

**RESEARCH BRIEF** 

# Developing Exit Tickets in an Improvement Network



# **AUTHORS**

# Anna E. Premo

Doctoral Student School of Education, University of Pittsburgh

Anna Premo is a doctoral student in the Learning Sciences and Policy program and graduate research assistant in the Learning Research and Development Center at the University of Pittsburgh. Her research interests include organizational learning, data and measurement use, and research-practice partnerships, and she strives to reframe complex organizational change and transformation as learning processes.

## Hannah G. Goldstein

Doctoral Student School of Education, University of Pittsburgh

Hannah Goldstein is a doctoral student in the Education Policy program in the Department of Educational Foundations, Organizations, and Policy and a research assistant on a W. T Grant Foundation funded project. Her research interests concern policy implementation across state and local levels, and the role of research-practice partnerships in driving equity-oriented systems change.





Vignette: An illustration of a teacher using and learning from exit tickets1

Ms. Johnson, an English teacher at an urban middle school, was concerned that her students were not doing as well in her class as they could be. Her district had recently partnered with the University of Pittsburgh's Institute for Learning (IFL) to form an improvement network to help students historically disadvantaged by education systems develop critical literacy skills needed for college- and career-readiness. At a recent professional development event hosted by the IFL, she learned about the value of selecting culturally relevant texts for her students. Ms. Johnson learned that research on culturally responsive teaching shows that students who read texts that aren't culturally relevant are likely to disengage from school. Knowing this, she was excited to try out the idea of selecting a nontraditional text for her classroom; she selected The Rose That Grew from Concrete by Tupac Shakur for an upcoming lesson focused on comprehension.

While Ms. Johnson was confident that her students would connect with the poems, she still wanted to be sure she was helping them stay engaged. One way she knew she could read the pulse of students was by using an exit ticket. In a prior professional development, the IFL team introduced exit tickets — very short surveys for students to take at the end of class — as a way for teachers to hear directly from students about new ideas they were implementing in their classrooms. Although Ms. Johnson was already familiar with exit tickets generally, she liked that the exit tickets shared by the IFL team had specific questions about how the students felt about the texts they were engaging with — including whether they felt the text was relevant to their daily lives or their backgrounds. She also liked that the IFL team would create a report for her with exit ticket responses split out by student background, enabling her to develop a more nuanced understanding of her students' experiences.

<sup>&</sup>lt;sup>1</sup> This vignette draws strongly on the actual experience of one teacher, with minor changes to mask their identity. It also incorporates the experiences of other teachers for a more generalized view.

Following the lesson, Ms. Johnson's students each completed an exit ticket. She decided to use an exit ticket specifically designed for the comprehension task sheets she was using to guide students as they interacted with complex texts (which had been designed by coaches at the IFL). Ms. Johnson hoped this exit ticket would help her learn how her students felt about both The Rose That Grew from Concrete and the task sheet she assigned along with the reading.

When Ms. Johnson received the report of her students' responses the next day (see Figure 1), she was disappointed. While she was pleased to see that her students were feeling better about using the task sheets this time, she discovered that few of her Spanish-speaking students found the Tupac poems very relevant to their daily lives. She found these results disheartening and decided to reach out to her instructional coach at the IFL to talk about what steps she might take next. Her coach first reminded her that very few texts feel relevant to every student, especially in a highly diverse classroom like hers, and reminded her that it was most important that each student found relevance in at least some of the texts she used in her lessons. They also discussed strategies for how to select texts that were relevant to different types of students and planned to meet again after her next lesson to review her latest exit ticket results.



Figure 1. Ms. Johnson's exit ticket report for The Rose That Grew from Concrete

# Introduction

Like Ms. Johnson, most educators want to know if students are learning, are confused, or are even interested in the material being taught. Exit tickets provide educators with a tool designed to help them learn what students are feeling in near real time. Exit tickets can give educators insight into whether students are learning what is being taught and whether students found the lesson engaging. By using exit tickets, teachers are able to garner immediate feedback that can be used to shape future lessons. This brief provides a look into how the team from one improvement network built an exit ticket system — the surveys, the reports, and even the tools themselves — from the ground up. Improvement networks rely a lot on data and are especially interested in hearing directly from students, and while the team didn't always make the right choices the first time around (or even the second or third), they learned a lot along the way.

