## **TICAL**

## Education Technology Support Needs Assessment

**Conducted by** 

**Educational Support Systems** 

John Cradler Ruthmary Cradler

for the

Technology Information Center for Administrative Leadership (TICAL)

TICAL is a project funded by the Santa Cruz County Office of Education

May 2019

### TICAL Education Technology Support Needs Assessment

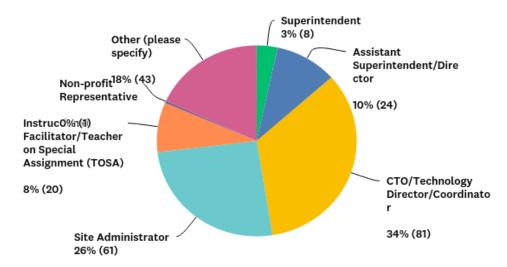
**Purpose:** The purpose of this survey was to identify specific needs documented by cross-samples of California school administrators who are directly or indirectly responsible for planning and implementing digital resources in K-12 education. The survey questions are based in part in consultation with the TICAL Cadre members, representatives from the California Department of Education (CDE).

The survey was beta tested with TICAL Cadre members, and administrators attending the TICAL workshop at the Association of California School Administrators (ACSA) annual conference and based on that test, refined for broader distribution.

The survey was administered, online, and administrators on the TICAL mailing list, as well as administrators from ACSA and CUE were invited to participate. This report provides both a narrative and graphical representation of the survey results.

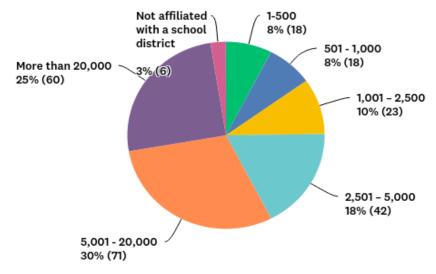
**Survey Respondents:** The survey was completed by 238 school administrators, representing a cross-section of California school administrators by job role, district size and district location.

**1. Job Title.** The majority of respondents were CTO/Technology Directors/ Coordinators or Site Administrators. The 43 respondents who indicated "other" were other district administrators including special education, grants management, other site level administrators, teachers, retired administrators, CDE consultants, and professional development specialists.



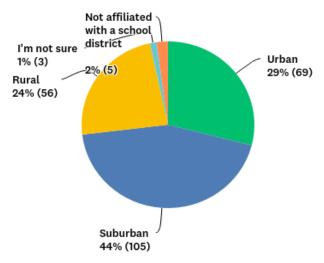
| ANSWER CHOICES   | RESPONSES |     |
|--|-----------|-----|
| Superintendent   | 3%        | 8   |
| Assistant Superintendent/Director                              | 10%       | 24  |
| CTO/Technology Director/Coordinator                            | 34%       | 81  |
| Site Administrator   | 26%       | 61  |
| Instructional Facilitator/Teacher on Special Assignment (TOSA) | 8%        | 20  |
| Non-profit Representative                                      | 0%        | 1   |
| Other (please specify)   | 18%       | 43  |
| TOTAL  |           | 238 |

**2. District Size.** The respondents represented the range of size of districts across the state, with the majority from medium-sized districts (5,001-20,000) or large districts (>20,000).



| ANSWER CHOICES                        | RESPONSES |     |
|---------------------------------------|-----------|-----|
| 1-500                                 | 8%        | 18  |
| 501 - 1,000                           | 8%        | 18  |
| 1,001 – 2,500                         | 10%       | 23  |
| 2,501 – 5,000                         | 18%       | 42  |
| 5,001 - 20,000                        | 30%       | 71  |
| More than 20,000                      | 25%       | 60  |
| Not affiliated with a school district | 3%        | 6   |
| TOTAL                                 |           | 238 |

**3. District Demographics.** Survey respondents were asked to identify the type of geographical setting for their school/district. The majority (44%) were from suburban districts, followed by urban (29%) and rural (24%).



