

# Thomas Jefferson High School for Science and Technology



## School (Student) Improvement Plan 2009-2010

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## SACS Five Year Action Plan 2007-2012

### Focus Area: Academics

#### Definition

*This focus area includes goals and objectives that affect curriculum, student outcomes, and methods of instruction to achieve the desired results identified by the SACS study. These goals and objectives were formed with TJHSST's mission and beliefs statement, and future trends in mind.*

#### Goal:

To examine and improve curriculum to reflect our desired results: problem solving, critical inquiry and research, intellectual curiosity, social responsibility.

#### Priority Action Items:

A1	Enhance TJHSST curriculum so that students develop research skills at all grade levels through vertical integration.
A2	Continue to develop interdisciplinary lessons as needed.
A3	Explore offering more flexibility in course selection, including high-level course work as an alternative to AP.
A4	Initiate regulations for expected performance to remain a TJHSST student.
A5	Review division course offerings in terms of vertical integration.
A6	Explore and pilot alternatives to the current school calendar.

### Focus Area: School Community and Climate

#### Definition

*School community and climate refers to the level of morale, spirit, drive, confidence and the well-being of students, faculty, staff, and parents including all aspects of student life: extra-curricular activities, social activities, clubs and organizations, and co-curricular activities.*

#### Goal:

To enhance the sense of community at TJHSST for students, faculty, staff, parents, and other stakeholders by enriching the learning and work environment.

#### Priority Action Items

SCC1	Assess the Jefferson Learning Community experience to maximize support for collaboration and professional development.
*SCC2	In order to foster respect and understanding, develop ways to insure that the climate at TJHSST is welcoming and inclusive of the diverse populations found in Northern Virginia.
SCC3	Twice a year, evaluate the leadership groups (Administrative Team, Leadership Team, Division Managers, faculty, staff, the Student Government Association, and class governments) by their constituents.
SCC4	Create an Evaluation Team to monitor this Action Plan's progress, provide accountability, give feedback to the Administrative and Leadership Teams, and instill community ownership of the process.
SCC5	The TJHSST Leadership Team will review and improve the consistency in the delivered and perceived message of the TJ experience from different perspectives and make changes as needed.

## Focus Area: Ethics and Social Responsibility

### Definitions

Ethics: *The rules and conduct in association with moral principles or with respect to the rightness or goodness of actions.*

Social Responsibility: *Awareness of the shared interests of humanity, and personal and shared responsibility to contribute to and improve such shared interests.*

### Goal:

To create an exemplary model of ethics and socially responsible behavior at TJHSST.

### Priority Action Items:

*ESR1	Assess how best to provide ethics instruction and promote socially responsible behavior.
*ESR2	Improve communication between the administration, teachers, counselors, and involved students and parents regarding action taken in response to ethical violations.
ESR3	Improve communication between the school and parents about the negative effects of poor ethical decisions.

## Focus Area: Resources

### Definition

*In this plan, resources are defined as Time, Monetary Funds, and Building Space Resources. (See appendix for more definitions).*

### Goal:

To improve the management of time, funding, and building facilities effectively to bring them in line with TJHSST's mission and beliefs and future trends of education.

### Priority Action Items:

R1	Create and maintain a master calendar for open view and create protocols for maintaining the calendar.
R2	Communicate the budgetary process and decisions to the school community on an annual basis to foster understanding.
*R3	Evaluate and upgrade the science and technology laboratories to provide students research experiences with current developments in science and technology.
R4	Create fair academic schedules for faculty (including number of classes taught, team teaching partners, student: teacher ratio, and curriculum team assignments) and communicate scheduling decisions to the faculty in a timely manner.
R5	Secure monetary resources and/or release time for faculty to pursue school-wide or division initiatives.
*R6	Develop a strategic plan for obtaining funds to support a new school building.

Note: ESR1 is in the School (Student) Improvement Plan and the other items with an asterisk are in the Leadership Team's Strategic Improvement Plan.