In this brief, the team shares their experiences working with teachers like Ms. Johnson to help them use exit tickets to advance literacy in middle-grades students in a large urban school district. They discuss their approach to using exit tickets in the network, including developing the content of the exit ticket surveys, designing the reports they shared back with teachers, and creating a tool to deliver everything in a seamless, timely way. The focus of this brief is on the infrastructure needed to support the collection, analysis, and use of exit tickets, with the hope that readers will take away useful knowledge that could help them use exit tickets in their own settings, for literacy or other subjects, so that they too can learn from their own practice.

The evidence the team draws on comes from their time supporting schools in an improvement network, funded by the Bill and Melinda Gates Foundation.<sup>2</sup> As network hub members of an NSI, the team developed exit tickets for use in the network's middle and high schools. The network they supported focused on improving literacy outcomes and exit tickets were a primary vehicle for elevating student voice in the improvement process. Teachers in these schools also used exit tickets to collect data related to the changes they were testing in their classrooms so that they could learn quickly how to continue to improve their literacy instruction.

In the next section, the team describes the goals and key considerations for their exit ticket process. They then discuss the constraints faced in their context. After that, they share their process for developing the exit tickets in three sections: (1) content, (2) reporting, and (3) tooling. In this brief, "content" means the creation of the survey questions. "Reporting" refers to the exit ticket reports summarizing student responses that were shared with teachers, instructional coaches, and other network stakeholders. "Tooling" refers to the technology used to support the end-to-end exit ticket process — in this case Google Workspace, including Google Forms, Google Sheets, and Google Scripts.

# Goals and Key Considerations for Developing the Exit Tickets

As members of the improvement network, it was important that the exit tickets reflected key aspects of practical measurement: providing timely information to teachers, being minimally burdensome to administer and review, and strongly related to the problem of practice. Improvement networks use data and <u>practical measurement</u> to inform decisions and determine the impact of change ideas that teachers, schools, and districts can use to improve learning for students. It was also important for the network and the teachers that the exit tickets be compatible with virtual and hybrid teaching, as this work was done during the COVID-19 pandemic.

<sup>&</sup>lt;sup>2</sup> In recent years, improvement networks have become an increasingly common way of organizing for change in education. In 2018, the Bill and Melinda Gates Foundation launched funding for a portfolio of Networks for School Improvement (NSIs) across the US. These networks focus on bringing together middle and high schools in order to advance college- and career-readiness, especially for historically marginalized populations.



In working toward these goals, the team identified seven requirements for the exit tickets that guided the development process.

Table 1: Seven Requirements for Exit Tickets

Goal	Requirement	Key questions	Explanations
Valuable to teachers, students, and other network stakeholders	(1) Customization	To what extent should the exit ticket surveys and reports be customizable to users and administrators of the exit tickets?	If, for example, a teacher adapted a change idea from the network and wanted to see how students responded, having the ability to customize the exit ticket survey would be of value to the teacher. However, this option must be weighed against the preferences of the network, where a common survey enables comparison of schools/classrooms across the network.
	(2) End-to-end timing	How long does it take from giving a survey to students to teachers getting the survey results?	Quick turnaround time of exit tickets enables teachers to be responsive to student needs. If the exit ticket reports indicate a common misunderstanding among students, teachers can adjust subsequent lessons to address student needs when they have timely access to the data.
	(3) Results comparison	How easy is it to compare survey results across teachers? Tests of change?Schools?	In the context of the network, the team had schools with multiple teachers conducting multiple tests of change. The ability to compare survey results across different dimensions was important for teachers to see and make sense of variation within their classrooms, and for network leaders to see and make sense of variation across tests of change and across schools.
	(4) Elevates student voice	How can the team ensure that student experience is incorporated into their decision making? How can such information be made easily actionable?	For teachers, choices about text selection can be informed by student voice and information about student experience. In the absence of student input, teachers may be unaware of what is culturally relevant for their students.
Minimally burdensome to teachers and other network stakeholders	(5) Effort	How much effort is required to design exit ticket surveys and reports using this tool? To build the surveys and reports?To use the surveys and reports on an ongoing basis?	Teachers, students, and other network members are all highly time-constrained, so it was important to understand the effort required to complete each step associated with exit tickets, and minimize effort/time required whenever possible.
	(6) Automation	How much manual intervention is required in the ongoing running of the exit ticket system?	Given the time constraints of all network stakeholders, minimizing manual steps throughout the exit ticket process is a key way to reduce overall effort. In this team's system, automation included distributing customized exit ticket links to teachers via email, notifying network hub members of new report availability, and distributing exit ticket reports to teachers via email.
Viable in a virtual or hybrid setting	(7) Supports virtual /hybrid environment	Can this tool be used easily in virtual classrooms? Hybrid classrooms?	Since the start of the pandemic, virtual and hybrid classrooms have become more commonplace; understanding how a given tool will support such an environment is essential.



