

Upper St. Clair School District

Curriculum Recommendations

2015 - 2016

All approved recommendations are subject to budget constraints. Administrative approval of any recommendation should not be considered as tacit approval for the related expenditures or summer workshops. Workshop could include Flex time, Act 48 hours, and/or paid workshop hours.

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Name: Judy Bulazo Area: All Areas	Level: Elementary Date: March 19, 2015		
Curriculum Recommendation 1. Pilot the newly revised elementary report card for kin	dergarten through grade four in the 2015-16 school year.		
Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
 This pilot is a follow-up to the recommendation from the spring of 2013: "Begin to explore, plan, and make recommendations for changes to the elementary report card as a result of the adoption of the common core standards." The current report card has been in use for at least 25 to 30 years with only minor modifications during that time period. The need for review and revision to better represent current instructional and assessment practices was critical. Since the initial recommendation, significant work has been accomplished. The report card was transferred to electronic format and the special subject areas were integrated into the report card. This year, a significant study and revision process was initiated and completed. All stakeholders were included in the process. The revisions were developed and have been embraced by all with great satisfaction. As curricular emphasis and assessment accountability stress getting all students meet grade level standards, our reporting to parents will now be based on this premise. While our instruction will remain individualized and customized, student progress will be reported in terms of meeting grade level standards. 	 Finalize the report card draft and work with the technology department to create an electronic version (summer 2015). Create supporting documents that provide guidance for teachers in the meaning of critical aspects of the report card and plan teacher training (summer 2015). Conduct teacher training related to the implementation of the new report card (August 2015). 		Approved. Given the many changes in the area of elementary education, this is a timely and necessary change.
(Cont'd.)			5.



Name:	Judy Bulazo	Level:	Elementary		
Area:	All Areas	Date:	March 19, 201	15	
	ulum Recommendation				
1. Pilot	the newly revised elementary report card for kinds	ergarten through grade foui	in the 2015-16 school ye	ar. (Cont'd.)	
Reaso	n(s) for Recommendation	Implement	ation Steps	Cost	Administrative Reaction
in a chan will allov	ften difficult to predict all of the issues that might result ge this significant. Piloting the report card for one year w us to make any needed revisions before fully ending its adoption.				6.



Name: HS Administration Area: All Areas Curriculum Recommendation 1. Study current and potential connections between the	Level: High School Date: March 17, 2015 Innovation Hub and all core content areas.		
Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
 As part of its 2015 Goals, the USC Board of Directors identified the goal to expand student opportunities at all levels through curriculum and instructional programs that address creativity and innovation, including Science, Technology, Engineering, Arts and Mathematics (STEAM). Opened in the Fall of 2014 at the high school, the Innovation Hub is home to two synergistic initiatives: a) the establishment of a globally-connected fab labthe first MIT Fab Lab in Pennsylvania; and b) the creation of SHOP@USCa pioneering, new student-run business. These two initiatives, together with our current engineering, design, and robotics courses utilize the Innovation Hub as a space to build, create, innovate, and learn. As we continue to develop specific content and courses to be taught directly through the Innovation Hub, our focus must also include connections to all content areas so all of our teachers and students can utilize the equipment, software, and related materials to enhance their knowledge in any discipline. 	 Administrative approval. Educate high school curriculum leaders about the capabilities of the Innovation Hub. Convene high school curriculum leaders to survey current course content and practices that could be supported by the Innovation Hub. Develop further curriculum recommendations. Discuss/share current scope and sequence with the STEAM Vision Team Chair and Co-Chairs. 		Approved.
			7.



Name: Tanya Chothani, Laura Carlino, Carlie McGinty, Dan Area: All Areas Curriculum Recommendation 2. Pilot a Peer-Tutoring Program to assist with academic services.	Level: High School Date: March 17, 2015	I elective cours	se.
Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
 Peer Tutoring is an opportunity for students to connect with another student who has previously done well in a course. The Bureau of Student Council, from Harvard University, references reasons to engage in peer tutoring: Discussing new information and concepts they are learning; Reviewing material they already know; Refreshing mastery of material they have forgotten; Preparing for an exam or presentation; Getting academic assistance beyond the help provided by the course teacher. Numerous research has supported the peer tutoring process: Peer tutoring usually results in significant cognitive gains for both the tutor and the tutee. When students teach students, the result is marked improvement in student learning which increases the productivity of the school. Effects on both tutors and students were positive in the areas of learning, attitude toward subject matter, and self-concept. Peer tutoring is widely used in higher education in a variety of forms (writing center, Student Support Services, etc.). This 	 Administrative approval. Determine credit worth, .5 (4 mods a week) or 1 (8 mods a week) per semester. Create Peer Tutoring Application Create portfolio-based assessment to be used as product each semester, based upon the ASCA Standards for Students, competencies & indicators. FST, Chemistry, Algebra 1, Geometry, Biology, Physics, and World Languages have been seen as an area of need for extra support in the Resource Center. Specific students that excel in these content areas would need to be selected. Share Application with Curriculum Leaders to spread awareness of program. Identify students to enroll as Peer Tutors. Students would earn an elective credit. 	Substitute day this spring to complete Student Application & Portfolio Assessment. Substitute days (one per semester) to review portfolios.	Approved. Exploring unique ways for students to benefit from working with each other will enhance the learning experience.
process would further promote self-regulatory and self-assessment skill growth, and development for college preparation.	Consult with School Counseling Department to align process for student recruitment.		8.



Name: Tanya Chothani, Laura Carlino, Carlie McGinty, Dan Beck Area: All Areas	Level: Date:	High School March 17, 201	5	
Curriculum Recommendation 2. Pilot a Peer-Tutoring Program to assist with academic support	in the High School Reso	urce Center as a pas	s/fail elective co	ourse. (Cont'd.)
Reason(s) for Recommendation	Implementation	Steps	Cost	Administrative Reaction
 4. The High School Resource Center has proven an invaluable asset for students seeking support and enrichment in certain subject areas, specifically from the teachers who are placed there during their duty. It is an environment conducive to academic support and enrichment. 5. This year, the School Counseling department, National Honor Society, and Mrs. Chothani have partnered together for those in need while NHS students complete required community service hours. Students who need extra support are matched by content area and free mods with a NHS member who then serves as peer tutor. The program has been widely successful by all parties involved. This serves as an opportunity to reinforce NHS students, as well as attract underclassmen and those not in NHS, by enrolling for credit and designating transcript recognition. Additionally, the program engages juniors and seniors as positive, role models, in a productive use of their free mods. 6. Peer Tutoring aligns with many American School Counselor Association standards within Academic Development, Career Development, & Personal/Social Development. 				
(Cont'd.)				9.



Name: Tanya Chothani, Laura Carlino, Carlie McGinty, Dan Beck Area: All Areas Curriculum Recommendation 2. Pilot a Peer-Tutoring Program to assist with academic support in the H	Level: Date: igh School Res	High School March 17, 2015 ource Center as a pass/fa	ail elective cour	se. (Cont'd.)
Reason(s) for Recommendation	Implementatio	n Steps	Cost	Administrative Reaction
7. Some National Honor Society students have disengaged from the program once finishing their community service hours. This credit and transcript recognition would continue to motivate students to help their peers who need the extra support. Students have already begun to earn community-based credit as peer tutors at other buildings, as well as technical support at the USCHS SmartDesk Initiative. 8. This credit-based course will not replace teachers placed on their duty in the Resource Center; instead, it will continue to supplement the supports already in place, especially when the Resource Center is depleted for coverage or during lunch mods.				10.



Name: Jennifer Kirk Area: Counseling Curriculum Recommendation 1. Research on-line high school course providers of reme online learning.	Level: Date:ediation, credit recovery, and enrice	High School 5/8/15 chment programs to det	termine the be	st options for
Reason(s) for Recommendation	Implementation	Steps	Cost	Administrative Reaction
 USCSD currently utilizes the AIU3 Waterfront Learning online courses for our students for credit recovery. Over the last several years the cost has increased significantly. Additionally, the flexibility of Waterfront has decreased. Peer districts have opted to utilize providers other than the AIU3 Waterfront Learning. Both South Fayette and Peters Township utilize the Seneca Valley online courses. Since the inception of on-line courses, providers have continued to evolve and change. There are now several course providers and it is timely to investigate programs to best fit student needs. The USCSD Strategic Plan challenges the District to, "Examine the high school experience to look at the impact of the many changing influencers, including but not limited to: technology and social media, the structure of time and schedule, academic rigor and pressures". 	 Administrative approval. Research on-line opportunities. Present finding to the High School September 2015. Consider possible Fall 2015 Fast T 	•		Approved. Consideration should be given to our own capacity to develop and deliver online instruction. This recommendation will require ongoing collaboration with District technology leaders.
				11.