Student Achievement Goals and Priority Action Item	Year 1 (2007-08)	Year 2 (2008-09)	Year 3 (2009-10)	Year 4 (2010-11)	Year 5 (2011-12)
<b>Academics</b>					
A1. Enhance TJHSST curriculum so that students develop research skills at all grade levels through vertical integration.	X	X			
A2. Continue to develop interdisciplinary lessons as needed.		X			
A3. Explore offering more flexibility in course selection, including high-level course work as an alternative to AP.					
A4. Initiate regulations for expected performance to remain a TJHSST student					
A5. Review division course offerings in terms of vertical integration 08-09: Teachers will implement vertical articulation plans that directly impact student learning.	X	X			
A6. Explore and pilot alternatives to the current school calendar.					
<b>School Community and Climate</b>					
SCC1. Assess the Jefferson Learning Community experience to maximize support for collaboration and professional development.	X				
SCC2. In order to foster respect and understanding, develop ways to insure that the climate at TJHSST is welcoming and inclusive of the diverse populations found in Northern Virginia.			X		
SCC3. Twice a year, evaluate the leadership groups (Administrative Team, Leadership Team, Division Managers, faculty, staff, the Student Government Association, and class governments) by their constituents.	X	X			
SCC4. Create an Evaluation Team to monitor this Action Plan's progress, provide accountability, give feedback to the Administrative and Leadership Teams, and instill community ownership of the process. 08-09: Improve the SIP Evaluation Team feedback process.	X	X			
SCC5: The TJHSST Leadership Team will review and improve the consistency in the delivered and perceived message of the TJ experience from different perspectives and make changes as needed. New 08-09		X			

Student Achievement Goals and Priority Action Item	Year 1 (2007-08)	Year 2 (2008-09)	Year 3 (2009-10)	Year 4 (2010-11)	Year 5 (2011-12)
<b>Ethics and Social Responsibility</b>					
ESR1. Assess how best to provide ethics instruction and promote socially responsible behavior. 09-10: The school community will teach a One Question course and focus school-wide on the question “What are the responsibilities of educated people?”	X		X		
ESR2. Improve communication between the administration, teachers, counselors, and involved students and parents regarding action taken in response to ethical violations.			X		
ESR3. Improve communication between the school and parents about the negative effects of poor ethical decisions.					
<b>Resources</b>					
R1. Create and maintain a master calendar for open view and create protocols for maintaining the calendar	X				
R2. Communicate the budgetary process and decisions to the school community on an annual basis to foster understanding.	X				
R3. Evaluate and upgrade the science and technology laboratories to provide students research experiences with current developments in science and technology.			X		
R4. Create fair academic schedules for faculty (including number of classes taught, team teaching partners, student: teacher ratios, and curriculum team assignments) and communicate scheduling decisions to the faculty in a timely manner.	X	X			
R5. Secure monetary resources and/or release time for faculty to pursue school-wide or division initiatives.		X			
R6. Develop a strategic plan for obtaining funds to support a new school building. 09-10: Building Renovation committee established.			X		

**STUDENT IMPROVEMENT PLAN OBJECTIVE:**

ESRI: Assess how to best provide ethics instruction and promote socially responsible behavior.

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RELATIONSHIP TO SACS ACTION PLAN: ESRI: Assess how to best provide ethics instruction and promote socially responsible behavior.

DESCRIPTION: The School Leadership Team believes that ethics instruction is not confined to a single classroom or discipline. Attempts have been made to increase ethics instruction throughout the school through TA and integrated into individual teacher lessons, but not necessarily through a uniform standard for the whole curriculum. With the advent of further ethics instruction across content areas, in addition to the newly formed elective class related to the One Question, students will be encouraged to explore real-life ethical dilemmas and examples, as well as be given the opportunity to make sound and responsible decisions in regards to not only themselves, but the greater global community. In addition, a One Question grant, made available by corporate sponsors, will award members of the school community resources to those individuals who wish to obtain resources for new learning opportunities related to the social responsibilities of educated people.

RATIONALE FOR OBJECTIVE: *(student performance data; knowledge of programmatic/instructional strengths and weaknesses; best-practice research)*

Data Sources: For the 2006-2007 school year, TJHSST participated in the Southern Accreditation of Colleges and Schools (SACS) Evaluation process. As part of this year-long process, interdisciplinary teams of staff members collected data on strengths and weaknesses, and gathered teacher opinion data. The study's final report indicated that our staff members would like to see a stronger emphasis on ethics instruction across all content areas. At the end of the 2008-2009 school year, the student body voted on five questions to pursue as a school community next year through the One Question initiative. The students selected a question related to the theme, "What are the social responsibilities of educated people?"

