

Pine View High School 2850 E 750 N • St. George, Utah 84790 • (435) 628-5255 • FAX (435) 628-0327

Technology Plan

2018-2019

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Introduction:

Curriculum should drive the technology we use in school. We want to help teachers make technology transparent and fit it into the existing curriculum seamlessly. The key to doing this successfully is the teachers. Only trained and motivated teachers can make the use of technology effective in the classroom.

Funding is the most critical issue facing technology incorporation at Pine View High School; consequently, it is essential that effective planning goes into the development and integration of technology in our classrooms to make the best use of funds spent.

Our technology committee consists of (alphabetically by last name) Zack Alvey (CTE/ Computer educ.), Tracy Anderson (Math), Lonie Black (Part-Time Technician), Tayler Cahoon (CTE / Woodshop), Chris Goebel (Social Studies), Matt Kreitzer (Library Media Coordinator), Renee Martineau (Social Studies, Data Coach), Mike Mees (Principal), and Bo Olsen (Language Arts). Our key objectives are to maintain adequate technology for teachers and staff, update technology as per tech-world standard end of life tables, and train teachers to use technology effectively as an adjunct to their other teaching methods.

Pine View High School Mission Statement: "Every Student a Success.' As a school, we value our shared commitment to students. We believe that our students come to us hoping for and wanting to be a part of a successful experience. 'Every Student a Success' defines our purpose and our mission with students at Pine View High School."

Pine View High School Vision Statement: "Our vision is to help our students develop PRIDE in themselves and in their school; to seek EXCELLENCE in their work and in their learning, and to pursue the ACHIEVEMENT of their goals and dreams.' It is very important to all of us at PVHS to create a school where our students feel accepted and valued as individuals....'" **Beliefs**

General: We believe that...

- All humans have the same three emotional needs: to belong, to be unique, and to contribute in meaningful ways.
- Everyone has equal inherent worth and deserves to be treated with respect and dignity.
- Everyone needs challenge, opportunity and encouragement.
- Meaningful relationships have profound lifelong impact.
- Each person is ultimately responsible for his/her own learning.
- Learning is lifelong and limitless.
- Public education is a bridge to creating productive members of society.
- Every individual is entitled to an emotionally and physically safe and respectful learning environment.
- Academics, the arts, career and technology, electives, and extracurricular activities are crucial to a well-rounded education, and that Imagination and creativity are vital to this objective.
- The core values of scholarship, integrity, and service should be evident in all we do.
- The school is an integral part of the community and the community is an integral part of the school.
- All students are capable of learning and must have the opportunity to learn.
- Families are their children's primary teachers and must be actively involved in education.
- Excellence in schools must be developed through high standards and high expectations.
- Students must demonstrate achievement of District-approved standards in order to graduate.
- Students need opportunities to experience success and to build self-esteem.
- Student success is measured in different ways.
- Every student can succeed, regardless of socio-economic status, race, or ethnicity.
- Resources are provided so students and staff of all backgrounds and abilities can be successful.

Technology specific: We believe that...

- Effective use of technology will lead to the development of learners who think more critically, collaborate more skillfully, and communicate with higher levels of precision.
- High-level, effective, utilization of personal technologies is the new expectation for student preparedness and success in higher education, careers, and life.
- Technology should be integrated in classrooms in the service of learning, not as an end in itself, and that effective utilization in the classroom makes the device virtually invisible.
- Effective use of technology leads to higher levels of personalized learning for both students and teachers.
- Parents need to be a part of the education process. If parents are able to access information on student progress, they will be more likely to help motivate students to succeed.
- Effective use of technology leads to increased efficiencies of time and resources (paperless classrooms, crowdsourcing, collaborative tools, etc.)
- Teaching with personal technologies creates a more student-centered and differentiated learning environment while also dramatically increasing the potential for real-time or just-in-time learning.

- Fluency with current personal technologies is directly related to success with future technological developments.
- It is our moral obligation to transform our current instructional practices to align with our stated belief that our students' future success will depend on their ability to harness new and emerging technologies.
- Effective management of a digital environment requires a proactive approach to digital citizenship as well as regular communication and feedback on the user experience within that environment.
- Leaders must model effective use of the personal technologies that teachers are using in the classroom.
- Teacher-leadership in the area of technology integration is an essential element of our collective success and efficacy.
- Technology integration, as opposed to technology used in isolation, is crucial.
- Technology integration is not about using an application (app) to create a product. It is about developing a culture that values critical thinking, explanation, revision and problem-solving.
- Technology nurtures the culture by allowing for revision, collaboration, explanation and an authentic audience.