Name: HS Administration and Melissa Tunga Area: Keystone Testing Curriculum Recommendation 1. Develop and implement a remediation plan for study	Date	e: May 8, 2015	exam after on	e attempt.
Reason(s) for Recommendation	Impleme	entation Steps	Cost	Administrative Reaction
 Beginning with the class of 2017, students must show proficiency on the Keystone Exams in Algebra, Biology, and Literature in order to meet PDE graduation requirements per recently-revised Chapter 4 regulations. According to these regulations, students must be remediated after each Keystone exam attempt before re-taking the exam. This recommendation is the logical follow-up to the 2014 curriculum recommendation to develop remediation courses for Biology and Algebra. The class of 2017 will be taking the Keystone Literature Exam for the first time in May 2015. The scores from this testing window should be available sometime July. Any student who has not shown proficiency will need to remediated before retaking the exam again. Once the scores become available, administrators and curriculum leaders will need to review them and determine the most effective plan for remediation. Staffing implications will have to be considered, and special provisions may also need to considered for IEP students. 	informing students, parents schedules as necessary. Enr remediation for fall semeste administer Keystone exam	plan for fall of 2015, including, and counselors and adjust students' roll students in appropriate courses/er, monitor student progress, and	Up to \$1500 for an online remediation program	Approved. This is a necessary next step in our Keystone remediation efforts.
4. The options for remediation may include: a remediation cla taught by a staff member, an online remediation program whice may or may not be a scheduled elective, and an online remediation program administered by an outside provider.	1			12.



Name: Kristy Berrott and Becky Kabala Area: ELA Curriculum Recommendation 1. Revise the elementary English/Reading and Language A	Level: Elementary Date: March 16, 2015 Arts handwriting curriculum scope and sequence and expenses.	olore related m	aterials.
Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
 Core academic pressures have gradually and academically increased. This has caused less of an instructional focus on handwriting, while the need for good and fluid handwriting remains important. Research in the field of handwriting offers findings that support the need to continue with instruction on process and practice to increase students' written fluency. As elementary students continue their education in middle and high school years, there exists a need for the ability to read cursive writing. 	 Administrative approval. Convene a team of teachers with representation for each grade level (2-4) and building to assist with the beginning phases of revision (summer). Review the scope and sequence of handwriting instruction that is currently in place and make revisions as needed based on the time for instruction correlated to the elementary master schedule. As the curriculum is revised, study and consider the necessary resources for implementation. Reflect on the effectiveness of existing materials and the possible need for additional resources. Research new materials that may be needed. Make purchases and develop support materials for teachers. Implement professional development surrounding the revised pacing and instructional methods (fall). 	Flex time or summer workshop - 2 days x 6 teachers = \$2174.40 at \$30.20 per summer workshop hour. Instructional materials	Approved. Building leaders need to assure consistent implementation.



Name: Becky Kabala	Level:	Elementary (Grades	s 3 & 4)	
Area: ELA – Spelling	Date:	March 16, 2015		
Curriculum Recommendation				
2. Revise the English Language Arts spelling curriculu abilities and needs.	m and explore related material	s to align with the PA Core Sta	indards and s	tudents'
Reason(s) for Recommendation	Implementa	ation Steps	Cost	Administrative Reaction
 Pennsylvania adopted the PA Core Standards in July 2013. A recommendation was made in 2013 to begin the process of converting our curriculum to the PA Core. The District has been working in the area of ELA to align our curriculum and instructional practice to allow our students to reach and exceed these standards. Significant work has been completed in the area of phonics in grades K-2. The middle school (grades 5 & 6) is currently pilotin a new spelling and vocabulary program. This revision will focus on aligning the spelling curriculum in grades 3 and 4 with instruction students receive in the primary grades and will receive in the middle school. The PA Core Standards require students to correctly spell grade-appropriate words. The current spelling curriculum focuses on many spelling patterns that students currently learn prior to third grade. Spelling words should align with patterns students must master for accurate reading and written communication. Teachers have expressed that the current spelling program doe not provide students with rigorous words nor prepare them for words they will encounter in reading or use in writing. 	at the middle school. 4. Convene a team of teachers grade level and building. Begin process. 5. As the curriculum is develop necessary resources of implements. 6. Research new materials that and develop materials for teach. 7. Provide professional develo	m used in the primary grades and with representation from each the curriculum development bed, study and consider the entation. are needed. Make purchases ers.	Summer workshop time for 6 teachers at \$30.20 per hour for 2 days = \$2174.40 Instructional materials	Approved. This is a timely recommendation in light of both student needs and changes at the primary and middle school levels.
				14.



Name: Kristy Berrott & Becky Kabala Area: ELA Curriculum Recommendation 3. Study the English Language Arts writing curriculum and explore related materials to align with the PA Core Standards and to allow for the development of writing strategies for all students.					
Reason(s) for Recommendation	Implementation St	eps	Cost	Administrative Reaction	
 Pennsylvania adopted the PA Core Standards in July 2013. A recommendation was made in 2013 to begin the process of converting our curriculum to the PA Core. The District has been working in the area of ELA to align our curriculum and instructional practice to allow our students to reach and exceed these standards. Significant work has been completed in the area of phonics, grammar, and comprehension. These areas continue to be refined. Addressing writing is the next logical step. The PA Core Standards require students to create narrative, informational, and argumentative writing pieces. Students are also required to produce evidence-based analysis of texts and research. 	1. Administrative approval. 2. Continue the research process of walearn to write and the important curricular elements of the process. 3. Secure the assistance of professional Achievement Center at the Allegheny In assist with the beginning phases of deverevision phases of the process (summer 4. Convene a team of teachers with regarde level and building. In collaboration the curriculum development process.	ys in which students lar and instructional Is from the Reading intermediate Unit to elopment and in the & fall). In the second in the with the AIU, begin	Flex time or summer workshop - 2 days x 6 teachers = \$2174.40 at \$30.20 per summer workshop hour. Teaching Writing @ AIU: 4 teachers at	Approved. A strong writing curriculum is critical to success in all curricular areas.	
4. Writing is an important skill for communication. Writing is critical to expressing ideas and sharing information with others. Students must write to express learning and show application of skills in all academic areas. The PA Core Standards emphasize writing within and across content areas. (Cont'd.)	 5. As the curriculum is developed, studinecessary resources for implementation existing materials and the need for additional existing materials and the need for additional existing materials and the need for additional existing materials and develop support materials. 7. Provide professional development to assistance of professionals from the Resource at the Allegheny Intermediate U 	Review the fit of tional resources. s that are needed. Make for teachers. teachers with adding Achievement	\$600 each = \$2,400 3 days with Reading Achievement Center = \$2400 Instructional materials	15.	



Name:	Kristy Berrott & Becky Kabala	Level:	Elementary	1	
Area:	ELA	Date:	March 19,	2015	
Curriculum	Recommendation				
	English Language Arts writing curriculum an of writing strategies of all students. (Cont'd.)		s to align with the PA C	ore Standards and to	o allow for the
Reason(s) fo	or Recommendation	Implement	tation Steps	Cost	Administrative Reaction
narrative, inforr 3 rd and 4 th grade writing on the P a major shift an respond critical 6. The process new standards a embracing the c	ests require 3 rd and 4 th grade students to write to a mational, or opinion writing prompt. Additionally, estudents must respond to text using academic PSSA. These new standards and assessments show demphasis on students being able to write and lay to text through writing. of understanding the change in demands of the and assessments has been initiated. Teachers are changes and now need to have a sequential and turn plan to follow. Additional training will be				16.



Name: Melissa Tungate and Tim Wagner Area: English Language Arts Curriculum Recommendation 1. Study connections between English Language Arts and	Level: Date:	High School and Middle May 8, 2015	e School	
Reason(s) for Recommendation	Implementatio	on Steps	Cost	Administrative Reaction
 As part of its 2015 Goals, the USC Board of Directors identified the goal to expand student opportunities at all levels through curriculum and instructional programs that address creativity and innovation, including Science, Technology, Engineering, Arts and Mathematics (STEAM). As STEAM education has become more formalized in Upper St. Clair, it is a natural time to study the connections between English Language Arts and STEAM in our current course offerings. STEAM is also the focus of one of the Vision Teams in the Strategic Planning process. English Language Arts courses place a strong emphasis on the 21st-century skill of communication and disciplinary literacy. Similarly, STEAM-related content requires students to be skilled communicators. This intersection provides ripe opportunities for interdisciplinary work. A well-articulated scope and sequence creates a meaningful crosswalk between ELA and STEAM content areas. With such a sequence, intentional and systematic integration of the content areas across grade levels will occur. 	 Administrative approval. Survey middle and high school current content and practices that a and instructional practices. Study models used by other schnationally, and internationally, that STEAM and ELA curricula. Meet with social studies curricula humanities content is represented, Create a current scope and seque current scope and sequence will be 5-12 ELA departments to determin potential curriculum recommendat Discuss/share current scope and Vision Team Chair and Co-Chairs. 	align with STEAM content sool districts, both regionally, effectively integrate alum leaders to ensure as it applies. Hence based on findings. This ereviewed and studied by the further study and/or ions.		Approved.
				17.



18.