Knowledge of Programmatic/Instructional Strengths and Weaknesses: TJHSST is a community that engenders a strong core value system, not only by means of its student-designed honor code, but also by the tenants of its mission statement and beliefs. Critical thinking and problem solving skills are utilized when addressing current complex societal and ethical issues across the curriculum. In

accordance with the mission, TJHSST sponsors outreach activities to communities both near and far. Some past and present examples include an open-door policy for guests, Techstravaganza, the Hands On Science Day, and tutoring programs with local elementary schools. TJHSST also partners with the Office of Overseas Schools, in the United States State Department, to offer an annual technology conference for educators called JOSTI (Jefferson Overseas Schools Technology Institute). TJHSST is always looking to develop new programming that aids in allowing its students to interact with the local and global community, particularly to support enthusiasm for learning STEM disciplines to groups underrepresented at the school. TJ students tutor and mentor students, as well as support teacher instruction in local elementary schools. TJ students participate in or organize many other out-of-building efforts, such as Leewood Friends, the Red Cross Youth Task Force, Relay for Life, Action Africa, Fashion for a Cause, amongst various others. For over the past 10 years, TJHSST has been participating in Celebrate Fairfax, and has conducted a variety of activities, such as a robotics display developed by instructor Adam Kemp and freshmen technology students. TWIST, an organization established to foster young women's interests in engineering, computer, and physical sciences, has created an event known as Techstravaganza. This is a joint effort of TWIST, GEMS, and WISE—three action groups that actively pursue educating intermediate grade-level school girls to develop their interests in these particular areas of science. These activities are important in developing socially responsible behavior in our students, however, the majority of these initiatives are extracurricular, i.e., take place outside of the classroom learning. The school's leadership is interested in the development of learning activities that integrate socially responsible activities and ethical behaviors into the classroom as part of its best practice.

Best Practice Research: As advocated by both the American Association for the Advancement of Science and the National Research Council, the issue of ethics is an extremely important part of high school science curricula and instruction. Students need to understand the ethical ramifications of advances in technology so they can make informed decisions regarding the use of such technologies in the future. When teaching about ethics, critical thinking and responsible decision making are evident, and by creating or using case studies, students can be provided the opportunity to delve into practical discussion and potential solutions to ethical matters. The creation of community service projects by an individual or group of TJ students ensures that TJHSST will function as a true microcosm of society, helping others help themselves, as well as encouraging each student to learn to be more productive, responsible citizens who act with integrity. Getting the greater community involved, whether that be parents, faculty and staff, or possibly other area schools on board with this commitment to socially responsible behavior, will allow TJHSST students to become role models for their colleagues and peers. Additionally, the entire school community continues to read the One Book selection, and this summer, the book, **Three Cups of Tea**, will provide an example of the power of one individual who demonstrated exceptional social responsibility to improve a culture. Tony Wagner of the Harvard Graduate School of Education and the Change Leadership Group identified the ability to be agile and adaptable as one of his Seven Survival Skills for College, Careers and Citizenship (2009). He describes as essential the need for students to be prepared and personally accountable to their learning, business practices and lifestyles will be based on global contexts and relationships, not on traditional or standard lines of authority. TJ's One Question efforts will help our students and staff to become more aware of the need to be adaptable, agile and responsible.

**SCHOOL COMMUNITY AND CLIMATE – ESRI  
PERFORMANCE INDICATORS**

Performance Indicators <i>(Specific Measurable Attainable Realistic and Time-Bound)</i>
Each quarter, each teacher will provide evidence to Division Managers of lesson(s) that tie into the One Question initiative.
One Question course will require students to complete and share ideas on social responsibility in the TJ community. Forum will be developed.
To improve schoolwide communication around ethics and social responsibility, faculty and students will share examples of socially responsible behavior of what students have done via the morning announcements, TJ Today and/or the tjSTAR Research Symposium

## SCHOOL COMMUNITY AND CLIMATE – ESR1 WORK PLAN

STUDENT IMPROVEMENT PLAN OBJECTIVE: ESR1: Assess how to best provide ethics instruction and promote socially responsible behavior.							
Administrative team support person to those people monitoring strategies in this objective: Mary Ann Bosley							
Strategies	Point of Contact	Materials Needed and Costs	Time Line				Expected Outcome or Product
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will monitor the strategy.	What materials will be used to implement the strategy? What are the costs?	Check the projected quarter for implementing the strategy this school year.				What new information/resource do you expect to have after completion (data, lessons, report, etc.)?
			1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
Work through TA to showcase social responsibility	Jean						
Provide existing lesson plans (currently on BB) to TA teachers for each of the TA days Jean has compiled “suggested” lessons from prior BBC publications/use; posted on BB; Jean has made them specific to grade level based on grade level themes discussed last year. Use open TAs to apply for “one question” grant; teachers submit every idea students submit and then they choose idea from list (one TA or across TAs) and submit grant	Jean One Question Committee/Carter Vaden	Handed out to each TA electronically and hard copy with rosters to Xerox and use as they wish			1 or more lessons by all TAs	All teachers will use or modify the lessons to adhere to the theme Teachers understand there are some specific expectations for TA but also some flexibility; Teachers are aware of resources available to help TA specifically through “one question” grant	
Add any lesson plans for one book to this list	Carter Vaden						