School information & Background:

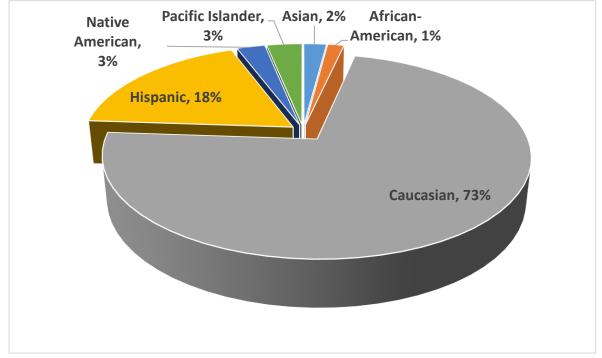
Pine View High School (hereafter PVHS) currently holds 1208 students (see "School Boundaries" at <u>https://www.washk12.org/transportation/boundaries-and-routes</u>). Select "Pine View" from the High Schools list). This total excludes "Success Academy" students (SAS) who attend advanced courses for half a day at Dixie State University. There are 19 registered for the morning sessions and 29 for the afternoon sessions (14 November 2018, Power School Admin,

https://psa.washk12.org/admin/home.html). There are currently 66 teachers, three administrators, one School Resource Officer (SRO) and 42 additional staff.

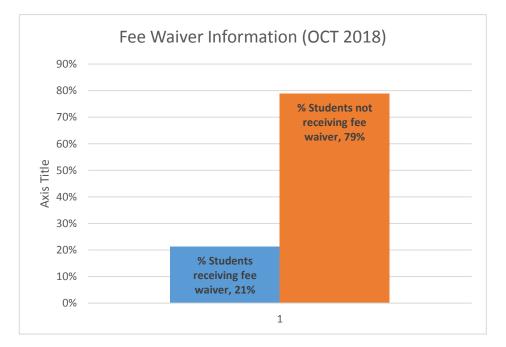
Pine View High School opened in 1983 with just over 600 students (in grades 9-12). Students were from Washington and other outlying communities. Now in its 36th year, PVHS has undergone multiple construction projects to accommodate a growing student body population. The most recent project was the addition of a Vocational-Education Building southwest of the original building. The new building has four classrooms and three Lab/Workshop areas for classes in Woods, Welding, Graphic Arts, and Ceramics.

The southwestern corner of Utah comprising Washington County continues to see rapid population growth, which has spurred the construction of yet another high school in the area, Crimson High (opening fall 2019). School boundaries are regularly redrawn to keep up with growth projections. Details about area population growth from 2010 to 2017 can be found at: http://www.census.gov/quickfacts/table/PST045215/49053 (United States Census Bureau: "Quick Facts Washington County, Utah."

Current demographics: "Reported Ethnicity" is illustrated in the chart below. Enrollment summary from 8 OCT 2018 shows the percentages of ethnic groups within our student body.



Socioeconomic status: Our students come from a wide range of socioeconomic backgrounds ranging from below national poverty lines to the affluent. The following chart illustrates the percentage of the student body who are on fee waiver and those who are not.



Vision and Goals of Pine View High School's Technology Committee:

Our vision is to support students in becoming skilled, independent learners who are comfortable with and proficient in using technology in all its forms. Through the use of technology, with its varied aspects and applications, each student will be given opportunities and challenges that will prepare them to successfully engage the future.

Goals:

- To integrate technology into all aspects of instruction in the curriculum
- To develop staff competency in technology
- To enhance student achievement
- To promote the effective, efficient, and ethical use of technology by students and staff

OBJECTIVE 1: INTEGRATION OF TECHNOLOGY IN LEARNING

Pine View High School staff, in order to assist in improving student performance, will have access to curricular materials and resources that support the use of technology in teaching, learning, and instructional management.

Strategies

- 1. Integrate technology with state and district core curriculum academic standards.
- 2. Develop and implement school plans that integrate technology and curriculum and define measures for documenting success in raising student achievement levels.
- 3. Identify hardware and software necessary for successful technology integration, and provide a purchasing schedule/plan for the hardware and software.
- 4. Implement local technology integrated curriculum based on state content standards for high academic achievement.