Name: Melissa Tungate Area: English Language Arts Date: May 8, 2015 Curriculum Recommendation 1. Adopt Wintergirls by Laurie Halse Anderson as an option in the Honors English 9 and MYP Honors English 9 Supplemental Reading Program						
Reason(s) for Recommendation 1. This fictional text has contemporary, relevant, and high-interest topics for young adults, as it focuses on the dangers of eating disorders and one girl's road to recovery. These relevant topics allow for connections to and support from ninth grade Health classes and the Freshmen Seminar taught by school counselors. 2. The text offers a unique literary perspective for students as it is written as a first person journal, often in stream-of-consciousness. 3. The text provides opportunities for cross-textual exploration as it makes allusions/connections to literature, fairy tales, and Greek and Roman mythology, which students will encounter as part of the 10th grade curriculum. 4. The addition of this text also helps to work on the balance of authors in the program; currently, only 9 of the 33 texts in the Honors English 9 Supplemental Reading Program are written by	1. Administrative approval. 2. Purchase 30 copies of the book. 3. Develop assessments for the text 4. Begin offering as an optional selereading program for the 2015-2016	ection in the supplemental	\$14.65 X 30 copies = \$ 439.50 Up to 12 flex hours for up to 2 teachers	Administrative Reaction Approved. Improving reading choices for students is always a worthwhile effort.		
Honors English 9 Supplemental Reading Program are written by female authors. In addition, <i>Wintergirls</i> won the ALA Quick Picks for Reluctant Young Readers, 2010; ALA Best Books for Young Adults, 2010; Booklist Editors' Choice: Books for Youth, 2009, and <i>Publishers Weekly</i> Best Children's Books, 2009.						



Name: Ginny Husak and Amy Pfender Area: Library Curriculum Recommendation 1. Add a seven week research course to the 6th grade libration	Level: Sixth Date: March 18, 2015 ary curriculum to be a part of the expressive arts rotation.		
Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
1. Research skills are critical for all students. 6 th grade is the ideal grade to move the students from the traditional "book check-out" view of the library to using the library to locate and use information. This course focuses on developing information literacy skills as well as the 21 st century skills of communication and collaboration. 2. During this course, students complete a variety of activities related to developing information literacy skills such as evaluating websites, paraphrasing, and citing sources. Students are then guided using the Big 6 model for research to complete a research project on a topic of their choice. They also prepare a visual aid to support their report and deliver a speech on the research topic. 3. This course was first implemented as a pilot during the 2014-2015 school year to accommodate the large 6 th grade class and create a fifth Expressive Arts rotation. The course delivered information literacy skills in a meaningful way, and therefore it is recommended that it become part of the 6 th grade library curriculum. Both students and teachers see this course as a positive addition to the curriculum.	 Administrative approval. Revise and finalize the curriculum, create grading scale, rubrics and assessments and add to Rubicon Atlas. Revise the Middle School report card to include this course. 		Approved. This recommendation fills a need that transcends all content areas.
			19.



Name:	Ginny Husak and Amy Pfender					
		Leve	l:	Sixth		
Area:	Library	Date	: N	March 18, 2015		
Curriculum R	ecommendation					
1. Add a seven	week research course to the 6 th grade libra	ry curriculum to be a par	t of the expres	sive arts rotation.	(Cont'd.)	
Reason(s) for	Recommendation	Impleme	ntation Steps		Cost	Administrative Reaction
standard 2.1. applying criti evaluation, or	ddresses the ELA and Library Common Core 1: Continue an inquiry-based research process by cal thinking skills (analysis, synthesis, rganization) to information and knowledge in truct new understandings, draw conclusions, and nowledge.					20.



Name: Andrew Lucas	Level:	Middle School		
Area: Mathematics	Date:	March 18, 2015		
Curriculum Recommendation				
1. Modify the curriculum of the Algebra, Part A course to	strengthen the alignment wi	th Algebra I.		
Reason(s) for Recommendation	Implement	ation Steps	Cost	Administrative Reaction
 In 2012, a recommendation was written to adopt the Cognitive Tutor Algebra 1 course as another option for Algebra instruction for eighth grade students and to change the name to Algebra, Part A at Fort Couch and Part B at the high school. Since then, the course has offered the first half of Algebra I in 8th grade and the second half in 9th grade for students who struggle with algebraic and other concepts that are introduced in Pre-Algebra. This course allows students more opportunities to master the objectives of the traditional Algebra I course and provides them with alternate approaches to learning math through the numerous explorations and activities that the Cognitive Tutor program provides. It was hoped that one of the objectives this program would meet was that these students would pass the Algebra I Keystone exam at the end of their freshman year. While these students have become better Algebra students, many of them are still not meeting the standard set by the Commonwealth. A great deal of time has been spent revising the activities, instructional practices, and assessments in the Algebra I classes at Fort Couch to meet the PA Core standards for Algebra. These 	the school year to finalize tasks summer. 3. Submit these tasks as a proj completed by the Algebra, Part the Algebra, Part B teacher from	A teacher from Fort Couch and m the High School. er the summer to determine what the exam results from the spring	Up to 12 hours of workshop pay each for two teachers = 24 hours x \$30.20 = \$724.80.	Approved. Continuing to align our courses with the Algebra I standards is necessary and beneficial to all students.
changes have not been made to the same degree in the Algebra, Part A program. (Cont'd.)				21.



Name	An disease I suppose				
Name:	Andrew Lucas	Level:	Middle School		
Area:	Mathematics	Date:	March 18, 2015		
Curriculum	Recommendation				
1. Modify the	e curriculum of the Algebra, Part A course to stren	gthen the alignment with Alg	jebra I. (Cont'd.)		
Reason(s) f	or Recommendation	Implementation :	Steps	Cost	Administrative Reaction
to determine w would be and to B (See Append materials and a added. 6. Adding thes experience that Algebra I cours	Fort Couch and the High School have already met hat the sequencing for the revised Part A course of determine which concepts will be moved to Part ix A). Time is needed for these teachers to develop ssessments for new lessons and topics that must be deconcepts will provide students with an Algebra is more similar in rigor to that of the traditional see while still providing them with opportunities to ial in unique ways that fit their learning styles.				
					22.

Appendix A

Proposed Sequencing of Topics for Algebra, Part A.

Chapter 1:

Writing Equations
Graphing Equations
Graphically comparing two equations

Chapter 3:

Solving one-step and two-step equations

Percent Equation Integer Operations Coordinate Plane

Chapter 2:

Rates and Ratios Proportions

Percents

Chapter 4:

Relations and Functions
Domain and Range
Distributive Property
Combine Like Terms
Equations with variables on both sides
Absolute Value Equations
Arithmetic Sequence

Chapter 11:

Probability
Odds

Independent/Dependent Events

End of Year Project:

Slope Intercept Form

Food Drive

Topics That Need Additional Focus

Fractions: All operations Powers and Exponents

Square Roots: Estimating and putting on a number line

Order of Operations

Substitution

Simplifying Expressions



Name: Steve Miller Area: Mathematics Curriculum Recommendation 1. Study the potential options for both the evaluation of the provision of any necessary remediation for these study.		High School May, 2015 acher recommendations	in math course	selection and
Reason(s) for Recommendation	Implementation	ո Steps	Cost	Administrative Reaction
 It is important to ensure that students have the prerequisite skills required to be successful in the course for which they have enrolled. Of the students who overrode their math recommendation to take Honors Algebra II this year, 64% (49/76) dropped or earned a C or lower in the course in the first semester. Of the students who overrode their math recommendation to take Honors FST this year, 90% (19/21) dropped or earned a C or lower in the course in the first semester. The fact that there is a significant group of students who choose to override the teacher recommendation and are successful in the next course (36% in Honors Algebra II, for example) indicates the importance of the override process. This recommendation would help to clarify when overriding is a good option for a student. Changing courses once the school year has begun is stressful for students because of the difficulties involved in joining a new class and rearranging their schedules. 	 Administrative approval. Offer flex/workshop time in the this study. Develop a curriculum recommer the study. 	7 3 6	2 teachers x 12 workshop hours x \$30.20 = \$724.80	Approved. This study should potentially help enhance the ability to be successful in their coursework.
				24.



Name:	Steve Miller	Level:	High School		
Area:	Mathematics	Date:	May, 2015		
Curriculum	Recommendation	_			
1. Study the	potential options for both the evaluation of st		teacher recommendation	s in math course	selection and
the provision	of any necessary remediation for these stude	ents. (Cont'd.)			
Reason(s) f	or Recommendation	Implementati	on Steps	Cost	Administrative Reaction
itself, making s difficult. 7. The math consequence math to assess reading areas. Evaluating diagnostic test	ers of add/drops create stresses for the schedule sectioning and balancing sections extremely burses in general have the greatest number of drops. It is an easier task the sess in a concrete way than it might be in other on of students could be performed through a with subsequent remediation provided via an online of the spring/summer.				
					25.



Name:	Steve Miller Mathematics	Level: Date:	High School May, 2015		
	ecommendation otential and feasibility of a new course, CT	Functions Statistics and Trigonor	metry, in the 2016-17 sc	hool year.	
	r Recommendation	Implementation		Cost	Administrative Reaction
Differentiated M other junior-year 2. Students composed FST because of the state o	pleting CT Algebra II struggle to be successful in the pacing and prior content knowledge. Math is intended for remediation of skills not bra 1 and Algebra II, and as such is not an ement for successful CT Algebra II students. Inficant body of students coming out of ath and/or CT Algebra II who find Academic to challenging for them to be successful. Invoide successful CT Algebra II students with an ement where they can expand their content experiencing success. Invoide a viable pre-calculus option for these by move on to any type of calculus in college	1. Administrative approval. 2. Provide a project in the summer p catalog to examine the feasibility of t scope and sequence for the curriculur. 3. Write a curriculum recommendati Track for the new course.	his course and develop a m.	3 teachers x 12 hours x \$30.20 = \$1087.20	Approved. Finding feasible ways to address student needs is a commendable focus.
					26.