# Content: Deciding what questions to ask

#### **Developing Goals for Content**

This team's goal for the creation of exit tickets was to provide teachers, administrators, and hub leaders with student feedback about text selection and change ideas that were implemented in ELA classes throughout the network. The change ideas implemented in classrooms across this network emphasized student-centered routines as a foundation for just and equitable literacy instruction, honoring student ideas and identities throughout the improvement process. Change ideas such as using an questioning the author approach, having students transform a quick write to essay, and using comprehension task sheets, all used by Ms. Johnson in the vignette, were shared with educators by the IFL in network professional development sessions. This team's goals for the development of the exit ticket were also shaped through attention to core tenets of practical measures; thus they prioritize providing useful and timely information to key stakeholders (teachers, administrators, network hub), minimizing the burden for teachers and students, and elevating student voice.

#### Three Goals for Developing Exit Ticket Content

Based on the team's seven requirements (Table 1), they developed three goals for the exit tickets. In the section below they explain their approaches for addressing their three goals for developing exit ticket content.

#### 1. Provide useful and timely information to key stakeholders

- a. Questions were designed to provide teachers, administrators, and hub leaders with valuable and actionable information
- b. Paper exit ticket forms were replaced with digital exit ticket forms

#### 2. Minimize the burden for teachers and students

- a. Length of the survey was limited
- b. The majority of questions were formatted as multiple choice
- c. Digital exit ticket reports were immediately generated

# 3. Elevate student voice

- a. Exit ticket content was translated into Spanish
- b. A free-response question was added

#### Goal 1: Provide Useful and Timely Information to Key Stakeholders

Approach: Questions were designed to provide teachers, administrators, and hub leaders with valuable and actionable information

Teachers, administrators and hub leaders were interested in student sense-making and immediate value of change ideas, as well as student experience with the text.

The team designed the questions in Figure 2 to measure student sense-making of change ideas and immediate outcomes of the change idea. For example, do students find that using a comprehension task sheet helps them better understand and engage with the text? The team used the first question (multiple choice) to provide teachers and administrators with a broad understanding of overall student sense-making, and the third question (open-ended) was intended to pinpoint specific areas of confusion. It was their hope that the resulting exit ticket reports would provide adequate information for teachers to adjust future lessons based on knowledge of students' common misunderstanding, yet with enough specificity to direct their adjustments.



The La	e task sheet today (check all that apply) hoja de tareas de hoy (Marque todas las que correspondan)	
00000	helped me understand the text (me ayudó a entender el texto) was easy to follow (fue fácil de seguir) made sense (tuvo sentido) had enough information (tenía suficiente información) included all the steps to complete the tasks (incluyó todos los pasos para completar las tareas) None of these! (¡Ninguno de esos!)	_ 1. Measuring Student Sensemaking of Change Idea
	s any part of the task sheet confusing? guna parte de la hoja de tareas fue confusa?	
00	Yes (Si) No	
	at was confusing? ué fue confuso?	
_		2. Identifying Specific Opportunities for Improvement

Figure 2. Sample exit ticket questions

The exit ticket questions displayed in Figure 3 also served to provide important feedback to teachers and administrators about student experience with the text. The team prompted students to describe their feelings toward the text that they read in class (e.g., was boring, was relevant to my background). This information enables educators to engage in culturally responsive pedagogy. Teachers within the network have been successful in adjusting their approaches to text selection based on data derived from student-experience questions. In one instance, a teacher intentionally selected text that incorporated hip-hop lyrics, in an effort to provide culturally relevant text to their students. Upon receiving the exit ticket report for that day's lesson, the teacher came to find that the hip-hop lyrics were not relevant to their LatinX students; as a result, the teacher changed their approach to text selection. In this way the content of the exit ticket question provided the teacher with actionable information to drive positive changes in practice.

The last question in Figure 3 prompts students to express which language they used in completing the survey in order to enable the hub team to disaggregate responses based on the language used.