STUDENT IMPROVEMENT PLAN OBJECTIVE: ESR1: Assess how to best provide ethics instruction and promote socially responsible behavior.							
Administrative team support person to those people monitoring strategies in this objective: Mary Ann Bosley							
Strategies	Point of Contact	Materials Needed and Costs	Time Line				Expected Outcome or Product
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will monitor the strategy.	What materials will be used to implement the strategy? What are the costs?	Check the projected quarter for implementing the strategy this school year.				What new information/resource do you expect to have after completion (data, lessons, report, etc.)?
			1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
Use scrolling announcements to demonstrate examples of social responsibility in practice (do this regularly)	One Question Class/Various clubs Jean Stevens; written by students	Ed Montgomery to post	*	*	*	*	Examples of social responsibility accomplished by TJ students/clubs submitted for scrolling announcements in order to share with general community
Report to the PTSA for examples of SR for publication	Clubs coordinated by Jean Stevens	None	*	*	*	*	Examples of social responsibility accomplished by TJ students/clubs shared with PTSA in order to share with general community
Improve communication of SR to Communication Liaison							
End of year: review whatever lessons that have been developed to look at what should be continued outside of the one book and one question initiative while we prepare the one book for the following year (CT will do that?). Maybe continue them as TA lessons or adapted by specific level disciplines	Curriculum Team						
Create a strand at the symposium to follow up on the one book initiatives (especially recipients of grants).	TJ Star Coordinator						

STUDENT IMPROVEMENT PLAN OBJECTIVE: ESR1: Assess how to best provide ethics instruction and promote socially responsible behavior.							
Administrative team support person to those people monitoring strategies in this objective: Mary Ann Bosley							
Strategies	Point of Contact	Materials Needed and Costs	Time Line				Expected Outcome or Product
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will monitor the strategy.	What materials will be used to implement the strategy? What are the costs?	Check the projected quarter for implementing the strategy this school year.				What new information/resource do you expect to have after completion (data, lessons, report, etc.)?
			1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
Initiate a grant to students and teachers that allows them to obtain resources to support initiatives that align with the One Question. Implemented 2009							
Reassess the effectiveness of TA as a primary conduit for ethics instruction and character education and identify possible alternatives. As a staff reassess the purpose and use of TA; do we give equal weight to evaluation from someone who follows the program versus someone who doesn't	Leadership Team Assess after opening of school			*	*	*	Make a decision in 2009 regarding TA for 10-11
Develop and implement lessons in each Division that include topics in ethics and social responsibility.	Division Managers			*	*	*	Each division will give an example of lessons in SR by the end of the year
Provide ongoing professional development opportunities for teachers and staff in ethics instruction.	Heather Sondel as part of Feb 8 ½ day				*		

STUDENT IMPROVEMENT PLAN OBJECTIVE: ESR1: Assess how to best provide ethics instruction and promote socially responsible behavior.							
Administrative team support person to those people monitoring strategies in this objective: Mary Ann Bosley							
Strategies	Point of Contact	Materials Needed and Costs	Time Line				Expected Outcome or Product
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will monitor the strategy.	What materials will be used to implement the strategy? What are the costs?	Check the projected quarter for implementing the strategy this school year.				What new information/resource do you expect to have after completion (data, lessons, report, etc.)?
			1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
In all coursework involving significant writing, use turnitin.com, stress the importance of copyright compliance and teach students how to avoid plagiarism.	Division Manager		*	*	*	*	Teachers use Turnitin.com with greater frequency
Require course syllabi to include an academic integrity policy and require teachers to discuss the policy with their students at the start of each quarter.	Division Managers		*				All teachers include
Invite guest speakers who can spark discussions and workshops about real-world ethical concerns.	8 <sup>th</sup> period clubs/One Question Class/Carter Vaden	Speaker fees??? Use grant					
Consider adopting a community service graduation requirement.	FCPS/county wide requirement/not 09-10						FCPS will implement/wait

**Science Policy Curriculum Team  
WORK PLAN**

What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will monitor the strategy.	What materials will be use to implement the strategy? What are the costs?	Check the projected quarter for implementing the strategy this school year.				What new information/resource do you expect to have after completion (data, lessons, report, etc.)?
Assist in developing curriculum for the science policy course through sharing ideas and resources (such as articles, lectures, exhibits, contacts).	Melissa Schoeplein and Anna Brown		X	X	X	X	
Redesign the science policy course final paper/project	CT members		X	X	X	X	
Connect science policy students to faculty and students in the school who do research that complements their final science policy paper/project	Melissa Schoeplein and Anna Brown with CT members		X	X	X	X	
Help bring in guest speakers to the science policy course, and possibly have the speakers also do a brown bag lunch for faculty if their schedule permits	CT members			X		X	
Brainstorm other ways that TJ could highlight science policy in the school community	CT members		X	X	X	X	

