WASC Action Plan – Science
Student Achievement

Date	Tasks / Steps	Person(s) Responsible	Resources Needed
Fall 2006	• Continue to align course content to the state standards in Earth Science and Physics • Enhanced and increased use of teacher generated tests to identify problem areas and to implement appropriate re-teaching strategies	Earth science and physics teachers as well as district All Science Teachers	At least one buyback day
Spring 2007	• Implement a review curriculum prior to CST/STAR testing in Earth Science • Revise and Improve Physics CST/STAR review curriculum and continue its use • Use formative assessments to analyze and improve student achievement	Earth Science and Physics Teachers All science teachers	None
Fall 2007	• Realign chemistry courses to the state standards. • 9th and 10th grade teachers need to integrate a study skills curriculum into their courses • Continue to use formative assessments to analyze and improve student achievement • Implement a SCT/STAR review curriculum on Chemistry Classes	Chemistry teacher Biology and Earth Science Teachers All Science Teachers Chem. Teacher	None
Spring 2008	• Realignment of Biology course content to meet the state standards • Implement a SCT/STAR review curriculum in Biology Classes • Continue integration of study skills into 9th and 10th grade classes • Continue to use formative assessments to analyze and improve student achievement	Biology Teacher, site and district administration Biology Teachers Bio and Earth Science teachers All Science Teachers	Buyback day or release day
Fall 2008	• Review status of realignment efforts in all science classes • Implementation of remediation and re-teaching strategies to improve student achievement • Continue integration of study skills into 9th and 10th grade classes • Continue to use formative assessments to analyze and improve student achievement	Teachers	None

Student Achievement (cont) Spring 2009	• Continue to implement re-teaching and remediation strategies to improve student achievement • Continue integration of study skills into 9th and 10th grade classes • Continue to use formative assessments to analyze and improve student achievement	Teachers Teachers Teachers	None
Fall 2009	• Continue to implement re-teaching and remediation strategies to improve student achievement • Continue integration of study skills into 9th and 10th grade classes • Continue to use formative assessments to analyze and improve student achievement • Implement astronomy curriculum in earth science classes that utilizes the RedShift 5 astronomy software •	Teachers Teachers Teachers Earth science teachers	None
Spring 2010	• Continue to implement re-teaching and remediation strategies to improve student achievement • Continue integration of study skills into 9th and 10th grade classes • Continue to use formative assessments to analyze and improve student achievement • Begin implementing computer based labs in Earth Science course	Teachers	None
Fall 2010	• Continue to implement re-teaching and re-mediation strategies to improve student achievement • Continue integration of study skills into 9th and 10th grade classes • Continue to use formative assessments to analyze and improve student achievement	Teachers	None
Spring 2011	• Continue to implement re-teaching and re-mediation strategies to improve student achievement • Continue integration of study skills into 9th and 10th grade classes • Continue to use formative assessments to analyze and improve student achievement • Begin implementing computer based labs in Biology course	Teachers	None
Fall 2011	• Continue to implement re-teaching and re-mediation strategies to improve student achievement • Continue integration of study skills into 9th and 10th grade classes • Continue to use formative assessments to analyze and improve student achievement	Teachers	None

Student Achievement (cont) Spring 2012	• Continue to implement re-teaching and remediation strategies to improve student achievement • Continue integration of study skills into 9th and 10th grade classes • Continue use of formative assessments to analyze and improve student achievement	Teachers	None

Professional Development

Fall 2007	• Attend appropriate science teachers conferences such as Physics in Our Neighborhood, AAPT, etc… • Buy back or release days to use the OARS software to analyze student achievement on the prior years CST test, paying particular attention to sub-groups	Teachers and dept. chair Administration and site council Dept. Chair, Principal and District	Funding for fees and travel Funding for buyback or release days.
Spring 2007	• Select new standards based textbooks in survey biology, earth science and physics • Continue discussing the use of formative assessments to analyzing and improving student achievement • Teachers to be trained in using the OARS (online assessment and reporting system)	Science teachers, administration Teachers Dept. Chair, District and Site Administration	Funding for textbooks ($85,000) At least one buyback or release day
Fall 2007	• Attend appropriate science teachers conferences such as Physics in Our Neighborhood, AAPT, etc… • Buy back or release days to use the OARS software to analyze student achievement on the prior years CST test, paying particular attention to sub-groups	Teachers and dept. chair Administration and site council Dept. Chair, Principal and District	Funding for fees and travel Funding for buyback or release days.
Spring 2008	• Prepare curriculum to use new textbooks and supplementary materials • Meet as a department to discuss re-teaching strategies and remediation strategies to use with under-performing students • Train to teach using I Redshift 5 Astronomy software	Administration and district Science Teachers Dept. Chair, Administration and District	Funds for buyback or release days Funding for buyback day