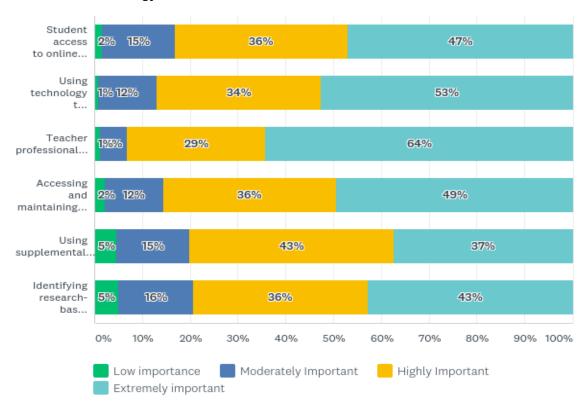
| ANSWER CHOICES                        | RESPONSES |     |
|---------------------------------------|-----------|-----|
| Urban                                 | 29%       | 69  |
| Suburban                              | 44%       | 105 |
| Rural                                 | 24%       | 56  |
| I'm not sure                          | 1%        | 3   |
| Not affiliated with a school district | 2%        | 5   |
| TOTAL                                 |           | 238 |

### Survey Results.

**1. Educational Technology Implementation Priorities.** Respondents rated the level of importance of a range of topics to consider when planning, implementing, and evaluating the integration of technology into teaching and learning. The level of importance rating categories: *Low importance*, *moderately important*, *highly important*, and *extremely important*.

Teacher professional learning in the use of technology rated the highest with 64% considering this topic the highest importance. All six topics were rated as highly important to extremely important with small difference between the items when in overall rank order of importance. The following graph displays the distribution of ratings of importance of the topics with the data displayed on the table.

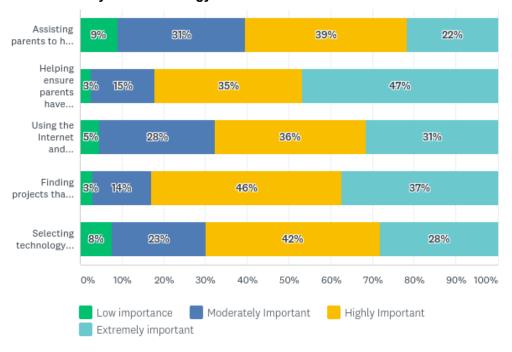
# Learning Environments and Technology: How important are the following topics around learning environments and technology?



|   | LOW<br>IMPORTANCE | MODERATELY<br>IMPORTANT | HIGHLY<br>IMPORTANT | EXTREMELY IMPORTANT | TOTAL |
|---|-------------------|-------------------------|---------------------|---------------------|-------|
| Student access<br>to online<br>instruction and<br>related<br>resources        | 2%<br>4           | 15%<br>36               | 36%<br>85           | 47%<br>111          | 236   |
| Using<br>technology to<br>effectively<br>support State<br>Standards           | 1%<br>2           | 12%<br>29               | 34%<br>81           | 53%<br>124          | 236   |
| Teacher<br>professional<br>learning in the<br>use of<br>technology            | 1%<br>3           | 6%<br>13                | 29%<br>68           | 64%<br>151          | 235   |
| Accessing and maintaining state-of-the-art technology to support instruction  | 2%<br>5           | 12%<br>29               | 36%<br>85           | 49%<br>116          | 235   |
| Using supplemental technology applications that extend learning opportunities | 5%<br>11          | 15%<br>36               | 43%<br>101          | 37%<br>88           | 236   |
| Identifying<br>research-based<br>educational<br>applications of<br>technology | 5%<br>12          | 16%<br>37               | 36%<br>86           | 43%<br>101          | 236   |

**2. Student and Parent Involvement.** Survey respondents were asked to rate topics related to the engagement of students, parents, and the community in the use of technology as an learning resources. As was the case with Implementation Priorities, respondents rated all five items as moderately to extremely important. The following chart displays the five topics with the distribution of ratings of importance. The table with the percentages follows.