Name: Pamela Dillie	Level:	Elementary					
Area: Science/S.T.E.A.M.	Date:	May, 2015					
Curriculum Recommendation							
1. Adopt the Engineering is Elementary (EIE) units as a supplemental science component to enhance our existing science curriculum in grades 1, 2, and 3.							
Reason(s) for Recommendation	Implementation :	Steps	Cost	Administrative Reaction			
 The Engineering is Elementary units would support our current emphasis on S.T.E.A.M. (Science, Technology, Engineering, Arts, and Mathematics) and our S.T.E.A.M. initiative in Upper St. Clair. Our students need to develop the skills of creativity, innovation, problem solving, and collaboration in order to be prepared to enter the workforce and the many future careers that do not currently exist. The EIE units are already integrated into our curriculum through our ASSET science modules. The Next Generation Science Standards, which are in the process of being studied and adopted by Pennsylvania, represent significant content changes in both topics and the depth of topics to be developed with K-12 students. A strong component of these standards is engineering concepts. Materials and activities in the area of engineer and design are not a part of our current curriculum. 	 Administrative approval. Adopt one supplement per grade let a let grade-Designing a Windmill extension of ASSET We 2nd grade-Designing a Hand Pollitextension of ASSET But. 3rd grade-Designing a Knee Bradextension of ASSET Hun Study and adjust the pacing of curscience units in order to allow for impunits. 	ather inator terflies e nan Body rent social studies and blementation of these	Cost per EIE kit-\$50 each manual per teacher (53 teachers x \$50 =\$2,500) and \$100 for the materials per grade level (12 x 100 = 1,200) (included in the science budget). Total: \$3700.00	Approved. Introducing engineering concepts at the elementary level is important to a strong STEAM education continuum.			
3. S.T.E.A.M. education (Science, Technology, Engineering, Arts, and Math) has become an important component in American education. As the economy changes, these areas will be the keys to innovation and career success. Our District is committed to S.T.E.A.M. education. We need to continue to maintain a strong science curriculum and continue to evolve in sound and appropriate ways at the elementary level.	4. Schedule professional developmer Foundations of Engineering and the I Imagine, Plan Create, Improve) for al training of all elementary teachers in supports our S.T.E.A.M. initiative. (Cont'd.)	Design Process (Ask, l teachers. Implement		27.			

(Cont'd.)



Name: Pa	amela Dillie	Level:		Elementary		
Area: S	cience/S.T.E.A.M.	Date:		May, 2015		
Curriculum Recon	nmendation			- 5,		
1. Adopt the Engin 1, 2, and 3. (Cont'd	neering is Elementary (EIE) units as a s	upplemental science comp	onent to enh	nance our existing	science curric	ulum in grades
Reason(s) for Rec	ommendation	Implement	ation Steps		Cost	Administrative Reaction
Boston Museum. They Option Science System developed at the Lawre California, Berkeley an Concepts Program) wh Smithsonian Science E organizations who process. The Engineering is partner lessons in engir place. The program mastudents by introducing and backgrounds who a problems. Students we science and mathematic	vailable both through ASSET and the value been made available by FOSS (Full n), a research-based science curriculum ence Hall of Science, at the University of and by STC (Science and Technology ich is an organization supported by the ducation Center. These are reputable duce high quality, inquiry-based materials. Elementary (EIE) program is designed to meering with science curricula already in akes engineering fun and engaging for gethem to children from a variety of cultures are facing a variety of engineering ork in teams to apply their knowledge of cs, use their inquiry and problem-solving te and improve possible solutions.	 5. After adoption, provide all exploration, application of lear design challenges. 6. Determine a design(s) or a the best to take to a culminating Consider the appropriate amount involve in this process. Consider that teachers would need in orduring the LAB visit most process. 7. Study IB-PYP Unit Planner appropriate alignment to update at each grade level. Make any updates to IB-PYP Unit Planner examination. 	design challeng production int of students der the trainin der to make the ductive.	dback on these new age(s) that would be in the FAB Lab. and teacher to g and/or orientation the time before and determine tesons and materials evisions and		
currently exist at each g science topics to the ne opportunity to use their knowledge while apply	inate with ASSET units of study that grade level. The EIE units take our current ext level by providing the students with r newly acquired scientific content ving the engineering design cycle. The end ite states: "Students realize that everyone (Cont'd.)					28.



Name: Pamela Dillie	Level:	Elementary		
Area: Science/S.T.E.A.M.	Date:	May, 2015		
Curriculum Recommendation	_			
1. Adopt the <i>Engineering is Elementary (EIE)</i> units as a set 1, 2, and 3. (Cont'd.)	upplemental science compo	nent to enhance our exis	ting science curri	culum in grades
Reason(s) for Recommendation	Implementa	tion Steps	Cost	Administrative Reaction
7. The foundations of engineering and the design cycle used in these units (Ask, Imagine, Plan, Create, Improve) provides a strong model for students and teachers that can be applied to any design challenge. This allows for the opportunity to create additional "design challenge" units that allow students to gain skills in both design and innovation in areas outside of the science curriculum. 8. Provide the opportunity for students to follow the design cycle to engineer a product that could be produced in the FAB Lab (probably 4th grade Motion and Design). Allowing students to experience a real engineering and design process result in a commercial-grade product, from the elementary through the high school level could have a powerful impact on students design skills and motivation to study or excel in these areas.				
				29.



Name: Pamela Dillie Area: Science/S.T.E.A.M. Curriculum Recommendation 2. Continue to research and develop ways technology create an ipad based equivalent to our existing Science	Level: Elementary Date: May, 2015 could support our existing paper Science notebooks. Explose notebooking initiative.	ore the new ASS	SET APP to
Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
 ASSET now offers its paper notebooks – Science Primary, Science Elementary and Math – as iPad apps. The ipad APP is much improved over its initial (beta) version. The use of an ipad APP supports 21st century learner skills: critical thinking, problem solving, communication, collaboration in groups, active engagement and interaction, and connection to the real world. ASSET notebooks promote active learning by integrating STEM and literacy. Notebooks provide a place for students to organize their thoughts, reflect on their learning and make sense content being taught. They enhance scientific literacy and engender positive attitudes towards being a writer on scientific issues. Future experiences of iPads are quickly becoming Person Learning Studios for customizing potential for every student. Th note booking APP could become an easy portable method for learners to make notes and mind-maps of class by combining science labs and literacy. There is a cost savings to the District by replacing disposable paper notebooks with online Science Note booking. 	formulas and more, but they now have audio and visual recording capabilities as well. Science notebooks enhance students conceptual knowledge. 3. Collaborate with both the technology department and middle school to determine the parameters of the transition of the existing paper Science Notebooks to the application of the new Science Note booking APP.	Cost of ASSET Note booking APP Licensing Prices. (See chart next page) Accessibility of iPads for the students to utilize during science (10 per class). If needed: Summer Workshop Time for teachers at \$30.20 per hour.	Approved. Finding ways to utilize technology to enhance the scientific learning in this manner is one way that will allow students experience the connections between science and technology.
			30.

"ASSET Note booking APP Prices"

Primary Science Quantity Price

- 1 user license pack/\$2.99
- 5 user license pack/\$14.99
- 10 user license pack/\$26.99
- 20 user license pack/\$47.99
- 50 user license pack/\$109.99
- 100 user license pack/\$179.99

Elementary Science Quantity Prices

- 1 user license pack/\$3.99
- 5 user license pack/\$19.99
- 10 user license pack/\$35.99
- 20 user license pack/\$64.99
- 50 user license pack/\$139.99
- 100 user license pack/\$239.99



Name: Caren Falascino Area: Science Date: Middle School March 18, 2015 Curriculum Recommendation 1. Pilot the STC (Science, Technology and Concepts) program, Understanding Weather and Climate, in sixth grade science.				
Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction	
 The department reviewed the anchors that are tested on the PSSA science test. After examination during our 3 year study, it was determined that there is a need for a more inquiry based unit in weather. This pilot would allow us to improve labs, use technology advances, and give consideration to the PA State Standards and the Next Generation Science Standards (NGSS). STC (Science, Technology and Concepts) units emphasize STEM (Science, Technology, Engineering, and Mathematics) initiatives to develop 21st century skills in science, technology, engineering and mathematics. The STC unit, Exploring Planetary Systems, a. reflects the objectives of the 8th grade astronomy unit. b. supports the District's literacy initiative. c. provides updated information and resources on space. At present we use <i>Prentice Hall, Weather and Climate</i>. New Jersey: Prentice Hall, Inc., 1992. 	 Administrative approval. Teachers will be trained at no cost from Carolina Biological. Pilot the STC unit, <i>Understanding Weather and Climate</i>. Explore technology as a tool to supply resources for the unit. At the conclusion of the 2014-2015 school year, a review of the unit will be completed to determine if the unit is adopted. 		Approved. This helps our students to learn in an inquiry-based setting with access to laboratory experiences.	
			32.	