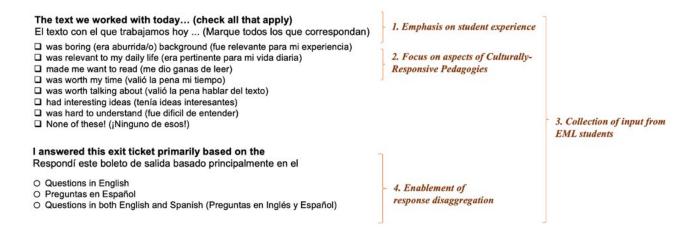


Figure 3. Sample exit ticket questions with Spanish translations.

Approach: Paper exit ticket forms were replaced with digital exit ticket forms

A major constraint of the paper exit tickets that were used prior to the pandemic was the inability of the network hub to provide teachers and administrators with timely reports. The switch to digital exit ticket forms gave teachers access to student reports instantaneously, ensuring that the data generated by the reports could inform teachers' lessons for the next day.

#### Goal 2: Minimize the Burden for Teachers and Students

Approach: Length of the survey was limited

The team limited the exit ticket survey to 3-5 substantive multiple-choice questions and one free response in an effort to minimize the amount of class time required for students to complete the forms, and the time for teachers to analyze the resulting reports. It was important that the exit ticket process, from the time students opened the exit ticket form to the time they submitted, took no more than 5 minutes. The team estimated that it would take students about 30 seconds to 1 minute per question, and therefore determined that they could include 5-6 substantive questions on the form. They were able to limit the number of questions by only including questions aligned with what they wanted to know: Did students understand the change idea, why or why not, and how did they feel about the text.

Approach: Majority of questions were formatted as multiple choice

Students are able to complete multiple-choice response questions more quickly than questions requiring them to formulate and write responses. The team leveraged a multiple-choice format to ensure that students could complete the form in a timely manner, and also to make it easier and quicker for teachers to analyze reports. For example, on this report summary, the multiple-choice responses (Feelings about the Test, and Feelings about the Task Sheet) are represented graphically for easy and quick review by teachers and other stakeholders.

Approach: Digital exit ticket reports were immediately generated

The digital format self-generated reports for teachers, immediately upon student completion of the exit ticket forms.



#### Goal 3: Elevate Student Voice

Approach: Exit ticket content was translated into Spanish

In the first iteration of the exit ticket process, the surveys were all written in English, and it became apparent that the team was missing key experiences of multilingual learners (in this network, mostly Spanish speakers). In the next iteration of their exit ticket design, the team chose to display all survey content in both Spanish and English to ensure that all students had equal access to the exit ticket, and that the data generated reflected the experiences of all students.

#### Approach: A free-response question was added

The team included free-response questions to enable students to discuss, in their own words, any difficulties or confusion they experienced with the change idea.

# **Applicability Across Contexts**

For this team's purposes it was useful to create general exit ticket content that could be used across change ideas, classes, teachers, and schools. Collecting standard measures enabled the team to learn collectively across the network, and provided suitable data for cross-network comparison. The common content also enabled them to track and analyze historical data.

# **Future Considerations**

# • Tradeoff of Generalizability

The exit ticket that they developed was more general, and less customizable. With generalized exit ticket content, the network hub could easily compare tests of change across schools in the network to better inform their change efforts. However, this tradeoff makes customization for specific lessons a bit more challenging. Ultimately, it is important to consider what key stakeholders intend to learn from the exit tickets before developing a broad, general survey or opting for more specific content.

# • Free-Response Questions

The team found it difficult to predict the types of answers that students might provide on the free response. While the free-response question prompted students to discuss confusion surrounding the change idea, students interpreted the question in various ways. Some wrote about their confusion regarding the change idea, while others expressed general confusion about the text. Student questions in any form may be useful to teachers; however, stakeholders may be interested in specific information from students. In future iterations of exit ticket development, the team would provide time and space for reconsideration and adjustments to the free-response questions in case the questions are not clear to students and the survey is not eliciting the types of responses that stakeholders seek. If students are misinterpreting the free-response question, further scaffolding can be provided with the questions. For example, prompts can ask students to consider specific aspects of the change ideas or text. In this way stakeholders can better customize the question to garner responses most valuable for their purposes.

#### Co-development

The team was able to engage briefly with teachers in the development of the survey content, but it was far less engagement than they had hoped for. With consistently high demands on the network teachers' time, any call for their involvement was a tradeoff with tasks on other network activities. The value of co-development with network teachers cannot be overstated, however, and with future iterations of this work the team would make every effort to prioritize their engagement. Working closely with teachers ensures that the exit tickets fully align with the interests of all stakeholders, and is beneficial to teachers as well as the hub team.