## tjSTAR

<b>Sub-Goal Number</b>	<b>Performance Indicators</b> <i>(Specific Measurable Attainable Results-Oriented and Time-Bound)</i>
	100% of the freshman and senior classes will present their research publicly. Presentations may vary: some formal, some roundtable, some panels, some poster presentations- this will help accommodate numerous presenters.
	At least 5 scientific corporations will participate directly in the conference.
	A student club (tjSTAR Club) will be formed to meet twice a week during 8 <sup>th</sup> periods. The club will provide leadership roles to students in planning and implementing this year's symposium and future symposia at TJ. Students will participate in every planning committee for tjSTAR.
	Faculty members from each division will serve as liaisons to the tjSTAR Steering Committee. Volunteer faculty and staff will participate in Symposium planning with student committees.

## tjSTAR WORK PLAN

<b>SCHOOL IMPROVEMENT PLAN OBJECTIVE:</b> The student body will participate in a day long research symposium to share their research and learn about research opportunities.							
Administrative team liaison: xx under the leadership of Betsy Sandstrom							
<b>Strategies</b>	<b>Person(s) Responsible</b>	<b>Materials Needed and Costs</b>	<b>Time Line</b>				<b>In-Process Measures</b>
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will monitor the strategy.	What materials will be used to implement the strategy? What are the costs?	Check the projected quarter for implementing the strategy this school year.				How we will monitor progress.
			1 <sup>st</sup> Qtr.	2 <sup>nd</sup> Qtr.	3 <sup>rd</sup> Qtr.	4 <sup>th</sup> Qtr.	
Develop a research symposium committee, consisting of faculty, students, parents, administration, and researcher	Betsy Sandstrom Admin – to contact parents, researcher	Time, request for faculty participation.	XX				
Obtain sponsors for the research symposium, in collaboration with the Partnership Fund	Evan Glazer and Gary B.	Time, list of possible sponsors, review last year's list					
Obtain guest speakers/presenters from alumni and corporations	Evan G. and Gary B.						
Develop research symposium program	Research Symposium Committee	Student committee					
Develop timeline for completion of research projects	IBET Faculty and Lab Directors						
Create a Research Symposium Website	Koji Otani	Students, 8 <sup>th</sup> period time					
Create an 8 <sup>th</sup> period activity to support the student club: tjSTAR Club	Betsy Sandstrom	Students 8 <sup>th</sup> period					
Provide weekly reports to Committee members who cannot attend meetings	Betsy Sandstrom Koji Otani	Release time to write reports					

**SCHOOL IMPROVEMENT PLAN OBJECTIVE:** The student body will participate in a day long research symposium to share their research and learn about research opportunities.

Administrative team liaison: xx under the leadership of Betsy Sandstrom

<b>Strategies</b>	<b>Person(s) Responsible</b>	<b>Materials Needed and Costs</b>	<b>Time Line</b>				<b>In-Process Measures</b>
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will monitor the strategy.	What materials will be used to implement the strategy? What are the costs?	Check the projected quarter for implementing the strategy this school year.				How we will monitor progress.
			1 <sup>st</sup> Qtr.	2 <sup>nd</sup> Qtr.	3 <sup>rd</sup> Qtr.	4 <sup>th</sup> Qtr.	
Provide planning and newsworthy updates to faculty – as needed but at least once a month	Betsy Sandstrom And student leaders	8 <sup>th</sup> period activity time					
Work with PTSA Curriculum Committee	Heather Sondel	Evening meetings					

Ethics and Social Responsibility/One Question Curriculum Team  
**WORK PLAN**

See Page \_\_\_\_\_ , school goal ESR1 for workplan of this curriculum team for 2009-2010.

## SCIENCE AND TECHNOLOGY WORK PLAN

Leadership team support person to those people monitoring strategies in this Work Plan: Jim Jarvis							
Actions	Point of Contact	Materials Needed and Costs	Time Line				Expected Outcome or Product
			1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will report progress.	What materials will be use to implement the strategy? What are the costs?	Check the projected quarter(s) for implementing the action this year.				What new information/resource do you expect to have after completion (data, lessons, report, etc.)?
Increase lab participation in mentorship program	Pearce	Time spent visiting potential locations/organizations		X			All labs in program to have mentees
Increase lab director contact with research professionals at university and corporate levels (This is PD and PI for these teachers.)	Pearce/Jarvis	Time	X	X			More contacts mean likely to have more opportunities.
Follow through on division academic vertical articulation	Jarvis	Time (use breakout JLC)	X		X		Rough spots removed.
Follow through on division academic horizontal articulation (chemistry in particular)	Jarvis	Time (use breakout JLC)	X	X			A chemistry common syllabus as per AP Chem
Assist in resources 3 objectives	Jarvis	\$600,000	X	X	X	X	Measured by removing most needed items from wish list via acquisition