Name: Caren Falascino Area: Science	Level: Date:	Middle School March 18, 2015			
Curriculum Recommendation 2. Adopt the STC (Science, Technology and Concepts) program, <i>Exploring Planetary Systems</i> , in eighth grade science.					
1. The department reviewed the anchors that are tested on the PSSA science test. After examination during our 3 year study, it was determined that there is a need for more current content and resources in the astronomy unit. 2. This unit transitions our labs to student centered, uses technology, and aligns to the PA State Standards and the Next Generation Science Standards (NGSS). 3. STC (Science, Technology and Concepts) units emphasize STEM (Science, Technology, Engineering, and Mathematics) initiatives to develop 21st century skills in science, technology, engineering and mathematics. 4. The STC unit, Exploring Planetary Systems, a. reflects the objectives of the 8th grade astronomy unit. b. supports the District's literacy initiative. c. provides updated information and resources on space. 5. At present we use <i>Prentice Hall, Exploring the Universe</i> . New Jersey: Prentice Hall, Inc., 1992. There have been significant discoveries in the field of astronomy in the past twenty years.	1. Administrative approval. 2. Adopt the STC unit, Earth in Space. 3. Review and revise the objectives i	ce.	Consumable supplies would be the only cost.	Administrative Reaction Approved. Strengthening these resources will provide a more meaningful and authentic learning experience for our students.	
				33.	



Name: Rebecca Smith Area: Social Studies Date: May 8, 2015 Curriculum Recommendation 1. Develop a formal Civics & Government Unit at the second grade level using the Understanding by Design (UbD, Wiggins & McTighe) curriculum and instructional design process.				
Reason(s)	for Recommendation	Implementation Steps	Cost	Administrative Reaction
the importance individually we formal, structured level. All other Development studies prograstandards and will also furth by supporting 2. The "Underdesign process focus on enducontent and letter and letter level." 3. The UbD process focus of this nunderstanding	and grade level, each classroom teacher emphasizes to of rules and elements of good citizenship with their students. However, at this time there is no ared Civics & Government Unit at the second grade ter grade levels include this structured study. Of this unit will strengthen the second grade social method by emphasizing PA Civics & Government objectives in a structured and systematic way. This ter support the district goal of customizing learning students in their study of our interconnected world. The results of the study, which helps teachers to be used for this study, which helps teachers to be used for this study, which helps teachers to be used to use within instruction. The rocess is supported by research and is compatible to of educational programming philosophies. The method of curriculum design is on student with an emphasis on enduring understandings as a riculum unit of study. (Cont'd.)	 Administrative approval. Provide time needed to support the recommendation throug curriculum meeting time throughout the school year and summer workshop time. Establish a core representative group of second grade teachers to research the Understanding by Design framework, PA Core Standards, and PA Standards in social studies to determine the most appropriate and effective instructional lesson framework. Complete lesson design and examine resources needed to implement the lesson design effectively. After completing the lesson design, communicate details of the unit and its development to the whole second grade team for further review and revision. Make revisions based on feedback obtained from this communication. Continue examination of the unit as needed within the UbD framework for alignment with PA standards in social studies, USC objectives, and PA Core Standards in order to determine further revisions as needed. 	Teachers at \$30.20 per hour for 2 days = \$2,174.40	Approved. Developing civic minded-students at a young age will be of benefit to our schools and community.
				34.



Name:	Rebecca Smith	Level:	Elementary (K	-4)	
Area:	Social Studies	Date:	March 19, 201	5	
Curriculur	n Recommendation				
	a formal Civics & Government Unit at the second and instructional design process. (Cont'd.)	d grade level using the Unders	tanding by Design (U	bD, Wiggins & N	/IcTighe)
Reason(s)	for Recommendation	Implementation	Steps	Cost	Administrative Reaction
with Upper S their explorat Government, government v how internation 5. Examinati development provide aligne PA Core Stant 2012, specific Studies". 6. This exam consistent and Government s within the uni second grade principles of	will determine content to emphasize that is aligned to the Clair objectives and that also will help students in ion of the Pennsylvania standards in Civics & including principles of government, how works, rights and responsibilities of citizenship, and onal relationships function. on of USC objectives and PA standards for of this unit will also allow for opportunities to ment of instructional experiences and materials to the dards in English/Language Arts, released in March, eally the section entitled, "Literacy in Social ination and development will ensure that there is a disystematic unit of study within the Civics & strand at the second grade level and that the content it is accurate and developmentally appropriate for students, thus enhancing their knowledge of government, how government works, rights and es of citizenship, and how international relationships				
					35.



Name: Doug Kirchner Level: High School Area: Social Studies Date: May 8, 2015 Curriculum Recommendation 1. Study connections between Social Studies and STEAM curricular content.				
Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction	
1. Social Studies courses already place a strong emphasis on the 4 Cs of 21st-century skills: communication, collaboration, critical thinking, and creativity through inquiry, project-based, and authentic learning opportunities. This recommendation seeks to design both meaningful and intentional interdisciplinary opportunities with STEAM subject areas. 2. As part of its 2015 Goals, the USC Board of Directors identified the goal to expand student opportunities at all levels through curriculum and instructional programs that address creativity and innovation, including Science, Technology, Engineering, Arts and Mathematics (STEAM). This recommendation addresses this goal. 3. Similarly, this recommendation supports the goal of the Comprehensive/Strategic Plan's STEAM vision team to "improve the integration of STEAM across the curriculum at all levels and for all students." 4. The aim of this recommendation is to ensure that a broad based liberal education remains focused on the "whole child" while nurturing the integration of STEAM across all social studies/ humanities course.	 Study models used by other school districts that effectively integrate STEAM and Social Studies curricula. Continue to strengthen our department's collaboration with CMU,* and establish partnerships with other local and national colleges/universities. *The USCHS Social Studies department has recently worked with CMU's Department of Engineering and Public Policy to initiate research into possible STEAM/humanities connections. Collaborate with ELA and World Language curriculum leaders to share outcomes of research and plan future steps. Consult with members of the STEAM vision team and the High School Leadership Team for a possible fast-track 	Summer Workshop time for 3 teachers @ a rate of \$30.20 per hour for 6 hours each. Total 18 hours Total cost = \$543.60	Approved.	
			36.	



Name: Judy Bulazo, Stev Area: STEAM	e Miller, Lynn Kistler	Level: Date:	K-12 Spring 2015		
Curriculum Recommendation 1. Develop and implement a three provide related training for teache		EAM curriculum offerings, im	prove the connections bet	ween STEAM a	areas, and
Reason(s) for Recommendation		Implementatio	n Steps	Cost	Administrative Reaction
1. The current and future American eco dependent upon STEAM careers. It has a growing disconnect between the skills succeed in an increasingly technological skills that students bring to these careers maintain its global leadership and compecareers will be critical. 2. In recent work with the Carnegie Scietheir rubric for STEM Excellence, relative need were identified in our coursework, connections between courses, and in teach evaluation provided details and direction in these areas. 3. Goals set through the strategic planning STEAM courses, curriculum, instruction follows: • Increase the depth and breadth of STE and improve the integration of STEAM all levels and for all students. • Enhance inquiry-based instructional probabilities artising applied in real-world settings all scheduling a	been reported that there is needed to thrive and world and the talent and. For the United States to etitive position, STEAM and the talent and states to etitive position, STEAM and the talent and the talent and the training of the training of the training. This self-is on ways to focus efforts and teacher training as AM curriculum offerings across the curriculum at tractices and project-based ong with flexible	2. Develop action plans via the Strand implement plans through relate the curriculum development process. 3. Coordinate efforts with other Stranding the Technology and the Ecommittees. 4. Develop organization and commercepresent our current and future ST. 5. Continue to learn from others in visits, continuing to establish partners workshops and conferences.	ed follow-up committees and ss. rategic Planning committees, High School Experience nunication mechanisms to EAM programming.		Approved.
scheduling options to accommodate this (Cont'd.)	type of instruction.				37.



Name:	Judy Bulazo, Steve Miller, Lynn Kistler				
		Level:	K-12		
Area:	STEAM	Date:	Spring 2015		
	n Recommendation				
	and implement a three-year plan to increase STEAM ted training for teachers. (Cont'd.)	l curriculum offerings, impr	ove the connections be	etween STEAM	areas, and
	for Recommendation	Implementation	Steps	Cost	Administrative Reaction
that they obtain	ners to educate students in STEAM areas by ensuring n STEAM content, pedagogy, and technology ough professional development.				
there is a need	USC has strong science and math offerings, but to assure that the integrated nature of STEAM and jects are represented within and between these				
STEAM educe programming identified. For baseline level	efforts have been made to increase and improve ation in USC. Still, gaps that exist in STEAM in the K-12 curriculum have been preliminarily ocus needs to be placed on <u>all</u> students receiving a of consistent STEAM experiences while that allow for further experiences, if desired, are				
underrepresen	t statistics have shown that girls are ted in our higher level STEAM coursework. This is dy and is part of another STEAM recommendation.				
					38.