Professional Development (cont) Fall 2008	• Attend appropriate science teachers conferences such as Physics in Our Neighborhood, AAPT, etc… • Buy back or release days to use the OARS software to analyze student achievement on the prior years CST test, paying particular attention to sub-groups and their performance • Develop astronomy curriculum for the earth science course that utilizes the **Redshift 5** Astronomy Software	Teachers, Administration SIP Administration, District, Dept. Chair Administration, District, Dept. Chair	Funding for fees and travel Funding for buyback or release day Funding for buyback or release day
Spring 2009	• Dept. chair to provide training in the use of the room 10 computer lab	Dept. Chair, Administration, District	Buyback or release day
Fall 2009	• Use the OARS software to analyze student achievement on the prior years CST test, paying particular attention to sub-groups and their performance • Train earth science teachers in use of probes and computers in order to integrate computer based labs into earth science curriculum	Administration, District, Dept. Chair Administration, District, Dept. Chair	Funding for buyback or release day Funding for buyback or release day
Spring 2010	• Share best practices among science teachers	Administration, District, Dept. Chair	Funding for buyback or release day
Fall 2010	• Use the OARS software to analyze student achievement on the prior years CST test, paying particular attention to sub-groups, and their performance • Train biology teachers in use of probes and computers in order to integrate computer based labs into biology curriculum	Administration, District, Dept. Chair Administration, District, Dept. Chair	Funding for buyback or release day Funding for buyback or release day
Spring 2011	• Share best practices among science teachers	Administration, District, Dept. Chair	Funding for buyback or release day
Fall 2011	• Use the OARS software to analyze student achievement on the prior years CST test, paying particular attention to sub-groups and their performance	Administration, District, Dept. Chair	Funding for buyback or release day

Spring 2012	• Department/classroom shared observations to assess best practices among science teachers	Administration, District, Dept. Chair	Funding for buyback or release day

Culture, Facilities/Materials and Support

Date	Tasks / Steps	Person(s) Responsible	Resources Needed
Fall 2006	• Purchase a new LCD projector for use in the room 10 computer lab in order to better instruct students in the use of software • Install data collection software on the eight new lap top computers in the chem. lab. • Implement use in chemistry classes • Purchase newer computers for the room 10 lab to replace aging computers	Dept. Chair to write a grant proposal Dept. chair and chemistry teacher Dept. chair, Administration, GATE, SIP and Foundation	$850 for purchase of the projector Funding ($6000) for new computers
Spring 2007	• Continue implementation of lap top data acquisition technology in the chemistry lab • Continue with communication model already established between dept. chair and the science department • Select new standards based texts for Earth Science, Physics, Survey and Sheltered Biology • Meet with counselors and administration to discuss high enrollment of 9th graders in science • Continue to purchase new computers for the room 10 lab	Chemistry teacher and Dept. chair Science Teachers, District Dept. Chair, Administration and Counselors Dept. chair, Administration, GATE, SIP and Foundation	None Funding for books More sections for science department Funding ($6000) for new computers
Fall 2007	• Continue implementation of lap top data acquisition technology in the chemistry lab • Start purchasing LCD projectors for all science teachers • Purchase newer computers for the room 10 lab to replace aging computers • Continue with communication model already established between dept. chair and the science department • Install Redshift 5 Astronomy Software in computer lab	Chem. Teacher Dept. Chair and Administration, SRHS Foundation and Site Council Dept Chair Dept. Chair Dept. Chair	None Funding for projectors Funding for computers None

Date	Tasks/Steps	Person(s) Responsible	Resources Needed
Culture, Facilities and Support (cont) Spring 2008	• Continue purchasing LCD projectors for all science teachers • Continue with communication model already established between department chair and members of the science department • Purchase five new DVD players so all science classrooms have a DVD player • Purchase newer computers for the room 10 lab to replace aging computers • Continue work with counselors to insure proper level placement of students.	Dept. Chair, site administration, SIP Dept. Chair, SIP, Site Administration, Foundation Dept. Chair, Administration and Counselors	Funding None Funding More sections for Science department
Fall 2008	• Identify and select new modern standards based DVD videos for use in Earth Science and Biology Classes. Seek funding and then purchase these videos • Visit feeder schools to improve articulation	Teachers, Dept. Chair, GATE, Foundation, SIP, Administration	Funding for videos
Spring 2009	• Purchase new teacher computers	Teachers, Dept. Chair, Administration, SIP, Foundation	Release time More science sections Funding for new computers ($4000)
Fall 2009	• Continue to purchase new computers for teachers • Continue communication and shared decision making model for running the science department • Continue use of technology in physics and chemistry labs	Dept. chair, administration, SIP, Foundation Dept. Chair	Funding for new computers ($4000) None
Spring 2010	• Continue communication and shared decision making model for running the science department • Continue use of technology in physics and chemistry labs and foster use in Earth Science courses • Lab computer upgrades	Dept. chair, administration, SIP, Foundation Dept. Chair	Funding

Date	Tasks/Steps	Person(s) Responsible	Resources Needed
Culture, Facilities and Support (cont) Fall 2010	• Continue communication and shared decision making model for running the science department • Continue technology improvement in physics, chemistry and earth science labs	Dept. chair, administration, SIP, Foundation Dept. Chair Teachers	Funding for equipment
Spring 2011	• Continue communication and shared decision making model for running the science department • Upgrade technology in physics and chemistry labs and foster use in Earth Science and Biology • Continue efforts to encourage 9th graders to take science • Visit feeder schools to achieve better articulation between SRHS and SRMS	Dept. chair, administration, SIP, Foundation Dept. Chair, GATE, Foundation Dept. Chair, Counselors and Administration	None Funding for more probes More sections for science department
Fall 2011	• Upgrade computers for teachers • Continue in communication and shared decision making model for running the science department • Continue use of technology in physics, chemistry, earth science and biology labs • Start discussions of more field trips for science students • Plan at least one field trip for Physics or Chem. or Bio/Earth Science	Dept. chair, administration, SIP, Foundation Dept. Chair Teachers Teachers	Funding for new computers • ($4000) • None May need funding for more probes
Spring 2012	• Continue communication and shared decision making model for running the science department • Continue use of technology in physics and chemistry labs and foster use in Earth Science and Biology • Have at least one field trip in Biology, Chem., Physics or Earth Science	Dept. chair, administration, SIP, Foundation Teachers, Administration	None Funding for more probes More sections for science department Funding for field trip