

Root Cause Analysis – Data and Context Packet

WHAT & WHY?

On Saturday, January 22nd, each committee will brainstorm causes for the unmet needs selected for analysis. This is hard work that needs a deep understanding to be successful. You will receive readings for context around all three unmet needs selected during the December 14th Committee Meeting. Reading this packet will help you get the most out of the activities, including:

1. Provide a deeper understanding of the context around unmet needs.
2. Jumpstart your thinking on causes through guided prompts.

PART 1 REVIEW

Review the final unmet needs statements developed by your committee to perform a root cause analysis upon. Review the context from the Community Interviews and the “who”, “what”, and “why” identified in the development of that unmet needs statement.

PART 2 READ

Learn more about the context around each unmet need by reading the following perspectives:

1. Expert Interviews
2. Committee Insights
3. Research and Data

estimated time: 20 minutes or more

PART 3 REFLECT

Using the readings from Part 2, begin your initial brainstorm using the following prompts:

1. What might be causing this unmet need to happen?
2. What causes might be connected to the work of other committees?

recommended time: 10 minutes or more

Part 1 – Review | Unmet Needs Statement

This is one of three unmet needs statements prioritized by this committee for the January 22nd Root Cause Analysis exercise(s). This statement was selected by the committee during the December 14th committee meeting.

Students of all ages need integration of technology in all learning curricula in order to be prepared to use and learn evolving technologies throughout their education and lives.

Part 2 – Read | Expert Interviews

This page contains contextual information related to district practices, operations, and constraints as it relates to the identified root cause. Some of this information may have been relayed verbally during committee meetings. This information was provided by AISD staff selected by the PMs for the knowledge provided by their roles.

- This is the biggest year for technology adoption in the history of AISD because it had to be in order to continue on. Now that adoption has been implemented, training and support need to be enhanced to better support.
- Standardized approach for information access would be beneficial for clarity of all users & AISD staff alike. Streamline information in multiple locations to centralize for clarity and ease of use.
- The face of instructional use of technology needs to be more robust and supportive to positively affect change in the district. Teachers are required to complete a large amount of upfront training in the beginning of the school year. It is hard to get through all of it as it is. Changing software, or added training is unevenly rolled out to campuses, trainers do not have all information, and there is not sufficient time to actually train teachers.
- Communication is huge, even the finer details such as a google chrome update which can cause issues for end users. Having a single place to go for technology resources is critical for clarity. Some software platforms are not funded or operated by technology department and they cannot assist if they do not know anything about it. Centralized resources would benefit everyone in the district.
- AISD is working with PSS's to give basic training and support so they are more effective in the existing systems which will make it easier to reach out to families. Training videos in multiple languages, training for at-home learning.

Part 2 – Read | Committee Insights

This page contains any feedback from committee members across all committees from the November 30th committee meeting discussion around unmet needs not yet expressed or identified that the committee members were aware of or wanted to share. These have been organized as they relate to the existing unmet needs or grouped into new ones.

This unmet need was identified as missing by this committee during the November 30th committee meeting. Committee discussed collaboration with Academics & CTE to create Technology Curriculum; formalized software training was discussed as a separate issue but equal need.

- The lack of technology training & the consistent changing of software platforms presents a barrier to both parents and students to access necessary information.
- Lack of the appropriate amount of dedicated staff is causing bottlenecks for IT support and training.
- More training for parents to use AISD platforms to assist engagement with students.
- Consistency across the platforms for how teachers display information to students & parents. Assignments & grades being distributed from various platforms causes confusion.

Part 2 – Read | Research and Data

This page contains key findings from the additional data sources identified by committees during the October 26th committee meeting, as well as key findings from validated external resources and research from the AISD Department of Research and Evaluation.

Technology courses are offered at the HS level through P-TECH, AP and OnRamps

- There are four technology & computer science-related courses offered as part of the new HS P-TECH program (NOTE: P-TECH programs are available to students both in and outside of the district who want to enroll):
 - Computer Science - Bowie High
 - Coding & Computational Thinking - Bowie High
 - Cybersecurity - Information Technology - Northeast Early College High
 - IBM Partnership - User Experience & Design; Computer Programming - Navarro Early College High

Source

HS Academics Programming dataset 2021-2022 SY

Technology-based programs can help at risk students succeed in school and post

- In 2019–2020, 338 high school students participated in P-TECH (Pathways in Technology). The majority were Hispanic, economically disadvantaged, and/or classified as at risk of dropping out of school.¹
- Regarding student retention, all students who attended P-TECH in the prior year re enrolled in the program in 2019–2020.¹
- Regarding postsecondary outcomes, P-TECH campuses surpassed the TEA's industry certification recommendations, and 97% of the P-TECH students graduated from high school.¹

- DELTA (Diversified Education Through Leadership, Technology, and Academics) helped students at risk of dropping out, who participated, graduate at a rate of 79% through computer-based coursework.²
- A few of the graduating students were part of prior cohorts, indicating that DELTA helped students stay on track as well as recover credits to graduate.²

Sources

1. [Pathways in Technology Early College High School Program Summary Report \(2019–2020\)](#)

Starting as early as 9th grade, Pathways in Technology (P-TECH) provides a 6-year, career-focused program that combines high school and college coursework with real- world work experience. This report includes findings regarding the demographic characteristics and academic outcomes of the students served by the program and provides general recommendations for future program implementation.

2. [Diversified Education Through Leadership, Technology, and Academics Credit Recovery Program Annual Report](#)

Diversified Education Through Leadership, Technology, and Academics (DELTA) is a dropout prevention and course credit recovery program. The majority of students were Hispanic (69%), economically disadvantaged (63%), and/or categorized as being at risk of dropping out of school (79%)

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Part 2 – Read | Research and Data *CONT.*

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Students need access to the appropriate technology due to the benefit it has on their academic careers

- Students who have the opportunity to use technology to acquire and organize information show a higher level of comprehension and a greater likelihood of using what they learn later in their lives.¹
- By giving students access to a broader range of resources and technologies, students can use a variety of communication media to express their ideas more clearly and powerfully.¹
- Technology can decrease absenteeism, lower dropout rates, and motivate more students to continue to college.¹
- Students who regularly use technology take more pride in their work, have greater confidence in their abilities, and develop higher levels of self-esteem.¹

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Part 3 – Reflect | Guiding Questions

This page contains guiding questions to brainstorm causes and reflect on connections between the work of different committees. The cross-committee connections highlighted on this page were identified by the PMs and/or committees prior to and during the December 14th committee meeting.

Unmet Needs Statement

Students of all ages need integration of technology in all learning curricula in order to be prepared to use and learn evolving technologies throughout their education and lives.

Cross-Committee Connections



Reflection Questions

What might be causing this unmet need to happen?

What causes might be connected to the work of other committees?