## MATHEMATICS AND COMPUTER SCIENCE WORK PLAN

Leadership team support person to those people monitoring strategies in this Work Plan: Jennifer Allard							
Actions	Point of Contact	Materials Needed and Costs	Time Line				Expected Outcome or Product
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will report progress.	What materials will be use to implement the strategy? What are the costs?	Check the projected quarter(s) for implementing the action this year.				What new information/resource do you expect to have after completion (data, lessons, report, etc.)?
			1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
Vertical integration: Complete Program of Studies documents for upper level math and computer science classes.	Spoden, Osborne, Rose, Billington, Stueben, Sachs	FCPS Programs of Study	X	X			Programs of Studies for Multivariable, Linear Algebra, AMT, Complex Analysis, Differential Equations, Numerical Analysis, Computer Science, Accelerated Computer Science, and AP Computer Science
Explore and implement the effective use of technology in the Math/Computer Science classroom, especially the clickers and computer software Mathematica and Fathom.	Razzino, Rychlik, Osborne	Technology tools, training	X	X	X	X	Lesson plans, activities, "Notebooks" for students to do independent explorations
Implement team-wide use of open ended and application problems (with an emphasis on science applications) in Algebra 2 and Precalculus.	Drobnis, Rychlik		X	X	X	X	Sample problems, lesson plans, exams, Problems of the Week

Leadership team support person to those people monitoring strategies in this Work Plan: Jennifer Allard

<b>Actions</b>	<b>Point of Contact</b>	<b>Materials Needed and Costs</b>	<b>Time Line</b>				<b>Expected Outcome or Product</b>
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will report progress.	What materials will be use to implement the strategy? What are the costs?	Check the projected quarter(s) for implementing the action this year.				What new information/resource do you expect to have after completion (data, lessons, report, etc.)?
			1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
Continue and increase division outreach initiatives.	Rose, Gabriel, Allard		X	X	X	X	Workshops; communication; Monthly discussion groups, email

## HUMANITIES WORK PLAN

Leadership team support person to those people monitoring strategies in this Work Plan: Cathy Colglazier							
Actions	Point of Contact	Materials Needed and Costs	Time Line				Expected Outcome or Product
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will report progress.	What materials will be use to implement the strategy? What are the costs?	Check the projected quarter(s) for implementing the action this year.				What new information/resource do you expect to have after completion (data, lessons, report, etc.)?
			1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
Develop and implement lessons in each Division that include topics in ethics and social responsibility.							
At each month's division meeting each teacher will submit a recent example of his or her instruction that integrates ethics and/or social responsibility.	Cathy Colglazier	Meeting time, index cards	Collect	Collect	Collect and analyze data	Report out findings	
Teachers will invite members of the TJ administration, counselors, and other interested people to attend lessons related to ethics and social responsibility. Teachers will copy these invitations to English and social studies chairs.	Cathy Colglazier David Zack	Time to tabulate, analyze, and interpret data.					Prepare to use summer hours to tabulate, analyze, and interpret data and to conduct follow-up interviews and report out findings.
Collects teachers' anecdotal reports of student violations of ethics or integrity. Collect teachers' reflections on the effective and ineffective elements of those events. Do a thematic analysis of the data during the summer to identify commonalities, issues, questions, and needs for further data collection	Colglazier/MacLean	Summer curriculum hours					

## FLAMPE –World Languages WORK PLAN

Leadership team support person to those people monitoring strategies in this Work Plan: Genevieve Delfosse							
Actions	Person(s) Responsible	Materials Needed and Costs	Time Line				Expected Outcome or Product
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will report progress.	What materials will be use to implement the strategy? What are the costs?	Check the projected quarter(s) for implementing the action this year.				What new information/resource do you expect to have after completion (data, lessons, report, etc.)?
			1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
We will implement initiatives started last year. (Summary) ✓ Level 1 WL programs will do CITIES research ✓ Level 2 WL programs will do HOUSING research ✓ Level 3 WL programs will do ECOLOGY research Level 4 WL will tie to ONE QUESTION	<u>ALL of the WL teachers</u> will do at least <u>ONE RESEARCH</u> project in their programs	JLC time dedicated to discussing this research  Smartboards needed in all WL classrooms	X	X	X	X	Models to use in subsequent years  Participation by advanced levels in the TJStar

