Educational Technology Artifact
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Outcomes:

- EdT-01. Demonstrate a working knowledge with the Common Core standards that require technology ability, skills, or instruction.

- EdT-02. Demonstrate a working knowledge of a variety of technology tools, devices, and resources that can be used by the teacher to accomplish the Common Core standards and how those tools, resources, and devices will impact your department and your organization's infrastructure.

Artifact Assignment

- Utilizing your district's 2013-15 plan and spending of the $200 ADA Common Core one time money, analyze the expenditures in all three areas (PD, Technology, Instructional Materials) and the results of those expenditures across the areas of teaching, learning, and infrastructure. Provide data as part of the analysis.

- Develop a plan to spend the additional $140 ADA that each district will be receiving as additional one-time funding. Please include specifics (i.e. iPads, Chromebooks, Android tablets, Cisco routers, etc.) on devices, programs, software, professional development, infrastructure and instructional materials you feel are needed. Include how that plan will impact your department. Address how this spending will help teachers accomplish the Common Core.

- http://laschoolreport.com/browns-budget-common-core-internet-charters-special-ed/ (Links to an external site.)

- Present your plan to the Assistant Superintendent of Educational Services for your district. You may need to involve your supervisor in the conversation. Please discuss the following areas:

  o Instructional Materials needs including the role of the technology department in selecting future curriculum and textbook adoptions.

  o Technology purchases and vetting devices for students based on data.

  o Infrastructure needs to address purchases, BYOD, 1:1, devices, etc.

  o Professional development including items such as 1:1 pedagogy, GAFE, Office 365, or other programs to be adopted for students and staff

- Please be specific with the role of the CTO in determining instructional materials and analyzing the technology components of instructional materials to be purchased for Common Core.

Artifact

The purpose of this paper is to provide recommendations for the use of the $140 per student one time funding in the fiscal year 16 budget. These recommendations are based on currently deployed technology and trends for future technology.

Context

Santa Clara County Office of Education provides services directly to students in several different areas including Alternative Education, Special Education and Head Start. The recommendations provided in this document are for the Alternative Education group. This group has approximately 70 teachers and can range from 400-800 students. The student population is very transient, moving from one facility to another and then back to their home district. The Alternative Education population at Santa Clara County is located in several different facilities in Santa Clara County with a variety of levels of security. Some of these facilities are residential and often referred to as ranches. The technology has been well funded due to E-Rate funding and title 1 funding. In the Alternative Education population 80% of the students are qualified for free and reduced lunch.

During the 13-14 budget cycle the state provided a $200 per student allocation for implementation of common core funding. This allocation from 2013 was used at SCCOE for Professional Development and Materials. The original 13-14 SCCOE entitlement was $389,600. The majority of the funds, approximately $300,000, were used for an additional 3 professional development days added to the end of the each school year. An additional $48,000 was budgeted to purchase intervention curriculum. These expenditures were not tied to any measurement or goals other than to provide additional opportunities for students in Alternative Education. Due to the transient nature of our student body no specific data is available on the impact of these funds.

In January 2015 Governor Brown announced that the new fiscal year budget will include additional monies to support common core implementation. The allocation of approximately $140 per student is intended to be used for Professional Development, Instructional Materials or Technology.

Technology Considerations

Bandwidth

Bandwidth at the SCCOE Alternative Education facilities ranges from 200mb to the classroom at small facilities up to 1gig to the classroom at larger facilities. The WAN offers bandwidth of 1 gig to 10 gigs. The network use is constantly monitored and funding is available if additional bandwidth is needed.

Hardware

While other institutions are working towards 1-1 hardware to student ratio SCCOE Alternative Education has approximately 1.2 computers per student. This is a result of computers being in classrooms as well as open labs. The hardware available to the students is desktop computers. No portable computing is provided to students due to the nature of the population and facility

Software

Alternative Education has significant software available due to the CAMSA agreement with Microsoft. CAMSA is a statewide licensing program between CETPA and Microsoft which provides Microsoft software at significant savings to schools. All computers use a Windows operating system. Students are provided an exchange account and use Microsoft Outlook for email. Storage space for student files is provided on SCCOE file servers.

The introduction of IPads brings a new level of software requirement. Teachers will be interested in using software for presentation and classroom management. There are a number of software applications available. We recommend providing a $25 ITunes card to each teacher for applications they may want to purchase and explore. Additional enterprise software may be required and could be addressed through regular funding channels.

Implementation Considerations

Professional Development
Common core will add additional duties that require new skills for our teachers. Santa Clara County Office of Education has an excellent Educational Technology department within the Technology Services Branch. The Educational Technology staff offers online training, including Leading Edge Certification, and classroom based training for common core. Last year most of the additional funds for Common Core implementation were used for professional development. This year we will rely on internal resources to continue that solid beginning. Included in this recommendation is an additional 2 days for teachers to receive professional development.

Support
Common Core testing is time sensitive during the test and the window that the test must be administered. Any disruption or distraction due to technical malfunction could have dramatic impact to our student's success. We have included salary expense in the budget to support a part time technical resource to assist our teachers.

The common core standards require that students be prepared to use multi-media content to analyze and support their position. Below is an example from the Common Core Standards for Literacy in Social Studies and History which illustrates the need for familiarity with digital resources and technology platforms:

> Gather relevant information from **multiple authoritative print and digital sources, using advanced searches effectively**; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.

Recommendation
The best use of this one time funding for common core implementation would be to make our teachers as comfortable and prepared to use technology in the classroom as possible. Mobile technology is engaging and could be time saving. It is recommended that we take this opportunity to deploy IPads for teachers. While technology is readily available it is not always integrated in the classroom activities and processes. Teachers have expressed interested in, and requested, IPads for the teachers to use as part of their teaching platform. A mobile platform will allow teachers access to technology and the internet without being tethered to their desks. SCCOE has virtual desktops in production that can access via any platform including IPads.

Mobile technology may provide an easier mechanism for reoccurring tasks such as attendance taking, making the teacher more available for focus on implementing common core standards. IPads are currently not used in any classrooms for Alternative Education within SCCOE. It will be necessary to provide adequate professional development for the teachers to leverage the IPads. In addition more ongoing technical support may be necessary in the future.

Budget

Item	Unit Cost	Extended Cost
IPad(s)	$ 550.00	$ 38,500.00
PD - provided by internal resources	$ -	$ -
Extra 2 days for teachers to attend training/ teacher	$ 250.00	$ 17,500.00
Training Materials and Expenses for IPad training days		$ 4,000.00
Apple TV	$ 100.00	$ 2,000.00
PT Tech at $20 per hour/ 4 hours per day for 1 year	$20/hour	$ 20,000.00
ITunes cards for Software Exploration		$ 2,000.00
Total		$ 84,000.00
Estimated Funding		$ 84,000.00

Measurement
The efficacy of IPads for teachers will be difficult to quantitatively measure because of the transient nature of our student population. The teachers should be surveyed at the beginning of the project to assess expectations and create a baseline and then after they have received the Professional Development training and finally at the end of one full semester. These surveys will help assess the comfort level for the teachers and integration into the classroom.