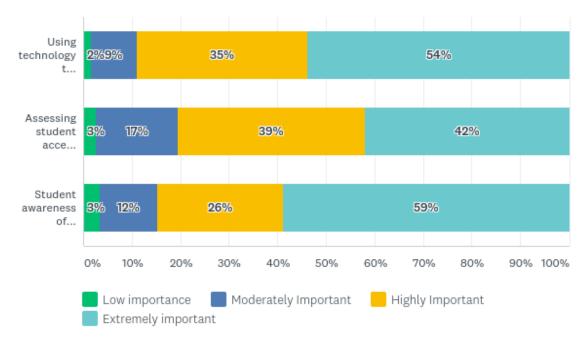
Student and Parent Involvement: How important are the following topics around engaging students, parents, and the community with technology?



| IMPORTANCE | MODERATELY<br>IMPORTANT | HIGHLY<br>IMPORTANT  | EXTREMELY IMPORTANT   | TOTAL  |
|------------|-------------------------|--|---|--|
| 9%         | 31%                     | 39%  | 22%   |  |
| 21         | 72                      | 91   | 51  | 235  |
| 3%         | 15%                     | 35%  | 47%   |  |
| 6          | 36                      | 83   | 110   | 235  |
| 5%         | 28%                     | 36%  | 31%   |  |
| 11         | 65                      | 85   | 74  | 235  |
| 3%         | 14%                     | 46%  | 37%   |  |
| 7          | 33                      | 107  | 88  | 235  |
| 8%         | 23%                     | 42%  | 28%   |  |
| 18         | 53                      | 98   | 66  | 235  |
|            | 9% 21 3% 6 5% 11 3% 7   | 9%       31%         21       72         3%       15%         6       36         5%       28%         11       65         3%       14%         7       33         8%       23% | 9%     31%     39%       21     72     91       3%     15%     35%       6     36     83       5%     28%     36%       11     65     85       3%     14%     46%       7     33     107       8%     23%     42% | 9%       31%       39%       22%         21       72       91       51         3%       15%       35%       47%         6       36       83       110         5%       28%       36%       31%         11       65       85       74         3%       14%       46%       37%         7       33       107       88         8%       23%       42%       28% |

**3. Student Outcomes.** Respondents were asked to rate the level of importance of three types of student outcomes related to their use of technology in education. As with the above topics, all three items were overall rated as important.

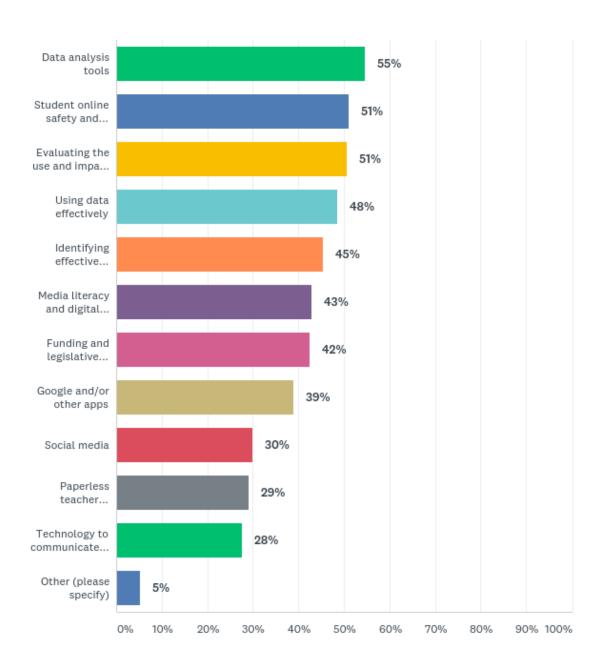
# Student Outcomes: How important are the following topics around outcomes for students through using technology?