Leadership team support person to those people monitoring strategies in this Work Plan: Genevieve Delfosse

Actions	Person(s) Responsible	Materials Needed and Costs	Time Line				Expected Outcome or Product
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will report progress.	What materials will be use to implement the strategy? What are the costs?	Check the projected quarter(s) for implementing the action this year.				What new information/resource do you expect to have after completion (data, lessons, report, etc.)?
			1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
We will continue initiatives started last year and add some new ones (Summary) ✓ <u>Russian TJ program</u> (teacher and students) visits middle schools where Russian is not offered ✓ <u>Latin TJ program</u> does presentation on Mythology at Barnes and Noble ✓ <u>Spanish TJ program</u> tutors Hispanic children at Weyanoke ✓ <u>Spanish TJ program</u> initiated a “book for children” project, books on tape narrated by TJ Spanish Students Other WL programs are planning to implement other outreach programs	<u>Betsy Sandstrom</u> , for Russian <u>Christine Conklin</u> , for Latin <u>Alex Pou</u> , for Spanish <u>Genevieve Delfosse</u> , for all other WL languages	Possible funds to buy material to use in the Middle Schools  JLC time used for coordinating	X	X	x	X	Project can be maintained and improved over the next few years  Increased awareness about TJHSST among sectors of the No VA population NOT well represented in the school Data will be collected: schools impacted, number of students involved

## FLAMPE - Driver's Ed, Health and Physical Education WORK PLAN

Actions	Person(s) Responsible	Materials Needed and Costs	Time Line				Expected Outcome or Product
			1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will report progress.	What materials will be use to implement the strategy? What are the costs?	Check the projected quarter(s) for implementing the action this year.				What new information/resource do you expect to have after completion (data, lessons, report, etc.)?
Expand research regarding relationship of fitness and disease	Teri Davis to report	Use of JLC time Web Research					Create report to share with students
Analyze how alcohol affects the brain	Teri Davis to report	Use of JLC time Web Research					
Address Ethics and Social Responsibility by making students aware that driving is a privilege and not a right	All PE, Health and Dr. Ed. TJ teachers	JLC time					Lesson plans and report
Address Social Responsibility by discussing prevention of communicable diseases.	Jeff James to report	JLC time					
Address Ethics and Social Responsibility by teaching and demonstrating sportsmanship	Jeff James to report	JLC time					

## FLAMPE – Fine Arts WORK PLAN

Actions	Person(s) Responsible	Materials Needed and Costs	Time Line				Expected Outcome or Product
			1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will report progress.	What materials will be use to implement the strategy? What are the costs?	Check the projected quarter(s) for implementing the action this year.				What new information/resource do you expect to have after completion (data, lessons, report, etc.)?
Continue to develop interdisciplinary lessons as needed (or mixed ensembles).	Bailey, Levowitz, Ulrey	Time					
Create and maintain departmental calendar.	Mary Ulrey						Create and maintain a system
Evaluate and upgrade music theory lab to provide students research experiences with current music software.	Adam Levowitz	Training in Pro-Tools, Pro-tools Software					
Align rudimentary goals among Band, Orchestra, and Chorus to ensure that students in each ensemble have some theoretical skills.	Bailey, Levowitz, Ulrey	Staff is using JLC do share those goals and come up with the appropriate assessment tools.					
Increase overall student interest and awareness in art and design at TJ.	Andrew Saffron						
Hold a “Senior Art Show” or “Junior/Senior Show” (depending on numbers) towards the end of the year in an area/room of the school.	Andrew Saffron						
Team up with the website creators/curators to allow graphics student input and design capabilities.	Andy Saffron						

## STUDENT SERVICES WORK PLAN

Leadership team support person to those people monitoring strategies in this Work Plan: Brandon Kosatka							
Actions	Point of Contact	Materials Needed and Costs	Time Line				Expected Outcome or Product
			Check the projected quarter(s) for implementing the action this year.				
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will report progress.	What materials will be use to implement the strategy? What are the costs?	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	What new information/resource do you expect to have after completion (data, lessons, report, etc.)?
Weekly meetings dedicated to program development and assessment	R5	Kosatka	X				
Dedicate a consistent time for DSS staff to consult and collaborate re: student needs	ESR2	Kosatka	X				
Increase accountability by collecting and analyzing evaluative data for selected DSS programs	ESR1	Kosatka		X	X	X	
Create a comprehensive 9 <sup>th</sup> grade transition program to foster healthy and successful transition to our school community	A2, A4, A5, ESR1	Kosatka			X	X	
Communicate consistently with the school community using BlackBoard, Naviance, and the new TJ public website	SCC5	Kosatka	X	X	X	X	
Establish 'work teams' with the department to help delineate roles and responsibilities for differentiated staffing needs	R4	Kosatka	X	X	X	X	
Develop and implement the 10 <sup>th</sup> grade career program	A2	Kosatka			X	X	

