student researcher responses included: "I could make a change in the schools and how kids learned";

"Having the opportunity to be a part of something that could make a difference"; and "Just have our voices be heard." Quantitatively, on a five-point Likert scale, 67.5% of the student researchers selected level 5, indicating they felt they were able to “Significantly” have their voice be heard, with 37.5% indicating “Mostly” (by selecting level 4). By sharing the student researchers’ process and perspective on the success of the action research project, staff were primed to hear the students’ actual voices as they shared their research and strategy recommendations during a January 2020 faculty meeting.

Student Presentation at January 2020 Faculty Meeting

When it came to planning the faculty meeting, students were asked to fill out sheet confirming what they were going to say as well as the point they were trying to get across. Students were asked what information they thought should be shared with staff, and that information was then formatted into a PowerPoint. Some students were also asked to answer additional questions that had been brought up as feedback from the December faculty meeting.

The presentation itself was very successful with all but one of our students being able to share their piece of the paper. After the presentation, we were able to model one of the skills with the staff, giving them the opportunity to brainstorm ideas in PLC groups (see Table 5) and ask the students questions as well as fill out a reflection sheet.

Table 5. Brainstorming Ideas for Strategies

<ul style="list-style-type: none"> ○ Kahoot! ○ Agree/Disagree Continuum ○ Incentives: Tickets or Students ○ Recognizing Each Other ○ In-class group discussions (in person) 	<ul style="list-style-type: none"> ○ Brain breaks ○ Physical activity (jigsaw activity) ○ Using surveys to get feedback on lessons/activities
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<ul style="list-style-type: none"> ○ Student-led Socratic Seminar ○ Community circles for: <ul style="list-style-type: none"> ○ Feedback ○ Content ○ Relationships ○ Issues/Behavior 	<ul style="list-style-type: none"> ○ Know it and can explain it/Heard of it/Not heard of it (yet) ○ Growth mindset language ○ Growth mindset assessments
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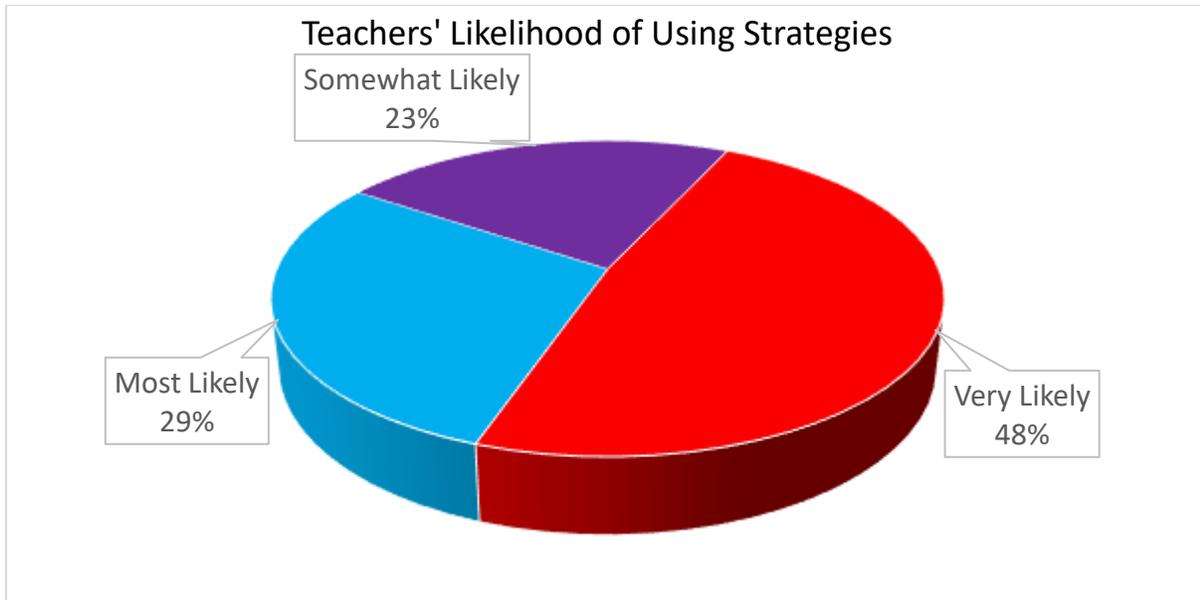
Analyzing Staff Feedback from January 2020 Meeting