KEY TASKS	RESPONSIBLE PARTIES	FUNDING SOURCES	TIME LINES
Identify state and district standards that address technology within the curriculum offered at Pine View High School.	District/ Schools/ Teachers		Ongoing
Review and identify standards where the integration of technology will facilitate the learning of the standards.	School Technology Committee		Ongoing
Develop and annotate lessons and curriculum so as to integrate technology identified as facilitating student learning.	Departments Teachers		Ongoing

Annually assess and develop a recommendation list of hardware and software needs that support staff and students.

Every December

OBJECTIVE 2: PROFESSIONAL DEVELOPMENT

Pine View High School educators will take advantage of opportunities for professional development in the use of technologies that will enhance teacher effectiveness, student achievement, and instructional management.

Strategies

- 1. Provide training and support strategies to ensure that the staff has the appropriate competencies and continuous support needed to use educational technology to deliver and support instruction.
- 2. Provide opportunities for all staff to enhance their educational technology knowledge and skills.
- 3. Provide educators with access to professional development in the use of educational technology in order to prepare them to help students meet high academic standards.

KEY TASKS	RESPONSIBLE PARTIES	FUNDING SOURCES	TIME LINES
Provide opportunities for all teachers to enhance their educational technology knowledge and skills by providing in-house training. (Where PLC meetings allow).		School Trust Lands	Ongoing
Fund and provide in-house and on-demand software and hardware technology support for teachers and the classroom.	District/School Administration	District and School Funds	Ongoing
Inform faculty and administration of technology training made available at school, district, region, and state level.	Technology Coordinator		Ongoing
Provide support and training for administrators, teachers, paraprofessionals, and staff on software and hardware purchased to meet the desired learning outcomes and standards for the use of technology within the curriculum	School District Region State		Ongoing
Establish and maintain a school wide hardware and software resource inventory, and maintain professional library of technology support materials	Technology Coordinator	School/Library Funds	Ongoing

OBJECTIVE 3: TECHNOLOGY LEADERSHIP, POLICY, AND ACCOUNTABILITY

Discerning leaders at the school level will (a) choose technology policies and procedures that promote achievement by all students, including those with special needs, and (b) carefully monitor the effectiveness of technology use throughout the school.

A. School Strategies

- 1. Develop a schedule for the technology infrastructure: maintenance, support, upgrading, expansion, and addition of new technologies.
- 2. Develop an inventory of technology equipment in the school, updated yearly.
- 3. Ensure technology integration takes place at the class, course, and department levels.
- 4. Analyze and monitor student performance to ascertain levels of improvement in student achievement.
- 5. Use developed policies concerning ethical and legal issues such as acceptable use (WCSD Policy-3700 Technology Acceptable Use), copyright, security, confidentiality, and equity of access; monitor local procedures for adherence to these policies.

KEY TASKS	RESPONSIBLE PARTIES	FUNDING SOURCES	TIME LINES
Establish School Technology (S.T.) Committee to provide advice on technology implementation.	Technology Coordinator		Completed
Develop and revise Pine View High School Technology plan	PVHS		Yearly November
Establish school-approved policies, including policies concerning ethical, legal, and security issues. Ensure funding of software and hardware to facilitate such polices. Including instruction on WCSD Policy – 3700 Technology Acceptable Use Policy (including BYOD "Bring Your Own Device"). Taught at Sophomore and new student orientation & online.	PVHS Media Coordinator Online		Ongoing Yearly
Implement the integration of technology in the curricula.	Administrators		
Document student success in using technology to identify problems, collect and analyze data, and organize and convey information	Technology Coordinator Teachers Administrators		Ongoing
Develop and implement a plan for evaluating the effectiveness of technology use by teachers and administrators.	Technology Coordinator Teachers Administrators		Ongoing Yearly

OBJECTIVE 4: EFFECTIVE USE OF TECHNOLOGY FUNDING AND RESOURCES

Pine View High School will encourage the efficient use of funds and resources in a manner, which ensures that all students have access to technologies that improve student competencies.