|  | LOW<br>IMPORTANCE | MODERATELY<br>IMPORTANT | HIGHLY<br>IMPORTANT | EXTREMELY IMPORTANT | TOTAL |
|--|-------------------|-------------------------|---------------------|---------------------|-------|
| Using<br>technology to<br>collect and<br>analyze relevant<br>student data  | 2%<br>4           | 9%<br>22                | 35%<br>83           | 54%<br>127          | 236   |
| Assessing<br>student access<br>to, and use of,<br>technology   | 3%<br>6           | 17%<br>40               | 39%<br>91           | 42%<br>99           | 236   |
| Student<br>awareness of<br>the roles<br>technology<br>plays for work,<br>education, and<br>social<br>life (Digital<br>Citizenship) | 3%<br>8           | 12%<br>28               | 26%<br>61           | 59%<br>139          | 236   |

**4. Areas of Need for Professional Development.** Respondents were asked to review and check the topics relate to possible needs for professional development and information: Following in rank order are the topics selected by percentage of respondents.

On which topics below do you need professional development and/or information? (check all that apply)



| ANSWER CHOICES   | RESPONSES |     |
|--|-----------|-----|
| Data analysis tools                                    | 55%       | 126 |
| Student online safety and cybersecurity                | 51%       | 118 |
| Evaluating the use and impact of technology            | 51%       | 117 |
| Using data effectively                                 | 48%       | 112 |
| Identifying effective online applications and programs | 45%       | 105 |
| Media literacy and digital citizenship                 | 43%       | 99  |
| Funding and legislative updates                        | 42%       | 98  |
| Google and/or other apps                               | 39%       | 90  |
| Social media   | 30%       | 69  |
| Paperless teacher evaluation                           | 29%       | 67  |
| Technology to communicate with stakeholders            | 28%       | 64  |
| Other (please specify)                                 | 5%        | 12  |
| Total Respondents: 231                                 |           |     |

#### Other comments included:

- Case study example of administrative practice particularly with examples of significant challenges
- ICT CTE Teachers or helping to prepare teachers for CTE in tech fields
- How to get funding for technology. Need technology 1st.
- Office 365-OneDrive, OneNote and Teams
- leveraging Instructional Technology in the classroom to improve teaching and learning
- We need the District Leaders to see the value and potential of any and all of the above instead of just dropping computers in student laps.
- Office 365
- Section 508 Accessibility Compliance for online documents, learning management systems and inter-office communications
- Al.
- multi-year look at the infrastructure
- Employee Training on online safety and cybersecurity
- Any PD, we currently have no TOSA

### 5. Level of Need for Specific Types of Support.

- **1. Professional development for teachers:** Over half (56%) of the respondents indicate a need not currently satisfied or a high need for more support. Less than half (44%) indicated that support is not needed or is satisfied.
- **2. Assistance to school district administrators:** Over half (55%) of the respondents indicate a need not currently satisfied or a high need for more support. Less than half (45%) indicated that support is not needed or is satisfied.

- **3. Assistance to school site administrators:** Over half (55%) of the respondents indicate a need not currently satisfied or a high need for more support. Less than half (45%) indicated that support is not needed or is satisfied.
- **4. Overall technical support:** Over half (40%) of the respondents indicate a need not currently satisfied or a high need for more support. Less than half (60%) indicated that support is not needed or is satisfied.
- **5. Information and resources about current trends and issues:** Over half (52%) of the respondents indicate a need not currently satisfied or a high need for more support. Less than half (48%) indicated that support is not needed or is satisfied.
- **6. Networking with colleagues:** Less than half (42%) of the respondents indicate a need not currently satisfied or a high need for more support. Over half (59%) indicated that support is not needed or is satisfied for this topic.