## LIBRARY SERVICES WORK PLAN

Leadership team support person to those people monitoring strategies in this Work Plan: Becca Ferrick							
Strategies	Point of Contact	Materials Needed and Costs	Time Line				Expected Outcome or Product
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will monitor the strategy.	What materials will be used to implement the strategy? What are the costs?	Check the projected quarter for implementing the strategy this school year.				What new information/resource do you expect to have after completion (data, lessons, report, etc.)?
			1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
Provide library and database orientations for all freshmen IBETs and Senior Tech Labs.	B. Ferrick	Handouts; instructional time; web resource update.	X				Freshmen and seniors prepared for year-long research process.
Offer review/trials of new and alternative databases.	B. Ferrick	Email notification of trial access.	X	X	X	X	Input on how to spend our budget most effectively to meet needs.
Solicit suggestions for collection development and library program services.	B. Ferrick	Email solicitations to faculty and announce to students.	X	X	X	X	Collection and services tailored to best meet the needs of patrons.
Offer training and collaboration opportunities through JLC.	B. Ferrick	Offer breakout sessions through JLC calendar.	X	X	X	X	Increased collaboration and scheduling across the curriculum.
Update Library web presence and migrate to Blackboard site.	B. Ferrick	Time and BB training.	X	X	X	X	Standardization with other school resources.

## TECHNOLOGY TEAM WORK PLAN

Leadership team support person to those people monitoring strategies in this Work Plan: Richard Washer							
Strategies	Point of Contact	Materials Needed and Costs	Time Line				Expected Outcome or Product
			1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
What we will do to achieve the objective. <i>(Include professional development and parent involvement)</i>	Person(s) who will monitor the strategy.	What materials will be used to implement the strategy? What are the costs?	Check the projected quarter for implementing the strategy this school year.				What new information/resource do you expect to have after completion (data, lessons, report, etc.)?
Training Strategy & Schedule	Moe Hansan		x				A plan in place to support ongoing and new IT training needs
Job Description and Delineation	Brandon Kosatka, Richard Washer		x				A clear strategy for minimizing the impact of reduction in IT work force
IT Storage and Receiving Area	Richard Washer, Brandon Kosatka		x				Less hallway clutter
Wish List	Richard Washer			x			A clearly defined process and an easily accessible database of information
Imaging (desktops and laptops)	Bryan Phillips			x			Streamlining maintenance and upgrades of software/hw.
Inventory	Bryan Phillips , Moe Hansan			x			Information needed for # 7 and # 8
Upgrading Network Equipment to support growing needs (including 1,500 and growing devices): load balancing, fault tolerance & data protection	Bryan Phillips, Pete Morasca				x		More available and improved resources for increasing curricular demands in labs and classrooms.
Renovation Plan	Pete Morasca					x	A model of current and future needs

## SIP COMMITTEE MEMBERS

Name	Position	Name	Position
Mary Ann Bosley	Assistant Principal	Bob Latham	Optics Lab Director
Carter Vaden	One Questions Leader/Teacher	Jennifer Seavey	English/Journalism Teacher
Mike Stueben	Math Teacher	Jay Lamb	Social Studies Teacher
Mary McDowell	Assistant Principal	Ithalda Uston	Science Teacher
Melissa Schoeplein	Government Teacher	Judy Howard	Admissions Director
Anna Brown	Social Studies Teacher	Brandon Kosatka	Director of Student Services
LeeAnn Hennig	Astronomy Teacher	Heather Sondel	Assistant Principal
John Woodwell	Geosystems Teacher	Carol Rychlik	Math Teacher
Betsy Sandstrom	Russian Teacher	Tonya Guiffre	School Counselor
Koji Otani	Japanese Teacher	Evan Glazer	Principal
Myra Spoden	Math Teacher	Teri Davis	Health and PE Instructor
Jim Jarvis	Division Manager, SciTech	Richard Washer	Technology Specialist
Jennifer Allard	Division Manager, Math	Becca Ferrick	Head Librarian
Cathy Colglazier	Division Manager, Humanities	Jen Hertzberg	Intern
Genevieve Delfosse	Division Manager, FLAMPE	Rich Deivert	Intern
Jeff James	Health and PE Instructor	Aria Sharma	Student
Andrea Cobb	Science Teacher	Laura Quintela	Student
Meena Krishnan	Parent	Abraham Lerner	Parent