# Reporting: Sharing the exit ticket results

Reports are the main way teachers and other network stakeholders receive the results of the exit tickets they use in their classrooms, and it is essential that they be designed to be as relevant and easy to use as possible. In order to make sure reports are appropriately designed in different contexts, educators should first make sure they have a thorough understanding of who the stakeholders are and what they're interested in. Next, they'll design the actual report or reports, depending on if they think it will be more useful to have a single report for everyone or different reports for different stakeholders (e.g., a lesson-based report for teachers and a school-wide report for district leaders). Finally, educators will want to develop supporting materials, including any training materials or process documentation. What follows is how the team approached each of these steps in their project, as well as some things for educators to think about as they make exit tickets of their own.

# Report Design

For their reports, the team started by thinking about all the people who would be involved. Ultimately, the stakeholders identified were:

- Students, who did not see the reports but whose voices needed to be accurately represented.
- Teachers, who were to use the reports for sense-making both of text selection and the change idea, as well as anything else relevant to their understanding (e.g., if they selected a text for its cultural relevance, did all students actually find it culturally relevant?).
- Coaches, who received the reports at the same time as the teachers and were able to take part in the sense-making process and provide support or guidance as needed.
- **District Leaders**, for whom the reports could be used to show progress within the project. The team decided not to design a separate summary report for district leaders, as a comparison across teachers had the potential to be misconstrued and used in ways other than intended for accountability or performance-assessment purposes.
- Network Hub Members, who were able to use the reports to identify trends in change idea uptake.
- Researchers, for whom the student-facing exit tickets were a rich data source but for whom the reports were less relevant.
- External Stakeholders (e.g., funders), who were interested in seeing how the network was using data in their processes and decision-making.

After identifying the relevant stakeholders and what their interests were at a high level, the team began designing the reports. The team's report design was iterative, with changes based on feedback from teachers, coaches, and network hub members.



Original Report	The team's first version of the online exit ticket report showed basic summary information about the exit ticket and student responses with minimal interpretation of data.
Factor Analysis	Once the team had about 1,000 student responses to the Comprehension Task Sheet exit ticket,
Report	they conducted factor analysis to meaningfully group the "Feelings about Text" and "Feelings about Task Sheet" values so that teachers could more easily translate the responses into decisions for their classrooms.
Demographics Report	In order to better support the aim of teaching students equitably, the team introduced some more questions about their identities. This report's key feature was response disaggregation based on response language, race/ethnicity, and gender identity.
Historicals Report	For those of the network teachers who frequently used the exit tickets, the team was able to generate reports showing student responses over time. While this report was only possible for teachers who had used the exit tickets multiple times, it was a great way for them to see how they had progressed and identify opportunities for continued growth.
Network Hub Summary Report	As a way to keep track of exit ticket use, the team developed a summary report that the hub team looked at regularly and shared with district and donor stakeholders to show uptake and how the network was using data in new ways.

# **Results**

Reports were the main way teachers got to see the results of the exit tickets, so it was important to get them right. It was a balancing act between preserving student voice and making the reports quick to read and easy to understand, and the team tried a number of different formats to get that balance right. While the reports weren't used by every teacher, making sure the team got feedback from teachers and the coaches who worked with them was essential to refining them and getting better results with (almost) every version. Being able to iterate and get honest feedback would not have been possible if the team hadn't built a lot of trust with network members.

# **Future Considerations**

- Existing reports and routines: What are network members already doing?
  - In the case of this network, Ms. Johnson and her colleagues were already familiar with exit tickets, so the team looked to the reports they knew, using them as a starting point for their own. They also made use of the existing routines of teachers meeting with their coaches, introducing discussion of the exit tickets into the meetings that were already regularly happening. If stakeholders are familiar with a certain format for reports or a certain process, it's valuable to align with those established practices wherever possible. Using what's already in place reduces the burden of learning how to interpret a new report format and helps teachers seamlessly integrate the process of receiving and making sense of these new reports into their existing routines.
  - Educators should consider leveraging existing reports and routines in order to minimize effort required to learn or use reporting as they implement their own exit tickets.
- Team skills: What skills and expertise are already present?
  - Within this network hub team, there were members who were very experienced with report design as well as quantitative and qualitative analysis. Particularly if time and other resources are constrained, it's important to understand how different tool options align with the skills and expertise of the team tasked with report design. Educators should consider how much upskilling or reskilling will be required of their team for a given report.
- Stakeholder priorities: What do network stakeholders want to see?
  - Reports are only useful if they are relevant to the stakeholders receiving them, so it is paramount to understand who the stakeholders are and what their priorities are. It is also essential to speak and —ideally collaborate with these stakeholders on the report design and future iterations.
  - Consider what will be most valuable to the teachers and other stakeholders using the reports.