Name:	High School Administration	Level:	High School		
Area:	SHOP@USC	Date:	May 6, 2015		
Curriculum	n Recommendation				
1. Pilot the P	Partners in SHOP@USC Program in grades 10	-12.			
					Administrative
Reason(s)	for Recommendation	Implement	ation Steps	Cost	Reaction
	rs in SHOP@USC Program is modeled after the tners in PE Program and is designed for students	Administrative approval.		Summer Workshop	Approved.
with special ne	eeds to have the opportunity to partner with regular lents in a smaller and more specifically modified	2. Develop unit plans and less	on plans.	Time \$30.20	SHOP@USC program
	room environment.	3. Establish creative schedulin education students are able to f		for 3 teachers	provides excellent
respect for ind	am would foster socialization, relationship building, ividual differences, and peer modeling, all of which	are available in the early morning	ale. Students with special needs ng prior to leaving school for	24 hours each = \$2174.40	inclusive opportunities.
the school and	bridge the friendships and partnerships throughout community culture (FRIENDS, Special Olympics,	work-related learning.	er er er		The Partners in PE program,
Miracle Field,	Partners in PE).	4. Identify students as possible The Science teachers along with	e participants in the program. The hthe Special Education teachers		which has experienced

- 3. Regular education students who may want to work in a career with special needs students would greatly benefit from a class where they are given a leadership role. This class may potentially generate interest in careers related to working with those with special needs. Regular education students would be paired up with special education students to help facilitate the class and meet all of the various needs of the special education student. In addition, regular education students would receive exposure to STEAM.
- 5. Offer course to students in grades 10,11, and 12 as a pilot for the 2015-2016 school year. 6. In grade 12, the class would be offered as a Community

will collaborate to complete a list of students. The Guidance

Office will work with the individual students who are interested

in participating in order to fit this program into their schedules.

Based Learning credit. In grades 10 and 11, it would be offered as either a Community Based Learning credit or an elective credit. Credit would be pass/fail.

experienced great success, will be a wonderful model to inform the development of this offering.

39.



Name: Ray Berrott, Carolyn Cusick, and John Rozz Area: Technical Studies Department Curriculum Recommendation 1. Pilot a keyboarding unit in grade 7 during the 2015-20	Date: June 2015		
Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
 Keyboarding is a technology literacy skill necessary for students to become productive citizens in an increasingly global and digital world. It is introduced at the elementary level, but currently is not reinforced at the middle school level. Keyboarding was offered as a high school elective until the 2011-2012 school year. Keyboarding is a component of the National Educational Technology Standards for Students (NETS•S) as recommended by the International Society for Technology in Education (ISTE). To "demonstrate a sound understanding of technology concepts," 	 Administrative approval. Purchase Typing Agent online subscription. (See Attachment) Purchase iPad external keyboards. Train teacher and prepare classroom materials. Collaborate with Technology Department to enroll and manage student sections using the Typing Agent software. 	Typing Agent online keyboarding software subscription for 7th Grade=\$1500 Estimated external	Approved.
systems, and operations," our students need to "select and use applications effectively and productively."	6. Create a schedule to provide keyboarding instruction to 14 sections of 7th grade students.	keyboards (Quantity 70 x \$50 ea = \$3500)	
3. Keyboarding provides the skills and background needed for our 1:1 Learning Initiative framework while enhancing student skills in terms of Access to Content, Collaboration and Communication, Feedback and Assessment, Creativity, Self-Directed and Self-Paced Learning, and Engagement.	 7. Develop keyboarding instructional materials to reinforce keyboarding skills in the 7th grade 21st Century Technology course. 8. Develop criteria and evaluation procedures relative to the 	Teacher Training/ preparation 15 hours x \$30.20=\$453	
4. Keyboarding supports: • ISTE Standards • PA G	needs of the middle school continuous progress report.	φσοι2σ φισσ	
 PA Core Standards (See Attachment) USC Educational Technology Standards for the 21st Century Learner 	9. Develop external keyboard distribution procedures.10. Review the pilot at the end of the 2015/2016 school year.		40.

APPENDIX F

Keyboarding Software Rationale Curriculum Recommendation June 2015

Typing Agent is the keyboarding program that has been selected for the pilot during the 2015-2016 school year. Additional software packages were also evaluated. However, the three keyboarding packages listed below were the main focus since it was important for students to be able to use traditional and mobile technologies. Typing Agent provides the best student customization features. One feature that is being developed this summer by the product development team is a diagnostic pretest that will generate learning paths based on student testing results. Typing Agent will "monitor and adjust" Gross Words a Minute (GWAM) rates as the student progresses through the program. The program will automatically provide "prescriptive drill lines" based on student keystrokes. Typing Agent keyboarding software is easy to use and engaging. The layout and design is a major strength. It has a "mobile device" appearance which will appeal to both males and females at the middle school level. This is the only program which offers a JAVA coding feature. The coding feature exposes students to the basics of the JAVA programming language which directly connects to the STEAM component of the USC Comprehensive Plan. Teacher and technical department support is provided by the company at no charge. The classroom management and student reporting features are superior to the other online keyboarding. Some of the classroom management features include:

- login date and time records
- daily and weekly activity
- accuracy percentage, GWAM, Average Words Per Minute (AWPM), and Q-Score Data
- snapshot data
- badges earned
- typeSMART
- customized learning targets
- customized grading

Definition:

"The **Q-Score**" or "Quality Score" is based on results from Applied Predictive Technology (APT). APT studies found that emphasizing quality over quantity increases typing improvement significantly. In one APT study it found that the methodical students who went slower had a 36% improvement in typing. The "fly through" students had only a 17% improvement. Based on research and our own internal studies, we developed the Q-Score to emphasizes accuracy over WPM (words per minute). The **Q-Score** will also usually increase when a student repeats a lesson or test creating a more methodical approach to typing. A perfect **Q-Score** is 300. The perfect **Q-Score** is not designed to be reached by younger students. The object for younger students is to try to increase their score as they progress. Most students can reach a perfect 300 if they are typing at speeds of 65 WPM or higher with high accuracy. Students at this level may need to repeat the lesson or test to hit 300. A 300 score generally implies the student is ready for the workforce if they are obtaining this score with everyday sentences."

Source: "Welcome to Typing Agent | Typing Agent." Welcome to Typing Agent | Typing Agent. N.p., n.d. Web. 29 May 2015.

Typing Agent Student View:



	Typing Agent	Keyboarding Online (Short Course)	Edu Typing (Jr. Curriculum)
PC & iPad compatible	Yes	Yes	Yes
Price (all 7th grade)	\$1500 per year	\$569 per year	\$2596 per year
Lessons	Contains 10 lessons. There are 7-9 exercises in each lesson. More content is being developed during the summer 2015 to continue the focus on customized learning.	Contains 18 lessons. There are 10 exercises in each lesson.	Contains 7 lessons to learn the keyboard. Additional units include 7 reinforcement lessons, 7 timed writings, and 21 "In the News" lessons.
Design & Layout	Looks like a "smart phone." Simple and easy to navigate. Visually appealing to a middle school student.	Not appealing to a middle school student. Layout has a traditional appearance.	Not appealing to a middle school student. Layout has a traditional appearance.
Customizable Grading Scale	Can customize grades as O, S, G, N	No	Can customize grades as O, S, G, N
Online Keystroke Demonstration	Yes	No	Yes-only provided at the beginning of a lesson.
Color Coded Online Keyboard	Yes	Yes	Yes
	Typing Agent	Keyboarding Online	Edu Typing

		(Short Course)	(Jr. Curriculum)
Customized Speed and Accuracy Rates	Yes	Yes	Yes
Time-Out Feature	Yes	Yes	Yes
Keyboarding Games	Yes	No	Yes
Reporting			
ISTE Standard aligned Resources	Yes	No	No
Common Core aligned Resources	Yes	No	No
Coding	Yes	No	No
Messaging Feature	Yes	Yes	Yes

PA Core Standards Connections

English Language Arts Grades K-12 PA Core Standards

- Grade 7 CC.1.4.7: Use technology, including the Internet, to produce and publish writing and link to the cite sources as well as to interact and collaborate with others, including linking to and citing sources.
- Grade 8 CC.1.4.8U: Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.

Writing in Science and Technical Subjects

• Grades 6-8 CC.3.6.8.E: Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.

Writing in History and Social Studies

• Grades 6-8 CC.8.6.8.E: Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.