The majority of staff feedback was positive. Most of the feedback touched base on how teachers were impressed by the students' accomplishments. Also, many teachers gave feedback on their perception of the students' presentation. This allowed us to realize that our message is giving off perceptions that we sought for. It gave us a boost and showed us our work is paying off and is affecting teachers the way we hoped. But some feedback was positive and guiding at the same time. Some teachers' feedback told us what they wanted and gave us the opportunity to improve on our work.

Some teacher responses included: "Very impressed with their presentation. Would be great to have them branch out to other grades and classes"; "Thank you for reminding me of how important it is to incorporate varied strategies to motivate students"; Very well articulated! I loved hearing your insight, it really made me pause and reflect on what I can change in my teaching"; and "It was refreshing as well as eye opening to hear the students' point of view." This helped us come up with more ideas and improve. Overall, the teacher feedback gave us motivation and pushed us in the right direction to improve our work.

The student group was expected to present to the Board of Education in May 2020; due to COVID-19, the presentation will be scheduled during the 2020-2021 school year. Based on teacher exit slip responses, they indicated they were likely to use the strategies presented by the student group. 100% of the teachers were likely to use these strategies as shown in Figure 4:

Figure 4. Teachers' Likelihood of Using Student-Identified Strategies.



Almost half of the teachers (48%) selected the highest category, with a score of 5 on a 5-point scale (Very Likely). The fact that teachers said they were likely to use the strategies showed that they were willing to listen and to use what we students think is best for us. Teachers also seemed to appreciate students being incredibly candid with the presentation, informing them exactly what strategies we disliked and liked.

Open-ended Responses: Take-Aways from the Student Presentation

At the end of the presentation, teachers were also asked to answer open-ended response questions as a way to understand what they learned. Thematic statements from coding open-ended response to question #1: What did you take away from today's presentation? are shown in Table 6.

Table 6. Thematic Statements from Staff Responses

Concept	Thematic Statement	Evidence
Strategies	Teachers identified strategies they want to use in their classroom as well as strategies they learned about through the presentation.	“Mix it up with various educational modalities” “How much students appreciate restorative practices”
Feedback on Student Presenters	Teachers are impressed that students were capable of doing this research project, in addition to being able to confidently speak on their topics in the presentation.	“There are some very confident students who really care about improving their learning and knowledge” “Students appreciate the opportunity to be heard about their work to be successful”
Student/Teacher Relationship	Teachers pointed out how teacher-student relationships effect learning and student performance.	“Positive feedback can go a long way” “Students need a positive connection with their teacher”
Student Perceptions/Opinions	Student want to be included in activity planning and that they know what strategies work and which don't.	“Students are perceptive about what work/doesn't work for them in the classroom” “Students can set the t[o]ne for success’

<p>Good impression/surprised</p>	<p>Teachers were surprised and impressed by student abilities to complete the work for the research.</p>	<p>“Hearing from the students and their experiences from this project” “Lots of interesting idea I can add into my learning”</p>
<p>Teacher Perception</p>	<p>Teachers judgement on the information presented.</p>	<p>“They want less work and don’t like stiff deadlines” “Students are stressed”</p>

We identified this quote, “Provide opportunities for me as an educator” as a stand-alone response that showed the impact the presentation had. We felt that this one quote exemplifies how important our presentation was, and that teachers felt hearing from the students could help them improve their teaching. The quote also proved by giving students a place to speak their opinions, it can help educators better teach their students.