# **Tooling: Choosing the right technology**

When thinking about exit tickets, surveys and reports probably come to mind first for most educators. Deciding whether to use Google Forms or Qualtrics or Survey Monkey may seem like an easy decision with minimal impact, but tooling can be a lot more important than educators might expect. In this team's case, they made choices to prioritize getting a highly customizable system up and running quickly, which ultimately reduced how scalable and sustainable their exit tickets were in the long term.

Deciding what tooling to use is an essential part of designing, implementing, and operationalizing an exit ticket system. First, it's essential to understand the overall goals of the exit ticket system and what that means for tooling, as well as any existing constraints. Next, based on these goals and constraints, practitioners should put together a list of requirements. Finally, different tooling options should be evaluated based on this requirements list. What follows is how this team approached each of these steps, as well as some considerations for others engaged in similar efforts.

# **Tool Selection**

The team evaluated three main types of tools for their exit ticket system, based on each identified requirement:

- **1. Google Workspace with added features:** Google Workspace tools (e.g., <u>Google Forms</u>, <u>Google Sheets</u>) with a number of new features added to the surveys and reports using <u>Google Scripts</u>
- 2. Platforms with out-of-the-box features: commercially available online tools without any changes, e.g., Google Workspace (without Google Scripts), Survey Monkey, Qualtrics
- 3. Paper surveys: surveys printed and distributed on paper

	Google Workspace with added features	Platforms with out-of-the-box features	Paper surveys
Survey Customization	High	Moderate	Low
Report Customization	High	Moderate	Low
End-to-End Timing	<24 hours	<1 week	>1 week
Results Comparison	Easy	Possible	Difficult
Design Effort	Teachers: Low Network Hub: Moderate	Teachers: Low Network Hub: Moderate	Teachers: Low Network Hub: Low
Implementation Effort	Teachers: Low Network Hub: High	Teachers: Low Network Hub: Moderate	Teachers: Low Network Hub: Low
Ongoing Use Effort	Teachers: Low Network Hub: Moderate	Teachers: Low Network Hub: Moderate	Teachers: Moderate Network Hub: Moderate
Automation	Semi-automated	Not automated	Not automated
Supports Virtual / Hybrid Environment	Yes	Yes	No



Ultimately, the tool selected was Google Workspace with customization. This option included:

- Google Forms for student-facing exit ticket surveys
- Google Forms paired with Google Scripts for teachers to request unique links for each lesson's exit ticket survey
- Google Sheets paired with Google Scripts to generate and distribute reports

A major priority for the network was having a high degree of customization, which was where this option rose to the top. It is worth noting that, while Google Workspace supports a high degree of customization and automation, a lot of this functionality relies on Google Scripts and Google Sheets expertise. The network hub had someone very experienced with both Google Scripts and Google Sheets, but that might not always be the case and this option wouldn't have worked without that one person.

While the network had originally used paper surveys for exit ticket surveys, the turnaround time on reports for these were long, and then throughout the pandemic paper surveys were no longer a viable option since they couldn't be used in virtual or hybrid classrooms. Interestingly, when classes returned to fully in-person instruction, network members were given the option to return to the original paper surveys and expressed a strong preference for the customized Google Workspace-based exit tickets.

# **Future Considerations**

• Existing tools: What are people already using?

In the case of this network, Google Workspace tools were already widely used and therefore had a much smaller learning curve.

Educators should consider what tools are available and already in use within their school when making tooling decisions. Choosing tools that teachers and students don't have to learn will be a huge asset for adoption.

• Team skills: What tools does the team already know how to use well?

If time and other resources are constrained, it's important to understand how different tool options align with the skills and expertise of the team tasked with tooling.

Educators should consider how much upskilling or reskilling will be required of their team for a given tool. Choosing tools that the team already knows how to use will reduce the time it takes to get exit tickets up and running, as well as make it a lot easier to keep them running.

Scalability: How easy would it be to use this tool for multiple teachers, schools, or changes?

For this network, the exit ticket system was used across multiple tests of change, teachers, and schools over a span of multiple years. A big goal was making sure the system could handle all of these dimensions without needing major changes.

Educators should consider how many different users and use cases there will be for this tool and make sure that the tool they choose is built to handle everything.