### Indicate your level of need for the following types of support.

|   | SUPPORT<br>IS NOT<br>NEEDED | NEEDED BUT<br>IS<br>CURRENTLY<br>BEING<br>SATISFIED | NEEDED AND<br>IS<br>CURRENTLY<br>NOT BEING<br>SATISFIED | THERE IS A<br>HIGH NEED<br>FOR MORE<br>SUPPORT | TOTAL |
|---|-----------------------------|---|---|--|-------|
| Professional<br>development for<br>teachers               | 5%<br>12                    | 39%<br>90   | 25%<br>58   | 31%<br>73                                      | 233   |
| Assistance to district administrators                     | 9%<br>20                    | 36%<br>83   | 34%<br>77   | 21%<br>49                                      | 229   |
| Assistance to<br>site administrators                      | 6%<br>15                    | 39%<br>89   | 34%<br>78   | 21%<br>49                                      | 231   |
| Technical support   | 14%<br>32                   | 46%<br>105  | 18%<br>41   | 22%<br>51                                      | 229   |
| Information and resources about current trends and issues | 11%<br>25                   | 41%<br>96   | 32%<br>75   | 16%<br>36                                      | 232   |
| Networking with colleagues                                | 13%<br>29                   | 46%<br>105  | 30%<br>68   | 12%<br>28                                      | 230   |
| Other (specify below)                                     | 33%<br>9                    | 15%<br>4  | 7%<br>2   | 44%<br>12                                      | 27    |

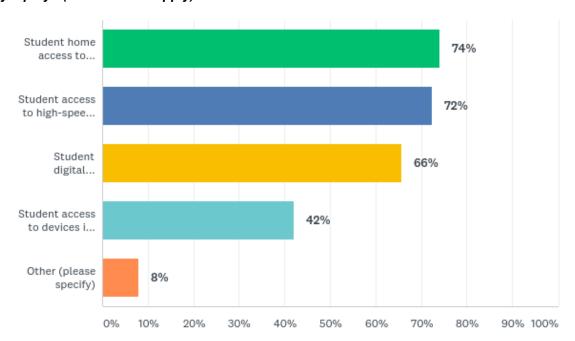
#### Other comments included:

- Adequate network infrastructure throughout a rural community so that students and family can access content and resources from home.
- Current trends on resources and apps to support instruction and differentiation
- Funding for student devices continues to be a challenge.
- creating time for professional learning
- Digital Citizenship
- Teachers need to be able to attend professional conferences, network, grow as professionals

- I've m worked in three districts, and all three desperately needed more on-site tech specialists with FULL access (many schools have a librarian/tech who doesn't have full admin rights to make changes). Additionally, every district needed at least one more specialist at the district level.
- research to practice and legislative policy
- We need be building up our EDTECH, not reducing it.

## **6.** Concerns About Technology-use and Implementation Related to Diversity and Equity. Respondents the identified following areas of concern displayed in the rank order of choices:

What concerns do you have around technology use and implementation as it relates to diversity/equity? (check all that apply).



| ANSWER CHOICES   | RESPON | RESPONSES |  |
|--|--------|-----------|--|
| Student home access to technology adequate for school work       | 74%    | 169       |  |
| Student access to high-speed Internet/broadband at home          | 72%    | 165       |  |
| Student digital literacy needed to access the digital curriculum | 66%    | 150       |  |
| Student access to devices in the classroom                       | 42%    | 96        |  |
| Other (please specify)   | 8%     | 18        |  |
| Total Respondents: 228   |        |           |  |

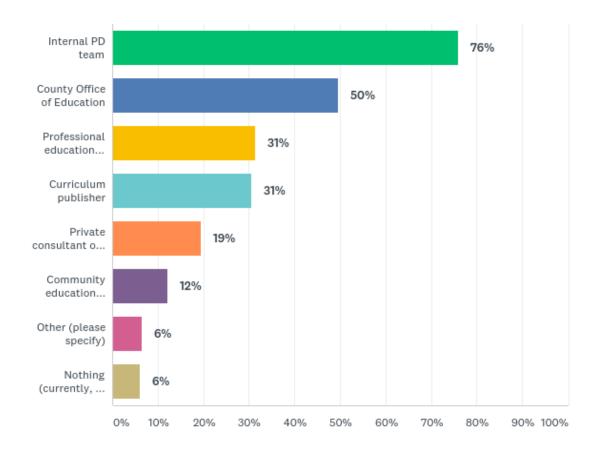
#### Other comments:

- Student representation in online curriculum
- Teacher digital literacy needed to access the digital curriculum
- Digital Citizenship, cyber-bullying and SEL with Tech
- Parent digital literacy needed to support students
- Parent awareness inappropriate (age) non-instructional technology use and screen time
- Having technology, and being able to update technology.
- challenges of getting progress measurements and datapoints from software vendors.
- Cvberbullvina
- Student access without appropriate means within the classroom to monitor what they are accessing and/or to provide focused instruction when necessary (i.e. GoGuardian)
- Student access to a printer.
- teacher efficacy and application affects on students
- Sustainability of 1:1 devices around technical support
- access to internet for incarcerated youth
- none
- All good there
- learning about reliable (unbiased, evidence-based) sources for equity issues
- CYber safety
- Parent Digital Literacy

## **7.** Currently Used Resources. Respondents the identified following areas of support displayed in the rank order of choices:

# Please indicate resources for information and support that you are now using to plan and use technology effectively in your school/district. (check all that apply)

| ANSWER CHOICES                                 | RESPONSES |     |
|--|-----------|-----|
| Internal PD team                               | 76%       | 176 |
| County Office of Education                     | 50%       | 115 |
| Professional education association             | 31%       | 73  |
| Curriculum publisher                           | 31%       | 71  |
| Private consultant or organization             | 19%       | 45  |
| Community education foundation                 | 12%       | 28  |
| Other (please specify)                         | 6%        | 15  |
| Nothing (currently, we don't have the support) | 6%        | 14  |
| Total Respondents: 232                         |           |     |



#### Other comments:

- PLN, Conferences,
- CUE
- Future Ready Schools
- Limited district sponsored professional development that models use of technology which we can replicate/use at school-site
- As a consultant I am providing support
- Begging for donations.
- Instructional application vendors. ~~
- Support from LAUSD Instructional Technology Division
- I do my own research and train myself. Schools also need to be provided with technology that allows teachers to monitor how tech is being used in the classroom (i.e. GoGuardian, etc).
- The district's Technology Department and the techs on site.
- simplek12.com
- Common Sense Media
- CUE
- A mish-mash of cobbled together support.
- No support! HELP!

#### 8. Other suggestions from respondents.

Please use this space to suggest types of resources or services that would address your educational technology administrative and instructional support needs:

- Badging based systems. Digital Promise does a really good job of that.
- I'm in Selma USD. We're in Fresno County, so we have the "teacher librarian" tech coach model. But it's REALLY not working. I would LOVE it if someone could "reach" our district admin and convince them that we need tech PD for our teachers.
- Differentiated Professional development for classified and certificated staff.
- I'd like to see more teacher involvement with CUE, and I'd like to see more administrators examine the work that the LEAD3 symposium offers. Perhaps involving CASBO, and getting more buy-in from the business side would benefit student learning (and all stakeholders), too.
- Better use of organizations like TICAL, CUE, Buck Institute, etc.
- Level support is necessary so staff can gain the tools they need to successfully use technology. This would
  include classified teams in supports daily school operations, onsite technology support for access, and
  instructional support.
- Funding that allows a small district to have someone full time to help in all IT areas.
- I think much more information is needed in the area of research-based applications of technology in the classroom. Does research support the use of technology in improving educational outcomes? Can online/technology-based programs provide quality academic interventions/supports for struggling learners? What role does the teacher play when students use online programs in order to access core curriculum instruction and/or academic intervention?
- Funding for student take home devices.
- As an administrator, I would like varied professional development that models use of technology for instruction
  and administrative uses that I can turn around and use/model with teachers at the school-site. Technology
  changes quickly and there are so many programs and apps many of them free, it would be helpful to have a
  resource bank to pull from and technology support staff focused on instruction.
- We would first have to acquire technology. What good is a technology plan or a PD if we do not have the tools.
- Need to double the on Site Tech Help....Need a centralized (district) drive to inform us about the latest trends in technology as it relates to the classroom teaching, as well as administrative operational needs.
- Staff training to prevent cyber crime/phishing etc.
- effective use of devices as a teaching tool
- Access to resources to provide paid PD opportunities to teachers by professional experts.
- Schools are responsible for funding their own technology for both students, teachers, staff, and parents. It would be helpful if monies were available to provide to schools.
- Modifying & overseeing screen time and SUPPORTING CONVERSATION.
- There is a high need for professional development on emerging technologies. We are being provided access to new technologies --touch screen TV's --without the PD on how to effectively implement them to support teaching and learning.
- I appreciate the IT staff at FCSS being there for us when we need assistance and training. I think we are in a good place but I am sure that we can use ongoing help and encouragement in the use of all things Google and some of the other programs we use.
- New approaches to online homework (changing mindsets on homework and the use of online resources for support)
- Instructional Technology Coach professional development like EdTech events, CUE, etc. Our district has
  indicated that "it does not see the value". They do not have a grasp, at the highest level, of instructional
  technologies beyond substituting a computer for paper.
- Support for teacher efficacy around classroom technology use
- Would be nice to have an organization review and recommend state of the art tech that teachers need for teaching. When we need to replace an interactive white board or doc camera, we have a long research process. Could this be streamlined?
- Funding for Ed Tech Conferences.
- Onsite computer technician
- I think more training/PD options for teachers would be particularly helpful.

- Digital Literacy for staff and students is currently our greatest need
- None
- Support with future planning
- Alignment with Common Core and NGSS.
- Assistance with funding options as alternatives to E-rate would be great. Especially with Cat 2 funding sunsetting. Also would like support or resources on how to manage, create, and structure effective PD for all staff (classified and certificated) surround use of technology. There is so much info out there but the "nuts & bolts" of effective PD is something that I feel could use more direction.
- Funding, network and tech support, cyber security funds and experts for safety, and edtech support.
- Help with better analyzing the effectiveness of digital tools as they relate to student success and mastery of standards.
- Again, we get stuck do to lack of personnel. When students switch math classes, it can take WEEKS to get them added to the new class textbook access. Teachers don't have the admin rights to make changes, and DO IT is woefully understaffed.
- I need to be able to fix some hardware problems quickly.( cables)
- There is a real need to support and build the skill levels of the employees that support and advance technology at the district level. Industry level certifications and training opportunities.
- Funds for educational technology support.
- Teaching educators the web tools available to enhance classroom instruction using step by step directions.
- Teacher-to-home communications. Classroom management (seating, behavior, groups, etc.) applications.
- lower cost internet service and distance learning programs for teachers to create online curriculum
- County training
- Waking up admins
- N/A
- regular meetings with reasonable location or webinars updating tech leaders of up and coming things; access to technology driven PD for senior admin
- We need another state approved technology plan guideline that incorporates LCAP, curriculum, school to home communication, student data privacy, student safety, long term budgeting, etc. We have not had districts build tech plans for several years now and they are flying by the seat of their pants.
- linking various data systems to maximize access to through-line information and eliminate gaps in data
- SCHMOOPS

#### KHAN ACADEMY

- Funding for replacement computers as the age out.
- Having national standard base line metrics for teachers regarding Technology Proficiency
- More models of tech curriculum that are not substitution examples but provide clear examples of tech use that can not be achieved without the use tech.
- Additional funding to support district coaches to support technology integration.
- Time is one of the biggest factors. Implementing system-wide initiatives is challenges as non-student time is scarce and highly competed for.
- We would love to see one online "hub" where we could find resources and PD that districts use around the state. We also need more support for our tech services with educational tech service support in the classroom.