USC Fort Couch Research conducted Spring 2014

- One hundred forty-two students consisting of both males and females from seventh and eighth grade were administered a five-minute timed writing using MS Word to measure current keyboarding speed and accuracy rates. The following results are listed below:
- Keyboarding GWAM (Gross Words Per Minute)
 - 6% of students are keying 46 GWAM or more
 - 61% of students are keying 30 GWAM or less
 - 81% of students are keying 35 GWAM or less
 - Percent of Accuracy. Please note the accuracy rate is affected by the use of the auto-correct software feature.
 - 9% of students have an 89% or lower accuracy rate
 - 91% of students have a 90% or higher accuracy rate



Name: Brad Wilson Area: Technology	Level: Grades 5-8 Date: March 18, 2015		
Curriculum Recommendation 1. Organize a team of teachers to collaborate, develop and	d pilot an electronic portfolio template that can be used fo	or all students	involved in 1:1
Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
1. Recent 1:1 technology investments are allowing for our teachers and students to accomplish tasks never before possible. In specific, gains have been made in the areas of: access to content, feedback and assessment, communication and collaboration, self-paced/self-directed learning, creativity, and engagement. In each of these areas, technology is allowing for students to produce and present high-quality work that in many cases is digital in nature. 2. With the increase in digitally produced work, there are many opportunities for not only saving work, but for the potential to showcase work for a variety of purposes. Currently, the World Language Department utilizes electronic "e-portfolios" for their students to maintain record of their progress over the course of their 6-12 World Language learning experiences. These portfolios have allowed students to look back on their growth over time, creating a very positive experience that could be extended to other subject areas. 3. Along with students monitoring their own growth, e-portfolios would also provide teachers with access to previously produced student work, which would support their ability to effectively customize learning for these students. Currently the ability to access previously completed student work is very limited, with exceptions in a few settings.	 Administrative approval. Communicate with staff and request group involvement. Introduce idea to middle school staff members to gain feedback and request membership for development and classroom piloting. Collaboratively develop a model portfolio that features plans for what will and will not be included in portfolio. Pilot portfolio in single class or team settings with interested teachers. If appropriate, consider full grade-level piloting. Regroup and discuss suggestions made throughout the year to refine portfolio in preparation for a full-scale rollout. Make future recommendations based on feedback and results from early pilots. 	Potential for costs associated with substitute teachers for work days	Approved. The outcome may produce a more effective way to communicate with parents as well as provide the opportunity for students to reflect on their learning.
(Cont'd.)			44.



Name: Brad Wilson Area: Technology Curriculum Recommendation	Level:	Grades 5-8 March 18, 2015		
Organize a team of teachers to collaborate, develop and learning settings. (Cont'd.)	d pilot an electronic portfol	io template that can be	used for all student	s involved in 1:1
Reason(s) for Recommendation	Implement	tation Steps	Cost	Administrative Reaction
4. A final gain with regards to e-portfolios would be improved communication with parents. Currently, sharing work with parents occurs, but there are unique new considerations that need to be made in the wake of paperless assignments and increased project-based assessment. Utilizing an e-portfolio system would provide parents with much improved access to their child's work in one location, which would greatly simplify our current system of sharing work.				
5. A segment of this portfolio will also connect to student self-reflections and their perspective of their work. A key component to this portfolio will be an on-going set of reflections that will be organized in a blog-like fashion. These reflections will allow for students to not only look back on their learning to see what was accomplished, but also to identify previous challenges that can be the focus of future efforts. Self-assessment has a strong research-base supporting its impact on, and the potential to significantly improve, student learning. (See: Hattie, John. <i>Visible Learning: a Synthesis of over 800 Meta-Analyses Relating to Achievement.</i> London: Routledge, 2009. Print.)				
6. Developing a systems approach to reflecting on learning is a key step in supporting customized learning by providing the framework for identifying areas for growth and reflecting on that growth over time.				45.



Name: Brad Wilson, Ray Berrott, Dan Beck	Lev	/el: High	School	
Area: Technology	Dat	te: Marc	ch 17, 2015	
Curriculum Recommendation				
1. Continue to pilot a student-run SMART desk to assist with to the High School as a pass/fail, one-credit, elective course (.5 pe		dents the opportunity to	o complete personalizo	ed technology projects at
Reason(s) for Recommendation	Implem	entation Steps	Cost	Administrative Reaction
1. With the advent of BYOD and the increase of technology bein used to support learning, the demands for technical support have grown exponentially in the last few years. In addition, with the Middle School 1:1, students with vast technology abilities are coming to the High School. The potential of the High School moving in a direction of a 1:1 Learning Initiative adds to the demand for more students being involved with the technology integration/support/implementation. 2. The capacity and capabilities of our students has continued to grow, resulting in a number of students who already have knowledge of coding, software development, networks, web development, and hardware. Our students have become a great resource in the area of technology support and have helped assist the technology department this year by solving more than 300 of the 900 tickets at the High School since August 1, 2014. 3. Students could also be a great enhancement to our professional development program in the area of technology. Students could not only help teachers develop apps but could also assist in leadin professional development sessions on how to use them.	2. Develop an independer framework in collaboration and faculty for students with SMART desk course. 3. Examine scheduling operations as well as to study projects for each study projects for each study prerequisite interview with Technology Staff. 5. Publicize the opportunity students for this elective control of the students for the students for this elective control of the students for the	on that study model that follows in with the technology state the would potentially enrobotions that consider the appropriate and work with study manage personalized, in indent. If Studies to include the application of Studies and recruit in the students and recruit in the students and collaborating the students to attend periods.	aff, librarians, oll in this ppropriate dents on a adependent oplication and ation/ t qualified bi-weekly on dic trainings	Approved. Continuation of the pilot will assist with the expansion of the types of experiences this course can provide.
((Cont'd.)		46.



Name: Brad Wilson, Ray Berrott, Dan Beck	Level:	High School	
Area: Technology	Date:	March 17, 2015	
Curriculum Recommendation			
1. Continue to pilot a student-run SMART desk to assist with tech the High School as a pass/fail, one-credit, elective course (.5 per s		ortunity to complete persona	alized technology projects at
Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
 4. Opportunities for growth exist with recruitment of more students, including, but not limited to: Personal projects: programming, coding, application development Help Desk support Peer-to-peer support Innovation Hub support 1:1 learning initiative support at the middle schools. 5. Along with further developing their technological skills, in the areas of coding, networks, software, and hardware, these students will have opportunities to grow in their communicative, creative, and critical thinking skills as they collaborate to solve authentic problems. 	 Examine the role of students participat peer and staff development training. Consider "faculty advisor(s)" for the segrown out of the pilot: Personal projects: programming, coding development Help Desk support Peer-to-peer support Innovation Hub support 1:1 learning initiative support at the m Consider permanent space for students especially in regard to peer-to-peer support within the Resource Center. Examine potential for piloting SMAR schools in support of the District's 1:1 Leapiloting may include recruiting, mentoring students to serve in future SMART Desk it wide. 	eparate areas that have ng, application iddle schools. 'home base, rt, including space ET Desk at the middle arning Initiative. This g, and training	47.



1. The current Physical Education curriculum has an emphasis on health concepts, the importance of physical fitness to the human body, traditional team sports, and having fun while exercising. 2. Martial Arts Fitness would be a non-traditional avenue to expose the students to a unique life-long activity that enhances an individual's strength, endurance, and confidence. Implementation Steps Cost Reactio 1. Administrative approval. 2. Provide curriculum and summer workshop time for training, lesson development and planning. 2. Provide curriculum and summer workshop time for training. curriculum active while school year. The instructional unit would include drills and circuits that focus on technique, footwork, upper and lower Reactio Approved Exploring ways to ge students to active while school year. The instructional unit would include drills and circuits that focus on technique, footwork, upper and lower Reactio	Name: Lisa Cain and Dana Mellinger Area: Wellness Curriculum Recommendation 1. Pilot the Martial Arts Fitness program for the 2015-2016	Level: Grades 5-6 Date: March 18, 2015 grades 5 and 6 at Boyce Middle School.
health concepts, the importance of physical fitness to the human body, traditional team sports, and having fun while exercising. 2. Martial Arts Fitness would be a non-traditional avenue to expose the students to a unique life-long activity that enhances an individual's strength, endurance, and confidence. 3. Implement the Martial Arts Program during the 2015/2016 school year. The instructional unit would include drills and circuits that focus on technique, footwork, upper and lower body movement, and endurance. 4. The program would also be available for use in intramurals during Pride Time. iPad training is also an option for smaller groups to ensure proper form and safety. 5. Explore alternate forms of funding to offset the cost, such as	Reason(s) for Recommendation	Implementation Steps Cost Administrative Reaction
6. Review the pilot at the end of the 2015/2016 school year to determine whether to proceed with implementation and to review possible expansion into additional grade levels.	health concepts, the importance of physical fitness to the human body, traditional team sports, and having fun while exercising. 2. Martial Arts Fitness would be a non-traditional avenue to expose the students to a unique life-long activity that enhances an	includes: 3 hour on-site training. 2 curriculum packet, 2 full unit plans, assessments, achievement certificates, activity cards, instructional would also be available for use in intramurals and a possible donation from the Boyce PTA. includes: 3 hour on-site training. 2 curriculum packet, 2 full unit plans, assessments, achievement certificates, activity cards, instructional DVD, online website membership. includes: 3 hour on-site training. 2 curriculum packet, 2 full unit plans, assessments, achievement certificates, activity cards, instructional DVD, online website membership.