• Sustainability: Will this tool be usable for as long as it needs to stick around?

While this network's grant spanned five years, the hope is for these exit tickets to continue to be used even after the grant concludes and the network intermediary leaves. Once the network intermediary leaves, teachers and district administrators will be responsible for maintaining and operating the exit ticket system, so it's important that teams select a tool that makes that possible.

Consider how long this tool needs to stay around and who will be involved in its maintenance and ongoing operation. If the project team is great with Google Scripts — as was the case for this team — but the district team hasn't ever used it, they're going to have a hard time handing everything over.



# Wrap-Up

While we've certainly spent a lot of time thinking about exit tickets, it's important to recognize that exit tickets aren't the goal. The goal for this team (and for all educators) is to support student learning. If exit tickets work in your context, they can be a wonderful way to elevate student voice. If exit tickets don't make sense or simply aren't feasible for you, however, many of these ideas are still relevant to using practical measurement more generally in education.

It takes effort to design and use practical measures effectively, as was the case for us, but they can also be a source of powerful, actionable insight. Practical measurement is often written about as being used in service of an improvement idea or in the context of improvement work. While practical measures are certainly a powerful tool in the arsenal of improvement work, at their core their value lies in their ability to help educators learn — about students, about the change they may be trying to make, and even about themselves.

If you take away only one thing from this brief, the team hopes it's this: effective measurement requires thought, intention, and persistence. It's also invaluable and (for this team, at least) fun! This was one team's approach, and they can't wait to hear about yours.



# **Appendix**

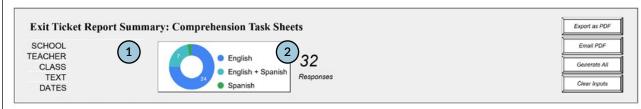
# **Original Report**

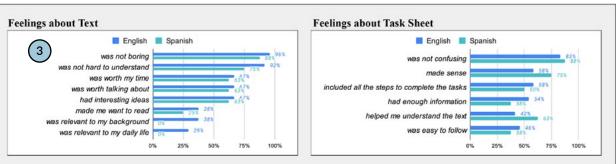
# **Key Features:**

- 1. Summary information (e.g., teacher name, text)
- 2. Split of students who completed the exit ticket using English versus Spanish
- 3. Report responses for each question, split between students who answered in English versus Spanish
- 4. Verbatim free text

# Outcomes /considerations:

Requires some degree of interpretation for teacher sense-making







Students	Shared their feelings on the text and change idea, both via predetermined response values and in their own words
Teachers	Received reports 24 hours after their lesson in order to hear about their students' experience and make decisions about how to use the change idea in future lessons
District Leaders	Saw sample reports as indications of network progress and impact
Coaches	Received reports for the teachers with whom they worked and reviewed them in coaching conversations
Network Hub Members	Delivered training in network professional development sessions on how to use reports
Researchers	Used student response data but not reports
External Stakeholders	Saw a snapshot of this report in network summaries

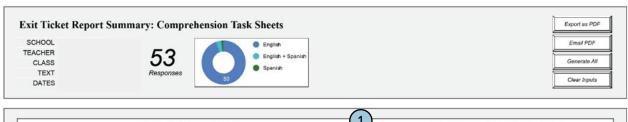


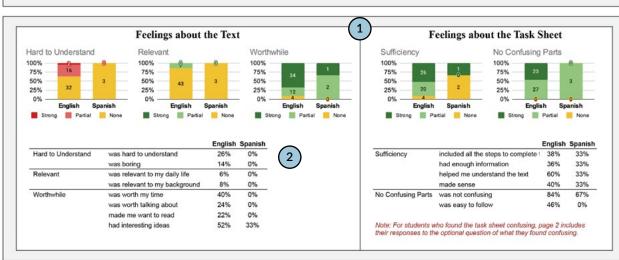
# **Factor Analysis Report**

# **Key Features:**

- 1. Grouping of responses into meaningful constructs to facilitate teacher sense-making
- 2. Clear mapping of responses to factors

- Requires some level of quantitative analysis
- Requires significant data set to conduct meaningful factor analysis





Students	Saw no change to their experience from the original report
Teachers	Still received reports 24 hours after their lesson but with easier-to-understand information that translated more readily into action
District Leaders	Saw sample reports as indications of network progress and impact
Coaches	Received reports for the teachers with whom they worked, and reviewed them in coaching conversations
Network Hub Members	Delivered training in network professional development sessions on report updates
Researchers	Conducted factor analysis to determine constructs
External Stakeholders	Did not use