Strategies

- 1. Develop a funding schedule for the technology infrastructure: maintenance support upgrading, expansion and addition of new technologies.
- 2. Coordinate with the District for purchasing new equipment and upgrading current equipment.
- 3. Provide for grant funding through local, state, and nationally recognized technology funding organizations

KEY TASKS	RESPONSIBLE PARTIES	FUNDING SOURCE	TIME LINES
Develop and implement technology plan to provide technology infrastructure with costs and resource requirements.	Technology Coordinator Committee		Completed but ongoing
Develop standards for purchasing new equipment and the upgrading of current equipment.	Technology Coordinator Cone site Tech Committee		Yearly
Set aside a reasonable time on a weekly basis for grant searching and writing	Technology Coordinator		ongoing

OBJECTIVE 5: PUBLIC AWARENESS

Pine View High School will foster community and parent motivation for student achievement through the use of educational technology.

Strategies

- 1. Provide parent workshops at school to increase parent awareness of technology.
- 2. Construct school homepage to provide access to current, effective, and informative educational resources.
- 3. Construct and maintain school homepage with current information concerning students, faculty, and programs.
- 4. Establishment of wireless Internet access paid for by the state, district, school for PVHS students.

FUNDING **RESPONSIBLE** TIME **KEY TASKS** LINES PARTIES **SOURCE** Technology Coordinator Provide parent technology workshops Ongoing and Committee Technology Coordinator Construct and maintain school home page Ongoing and Committee Principal, Technology Completed but Coordinator and Provide and enforce acceptable use policy ongoing Committee Technology Coordinator When needed Publicize technology developments and utilization and Committee Principal, Technology Provide opportunities and training for parents on Coordinator and Ongoing hardware, software, and online options at the site level. Committee

5. Provide local area newspapers and radio coverage of school related technology developments

Evaluation (Assessment)

Objective		Documentation	
1	Professional Development	Sign-in sheets for district and school level technology training	
		Published school technology plan	
2	Integration of Technology in Learning	Teacher lesson plans	
3	Technology Leadership, Policy and Accountability	Published inventory	
		Published acceptable use policy	
		Published Pine View High School technology plan	
		Teacher portfolios of student successes	
4	Effective Use of Technology Funding and Resources	Published list of specific technologies to be purchased	

		Published inventory and updates	
5	Public Awareness	Parent workshop sign-in sheets	
		Published school homepage	
		Copies of technology publicity in local media	

Pine View High School Technology Support Team and Technology Committee

Pine View High School Technology Committee 2018-2019

Name	Position	Technology-Related Duties
Alvey, Zack	Instructor: Computer Programming (Python) I, II Web Development I, II Digital Media Exploring Computer Science	School Website Administration and maintenance
Anderson, Tracy	Instructor: Math Department	
Black, Lonie	Cone-Site Technology Specialist	Hardware/Software evaluation, maintenance recommendations; including computers, servers, Internet (LAN-cable & Wireless), Interactive Whiteboards, infrastructure Server(s) maintenance Equipment upgrades
Cahoon, Tayler	Instructor: CTE (Wood working)	
Goebel, Chris	Instructor: Social Studies (Sociology, US History, World Civilizations)	
Kreitzer, Matt	Library Media Coordinator, Technology Coordinator	Technology budget (manager) Equipment Inventory Print and Electronic Media (acquisitions, maintenance, and weeding) Technology Integration (assist teachers in utilizing technology in curriculum, instruction, and assessments) UEN, USOE, SEDC Liaison

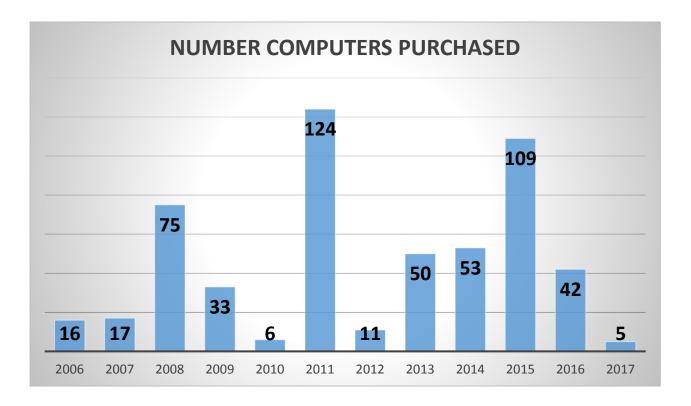
		WCSD Media/Technology Director
		Liaison
		On-site technology troubleshooter
Martinaan Banaa	Instructor: Social Studies	
Martineau, Renee	(Psychology), DATA Coach	
		Liaison with Administrator of Secondary
Mees, Mike	Principal	Schools WCSD
		Approve expenditures
Olsen, Bo	English/Language Arts (LA 11, Creative Writing)	Audio technology specialist