March 4 Professional Development and Staff Feedback

Given the district focus, administration requested that Dr. Hellerich’s professional development session on March 4, 2020 would focus on the use of circles across classrooms at East Windsor High School. An entrance slip asked staff to reflect on “What would you need to make circles work/continue to work for you?” Patterns from initial staff responses included: finding a balance with curricular demands, time, not feeling “forced” or “mandated” to use circles, and having a stronger knowledge base for the strategy of circles. After the initial discussion, the students’ data was shared in an effort to further validate the students’ voices and perceptions.

As identified through the action research project data analyses, staff were reminded of the level to which community circles were perceived as effective by students, as depicted in Table 7:

Table 7. Community Circles: Perceived Effectiveness

Community Circle Focus	Anonymous Student Survey Results: Perceived Effectiveness
For feedback (student input on activities)	91%
For relationships (to make connections as a class)	89.7%
For content discussion (about English-related topics)	95.6%
To address classroom interactions/behaviors	88%

When analyzing the anonymous PD evaluation survey results, staff indicated they used circles: Very often (defined as weekly): 21%; Often (defined as three times a month): 7%; Somewhat often (defined as twice a month): 28%; Not often (defined as once a month): 41%; and Never: 3%. It is noteworthy that that only one teacher comprises the 3% who never uses circles. Still, when examining these results, a total of 28% of staff indicated they used circles between three and four times a month. Yet, at 44%, a larger percentage of staff (combined) indicated they use circles once a month or less. Thus, examining the staff members’ perceptions of their level of comfort with circles could clarify desired supports so circles would be used more frequently.

Table 8. Staff Members’ Level of Comfort with Circles for Varied Purposes

Purpose of the Circle	Very Comfortable (5)	Comfortable (4)	Somewhat Comfortable (3)	A Little Comfortable (2)	Not Comfortable (1)
To Build Relationships	28%	42%	17%	10%	3%

To Get Feedback from Students on Activities	38%	35%	21%	3%	3%
For Content-Based Discussion	24%	41%	14%	21%	0%
To Address Student Behavior	17%	35%	21%	21%	6%

As demonstrated by the staff members' levels of comfort, for each purpose, the majority of staff collectively feel comfortable (when totaling the staff who selected "Very Comfortable" and "Comfortable"). When examining those who felt "Somewhat" or "A Little Comfortable," the combined percentages range from 27% (Relationships) to 24% (Feedback) to 35% (Content-Based Discussion) to 42% (Address Student Behavior). Given the extensive percentages of staff who are not comfortable with the strategies yet, a prime opportunity exists to provide further professional development. By providing training, staff may then move along the continuum towards feeling more comfortable integrating varied purposes of community circles across classrooms, which can provide more consistency for high school students.

When asked about the student-identified instructional strategies and what they would like the professional development to "look like," staff members' responses highlight the importance of modeling. Several responses requested modeling, such as: "Modeling the strategy, seeing it in action"; "Real life examples of what these would look like within the school." The concept of modeling also can involve students, which could move staff towards seeing the benefits. A response emphasized, "I would like to see students act out the activity, to get an understanding of what it may look like" and "Demonstrations with students." As noted by staff responses, involving students as part of the modeled strategy can further empower students' voices with respect to strategy integration.

In essence, students' interactions during a community circle, for any of the four purposes, can further validate the importance of their voice as other teachers, such as those who are "somewhat comfortable," view how student voices can be empowered within a community circle. Providing a structure for staff to observe other peers while holding community circles is a recommendation for administration to consider; however, given the required move to distance learning due to COVID-19 in mid-March 2020, this recommendation has been put on hold until we return to school.

Conclusion: Parts I and II

We feel very accomplished and excited about the overall project. When we students came together and presented to all the teachers, it showed us as students have a voice and can influence the way we learn and are taught. To hear positive feedback from the teachers, it showed us that what we are doing had an effect, validating our work. We were motivated by how much we were able to accomplish as students and looking back at what we achieved, it's very fulfilling.

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