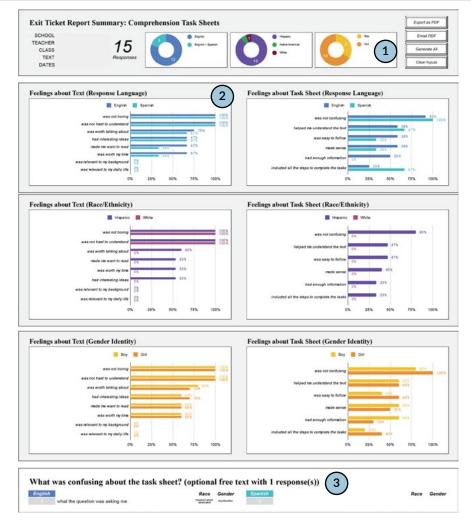


# **Demographic Report**

# **Key Features:**

- 1. Split of students who completed the exit ticket for each disaggregation category
- 2. Disaggregation for each multi-select question
- 3. Disaggregation for verbatim free text

- Requires additional information from students
- Longer report
- Disaggregation categories (i.e., response language, race/ethnicity, and gender identity)



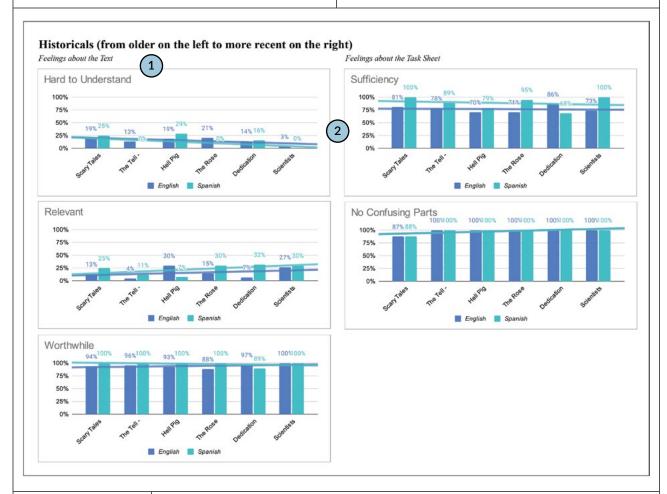
Students	Provided additional information on their race/ethnicity and gender identities	
Teachers	Teachers chosen to pilot use of this new report format provided feedback to the network hub	
District Leaders	Did not use	
Coaches	Received reports for the teachers with whom they worked, and reviewed them in coaching conversations	
Network Hub Members	Reviewed identity questions developed by Equity Team; instructional coaches delivered training to teachers piloting the updated survey and report	
Researchers	Used disaggregated student response data but not reports	
External Stakeholders	Did not use	

# **Historical Report**

# **Key Features:**

- 1. Organized by factor analysis constructs
- 2. Historical student response data for each non-free-response question

- Requires historical data
- Only useful for teachers who have used the exit tickets multiple times



Students	Saw no change to their experience from the original report
Teachers	Used for understanding patterns over time
District Leaders	Did not use
Coaches	Received reports for the teachers with whom they worked, and reviewed them in coaching conversations
Network Hub Members	Delivered training in network professional development sessions on report updates
Researchers	Used student response data but not reports
External Stakeholders	Did not use

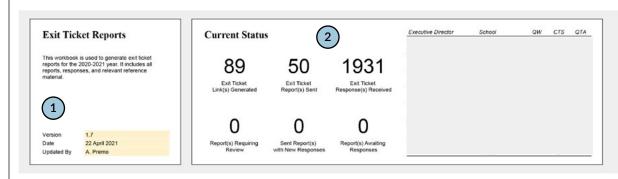


# **Network Hub Summary Report**

# **Key Features:**

- 1. Overview of the exit ticket workbook
- 2. Summary of the current status of all exit tickets
- 3. Summary of exit ticket reports generated by school and type, rolled up to each executive director

- Easy to see at a glance if there are trends in terms of which schools are using the exit tickets and if they are being used for all change ideas
- Shows exit ticket administrator if any action needs to be taken for report review



Students	Did not use
Teachers	Did not use
District Leaders	Did not use
Coaches	Used this report to see to what extent each of their schools was using the exit tickets
Network Hub Members	Members involved in exit ticket administration used this report to see what actions needed to be taken
Researchers	Did not use
External Stakeholders	Saw a snapshot of this report in network summaries