Name Lisa Cain and John Rozzo Area: Wellness Curriculum Recommendation 2. Adopt the 2014/2015 pilot that called for the inclusion ocurriculum.	Level: Grades 7 and Date: March 18, 20 of health and wellness topics to be taught in the seven	015
Reason(s) for Recommendation 1. A review was conducted in the 2013/2014 school year of the state standards in health, safety, and physical education, the high school wellness education curriculum, and guidance and FACS topics. That review demonstrated there was an opportunity for additional health instruction in the following areas; Safety and Injury Prevention, Healthful Living, Elements of Fitness, and Concepts, Principles, and Strategies Of Movement. 2. Although students do receive scheduled health lessons at the figh grade level, there was an experturity to previde some	Implementation Steps 1. Administrative approval. 2. Continue to dedicate time each nine weeks for health instruction in the seventh grade physical education classes. 3. Further development of the Blended Schools component lesson follow-up, enrichment, and assessments is a priority. Summer workshop and additional curriculum time will be uto address this need.	meaningful health education in our
fifth grade level, there was an opportunity to provide some additional health instruction in seventh grade. Entering ninth grade students will participate in a required one semester health class.	 4. Continue the dialogue and coordination with the ninth g health instructor, middle school counselors, and Boyce phy education teachers to review health topics being covered. T review can occur during curriculum meetings and profession development time throughout the school year. 5. Review and discuss possible expansion into additional g levels following the 2015/2016 school year. 	sical his nal



Name: Betsy Hess Area: Wellness Education Curriculum Recommendation 1. Research and study non-traditional methods for the de	Level: Date:	High School May 8, 2015		
Reason(s) for Recommendation	Implementation	Steps Cos	t	Administrative Reaction
 Children who are healthy and physically active improve their academic performance and are better able to meet the demands of today's hectic lifestyles. Quality Physical Education instruction can give students the strategies needed to reduce their stress and anxiety levels through physical activity. Upper St. Clair High School graduation requirements state that all students in grades 9-11 must complete credits in Wellness Ed (physical education) each year in order to meet the Pennsylvania Department of Education State Standards. Different approaches to the delivery of physical education would allow us to better meet the specific scheduling needs of all students and allow us to customize learning for individuals with various needs. 	 Administrative approval. Research methods being used at during the summer of 2015. Study data concerning effective methods. Present findings to High School September 2015. 	ness of various delivery	Visitations to schools to see programs 3 teachers for @ \$90 a day 3 substitutes \$270 Summer workshop for 3 teachers for 12 hours \$30.20 per hours X 36 hours \$1087.20	Approved. There are many connections between this recommendation, the physical education study, and the proposed goals of Strategic Planning related to reimagining the high school experience. We recommend that this be funneled to the high school administration to consolidate efforts to a comprehensive approach to meet the intended objectives.



Name: Area: Curriculum Reco	Betsy Hess Wellness Education ommendation nd study non-traditional methods for the deli	Level: Date:	High School May 8, 2015 Cont'd.)		
5. This recommen	ecommendation endation supports the USCSD 2015 Strategic planning process, which includes the	Implementatio	on Steps	Cost	Administrative Reaction
following: a. the board goal to look at the imp but not limited to: time and schedule safety /security, th b. the districts be person—ethically	I to "examine the student high school experience pact of the many changing influencers, including technology, and social media, the structure of e, academic rigor and pressures, transitions, the role of activities/athletics/ arts, etc. Elief that "effective education develops the whole y, intellectually, emotionally, socially, and promotes self-esteem and personal happiness."				
					51.



objectives.

Name: Betsy Hess, Doug Kirchner, Jennifer Kirk Area: Wellness Education/Social Studies/Counseling Curriculum Recommendation 1. Research strategies to develop students' social emotional learn	Level: High School Date: May 8, 2015	
Reason(s) for Recommendation	Implementation Steps Cos	Administrative t Reaction
 This recommendation directly supports and targets several components of USCSD's 2015 comprehensive/strategic planning process, including: the District's mission to promote happiness and success for each child. The District's belief that, "effective education develops the whole personethically, intellectually, emotionally, socially, and physicallyand promotes self-esteem and personal happiness." the Board of School Directors' goal to, "examine the student high school experience to look at the impact of the many changing influencers, including but not limited to: technology and social media, the structure of time and schedule, academic rigor and pressures, transitions, safety/ security, the role of activities/athletics/arts, etc." the High School Experience Vision Team's focus on Social and Emotional Learning (SEL). 	 Administrative approval. Provide summer workshop time for up to 2 teachers and 1 school counselor to work with curriculum leaders, department chairs, and administration on steps 3-4. This committee will begin by doing the following: Research current findings related to SEL through the Collaborative for Academic, Social, and Emotional Learning (CASEL):	Summer Workshop Time for 3 teachers @ a rate of \$30.20 per hour for 12 hours each. Total 36 hours Total cost = \$1087.20 Summer Workshop There are many connections between this recommendation, the social and emotional strategies study, and the proposed goals of Strategic Planning related to reimagining the high school experience. We recommend that this be funneled to the high school administration to consolidate efforts to a comprehensive approach to meet the intended



Name: Betsy Hess, Doug Kirchner, Jennifer Kirk Area: Wellness Education/Social Studies/Counseling Curriculum Recommendation 1. Research strategies to develop students' social emotional learnin	Level: High School Date: May 8, 2015 g. (Cont'd.)	ol	
Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
 According to the 2014 Natural Helpers survey, students at USCHS continue to experience a significant amount of stress and school-related pressure. Research at the national level has found the following: Eighty-three percent of students report that school is a somewhat or significant source of stress, and 10 percent of teens report receiving lowers grades than they are capable of because of stress.			53.



Name:	Deanna Baird	Level:	Middle School/High	n School	
Area:	World Languages	Date:	May 2015		
Curriculum	n Recommendation				
	the world languages curricula at all (high schoo th multiple STEAM lenses that are intentionally			l appropriate o	ones, and move
Reason(s)	for Recommendation	Implementation St	eps Cos	t	Administrative Reaction
of the new s 2. STEAM real-world so authentic ass and refined to with student STEAM skii. 3. The curridisciplinary English and those topics brainstorm i. 4. Much of the curricular and the important the important in the international.	ative will support the STEAM vision team that is part trategic plan. initiatives include foci on technology, collaboration, cenarios/activities, cross-disciplinary activities, and sessment. World language teachers have incorporated these traits for years; they need to reinforce these skills as being not only world language skills but also lls. culum units for world languages include many crosstopics in both art and also science, as well as in history. Teachers need to share with each other what are, refine/expand them where necessary, and f additional ones are appropriate. the department staff was not yet here when parts of a were written. Giving a new look to the reasons for ortance of various curricular components would AM lens also includes the need to incorporate more a components that go beyond the target country/ing studied. This also would support previous	 Administrative approval. Schedule summer flex in-service tilanguage curriculum. Consider additional STEAM compthe curriculum. Determine ways to infuse "international components. Continue to design/create activities year. 	oonents/methodologies for tional" into STEAM	6 summer work hours for 3 teachers @ \$30.20 = \$543.60	Approved.
					54.



Name: Deanna Baird	Level:	High School		
Area: World Languages	Date:	May 2015		
Curriculum Recommendation				
1. Research, design, and teach a world languages career common time in their high school experience.	s unit that will be offered across la	nguages to all world la	nguage studen	ts during a
Reason(s) for Recommendation	Implementation Ste	eps Cos	t	Administrative Reaction
 Future career paths are becoming very international in scope with multiple skills required in most careers. Many future professions will incorporate language and/or cultural skills. Many people still think that students with language majors are limited to careers in language teaching and translation. Our students need to explore career options that go beyond this traditional view. Language and/or cultural skills are truly a tool in a career tool kit. It will benefit all world language teachers if they researched and designed the unit in a collaborative fashion. The breadth of knowledge and experience of all teachers would allow more knowledge, resources, and speakers to be available to all students. 	 Administrative approval. Schedule a summer FLEX in-service languages. Research and pool various sources Determine best common time(s) and information. Design the unit for all teachers/stuck. Pilot the unit during the 2015-16 see 	on international careers. and methods to offer the dents.	6 summer work hours for 3 teachers @ \$30.20 = \$543.60	Approved. Given the global nature of most career choices, it is essential to continue to expose our students to such opportunities.
				55.



Name: Deanna Baird Area: World Languages Curriculum Recommendation 2. Incorporate a minimum of one IPA (Integrated Performation)	Level: High School Date: May 2015 ance Assessment) into every language level of every	language.	
Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
1. Integrated Performance Assessments have become a strong performance-based assessment used in world language assessment methodology. They also support and provide a good role model for USC's performance-based assessment goals. 2. The WL Department piloted the use of Integrated Performance Assessments with a few teachers last year. Although the construction of each assessment with its 3 components (intense interaction with authentic reading plus speaking and writing assessments based on a reading theme) requires more time and effort than a traditional unit test, the piloting teachers were very satisfied with the learning results. Their enthusiasm has inspired the rest of the department to begin to design these assessments. This recommendation is a natural step after the pilot.	 Administrative approval. Schedule a summer in-service FLEX workshop for the construction of additional IPAs. Implement more IPAs in the 2015-16 school year Continue to construct IPAs during WL in-service time. 	6 summer work hours for 4 teachers @ \$30.20 = \$724.80	Approved. Assessment practices such as this serve as a great model for a comprehensive way of measuring student achievement.
			56.