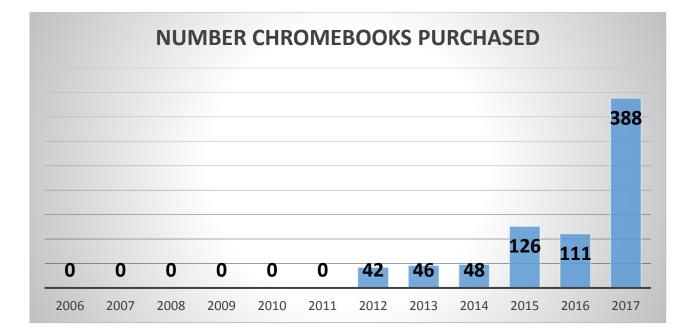
Pine View High School: Technology Plan

(Additional fields: Need Assessment Completed, estimated costs—including hidden cost projections & expected benefits)

Year Project started	Hardware or Software	Training Given	Status (ongoing or completed)
2001	Computer (and related hardware) Upgrades based on 5- year, rotating cycle		ongoing (as needed)
2004	Audio Visual presentation hardware: LCD projectors and large screens for every classroom (and lecture hall) DVD/VCR unit Audio systems Switch boxes to toggle between input devices	isual presentation hardware: jectors and large screens for every classroom ure hall) Yes C CR unit Audio systems	
2005	Addition of two more computer labs (total of three adjacent to library media center (LMC)	Yes	Completed 2006
2005	Addition of Guidance Dept. computer lab (11 computers)	Yes	Completed 2006
2005	Creation of student computer lab in LMC	Yes	Completed 2006
2006	Print Counter software installed on Student Server	Yes	Completed 2006
2008	Addition of LanSchool (teacher instruction & monitoring tool)	Yes	Completed 2008
	CTE Labs (two) added: Multimedia, CAD drafting/Architectural drafting		2009
2008	Complete school-wide software upgrade to MS Office 2007 (Professional)		Completed 2008
2008	Installation of Internet cable upgrade (T-1) [WCSD Tech. Office]	N/A	Completed 2008
2008	Interactive whiteboards for FLEX-Program		2008
2008	Interactive whiteboards (4)		2009
2009	Additional Interactive Whiteboards for Science/Math Departments (4)		2010

2010	Acquire Student Response Systems (iClickers) – 82 in initial group					
	Те	chnology/equipn	nent purchased:			
	Computers	Chromebooks	Chromebook Carts	Printers	LCD Projectors	Chromeboxes
2011	124	0	0	8	0	0
2012	11	42	1	1	1	0
2013	50	46	0	2	3	0
2014	53	48	3	4	3	3
2015	109	126	5	5	6	0
2016	42	111	1	3	9	0
2017	5	388 11 1		10	0	
2018						
2019						
2020						





Needs Assessment

To meet our goal to integrate technology into all aspects of instruction, and to realize our vision of helping all students become comfortable with and proficient in using technology, Pine View High School must work towards providing for several identified needs:

- Network ... (Lonie: LAN, Wireless networks, switches, etc.)
- Maintain LCD projectors and multi-media equipped computer stations for use in each classroom.
- Funding needs to be provided for site licensing of both workstation/network and Web-based applications for all the disciplines.
- Funding is required for the scheduled replacement of teacher and administrative workstations. A five-year rotation schedule dictates that we purchase at least 15 to 20 new computer systems each year.
- In order to maximize the benefits of the resources described above more training opportunities for teachers, students and parents are essential.
- FUNDING the technology budget needs to be maintained for technology-related expenses. (Capital Outlay PVHS/Supplies Technology. Acct. # 9200400720-650).

Descriptions of Technology Projects to fund this year;

There are several projects planned for installation this summer. The major projects include replacing the last of the old Optiplex 3020 computer systems. The nineteen new computers will be distributed among sixteen teachers and the three computer labs (the teacher/presenter computers only), four new Chromebook carts and the 144 Chromebooks they will hold (at 36 per cart), plus the licensing of each Chromebook, a set of twenty six new desktop computers for Lab B, a set of twenty six Chromebox systems to replace the computers in Lab C, software (MS Office Professional Plus 2016 for multiple machines, and Adobe Creative Cloud (Adobe CC) for systems requiring the features of this software, and four new LCD Projectors to replace the older machines.

Writing and Research Computer Labs B & C

We are going to replace the computers in Lab B with new systems and prepare them to run all the productivity tools in MS Office Professional Plus. The teacher/presenter system will also have Adobe CC productivity tools installed for teacher/presenter use. The systems we are replacing will be removed and placed according to our cone site technician's recommendation. Computer Lab C will be replaced with Chromeboxes in an effort to save money. These systems run Internet-based-only software. They cost less than desktop computers and we will be using the lab as a test lab to see if, when the time comes to replace other computer systems, we will purchase more. Effectiveness, teacher and student feedback will help in the decision-making process.

Teacher computers in Labs A, B, C

We will be replacing the three teacher/presenter computers in each of the three Writing and Research Computer labs. Each of these three computer systems will have MS Office Professional Plus 2016, and Adobe CC installed as well as other necessary software for course-specific instruction; e.g., "Plasma Cam" will be installed for CTE teachers (wielding and woodshop).

Teacher computers

Sixteen teachers, who are currently using Optiplex 3020 computer systems, are set to receive replacement/upgraded systems. Each will be outfitted with MS Office Professional Plus 2016 and Adobe CC) current edition.

LCD Projectors

As technology improves and time goes on, LCD projectors have become more efficient, less expensive, and loaded with more/better features. The replacement lamps have also become less expensive. In most instances now it is more economical to purchase a new machine rather than replace a broken/used lamp. In some cases, it is actually less expensive to buy a new machine than it is to buy a replacement lamp for the old machine. We are carefully monitoring the projectors on campus for age, wear and tear, lamp life, and lamp life expectancy. Over the last couple of years we have been able to replace the oldest projectors we had with newer ones. This year we propose to replace four more LCD projectors with new EPSON Powerlite W39 projectors.

Software

Multiple computer system replacements and current machines that are running, will require new software packages, some systems will also require licensing fees. Software costs on this document are estimates only as we are waiting for official quotes from the WCSD software purchasing specialist.

Chromebooks and Chromebook carts

As part of the movement toward 1:1 computing, and because of teacher demand, we are going to purchase four new Chromebook carts and 144 Chromebooks (36 for each cart). The necessary licensing will also be purchased and each of the carts will be distributed thus; one cart to replace the old Chromebooks available for teacher checkout (housed/charged in Lab B), one cart for the English Department to share, another cart for Social Studies teachers to share, and the last for our Foreign Language Department to share. This will provide an equitable distribution of these devices.

Tech Needs for 2019-2020	Quantity	bid/quote	Total
Hardware & Networking; e.g., Network switches	3	\$1,200.00	\$3,600.00
Desktop computers for student Lab B	26	\$650.00	\$16,900.00
Chromeboxes for student Lab C	26	\$475.00	\$12,350.00
Chromebook cart*	4	\$1,150.00	\$4,600.00
Chromebooks (four sets of 36)	144	\$250.00	\$36,000.00
Chromebook licenses	144	\$25.00	\$3,600.00
Software License agreements			\$2,500.00
Teacher computers (old) to be replaced	19	\$850.00	\$16,150.00
LCD Projectors (EPSON Powerlite W39)	4	\$465.00	\$1,860.00
			\$97,560.00
*Lab D. Fradiab. Casial Studies. Farsier Lawrences			

Technology Needs and Projected Expenses

*Lab B, English, Social Studies, Foreign Languages

Money from (Account)	Account Number	Amount
School Land Trust		\$57,200.00
Capital Outlay PVHS/Supplies - Technology	9200400720-650	\$33,500.00
Library Audio Visual Acct.	1060222720-646	\$6,860.00
		\$97,560.00

Projected budget for Audio Visual Acct. 2019-2020 year	\$9,613.18
minus	\$6,860.00
Audio Visual balance after 2019-2020 budgeted expenses	\$2,753.18