

2003-04

Fairfax County Public Schools
School Improvement Plan



Herndon High School
Cluster 1

Janice G. Leslie
Principal

Committee Members

Committee Chair: Ms. Nancy Barron, Assistant Principal

Committee Members:

Name	Position
Ms. Jean Blackwood	Social Studies Department Chair
Ms. Martha Cropper	PTSA Member, Hispanic PTSA Chair
Ms. Arlene Danby	Science Department Chair
Ms. Janice Leslie	Principal
Ms. Lisa Lombardozzi	PTSA President
Ms. Luanne Pickett	Mathematics Department Chair
Mr. Matt O'Connor	AP Coordinator
Ms. Theresa Wright	English Department Chair

Principal's signature: _____

Cluster Director: Mr. Denny Dearden

Cluster Coordinator: Mr. Don Cammiso

School Mission Statement

Virginia Board of Education Mission

The mission of Virginia's public education system, first and foremost, is to educate students in the fundamental knowledge and academic subjects that students need to become capable, responsible, and self-reliant citizens. Therefore, the mission of the Board of Education and the Superintendent of Public Instruction, in cooperation with local school boards, is to increase student learning and academic achievement.

Fairfax County Public Schools Vision and Mission Statement:

The vision of Fairfax County Public Schools is "to provide a gifted-quality education to every child in an instructional setting appropriate for his or her need." The vision is supported by a mission "to educate all students to meet high academic standards and to prepare all students to be responsible citizens in the 21st century."

School Vision and Mission Statement:

Herndon High School provides educational programs dedicated to fully developing students as contributing and responsible citizens for the new millennium. Our programs promote the development of:

- Life-long learning skills
- Ethical behavior
- Technological competence
- Appreciation of cultural diversity
- Individual and community responsibility



FAIRFAX COUNTY PUBLIC SCHOOLS School Demographics by Cluster and School

CLUSTER 1 HERNDON HIGH Category	June 2001		June 2002		June 2003	
	#	%	#	%	#	%
ETHNICITY						
ASIAN OR PACIFIC ISLANDER	304	13.72	324	14.36	306	13.55
BLACK (NOT OF HISPANIC ORIGIN)	212	9.57	216	9.57	207	9.17
HISPANIC	259	11.69	268	11.87	332	14.70
WHITE (NOT OF HISPANIC ORIGIN)	1,413	63.76	1,417	62.78	1,373	60.81
OTHER	28	1.26	32	1.42	40	1.77
	2,216		2,257		2,258	
GENDER						
FEMALE	1,089	49.14	1,117	49.49	1,105	48.94
MALE	1,127	50.86	1,140	50.51	1,153	51.06
	2,216		2,257		2,258	
ENGLISH PROFICIENCY						
ENGLISH PROFICIENT	1,962	88.54	2,008	88.97	1,972	87.45
LIMITED ENGLISH	254	11.46	249	11.03	283	12.55
	2,216		2,257		2,255	
LIMITED ENGLISH LEVELS						
LA-DEVELOPING LITERACY SKILLS	28	11.02	28	11.24	20	7.07
A-BEGINNING ESOL-NOT PROF IN ENG	51	20.08	67	26.91	89	31.45
B1-INT ESOL - LIMITED PROF IN ENG	46	18.11	30	12.05	40	14.13
B2-ADV ESOL-LIMITED ENG RD/WRT SKL	28	11.02	30	12.05	44	15.55
B3-ACHIEVING ENGLISH PROFICIENCY	101	39.76	94	37.75	90	31.80
	254		249		283	
FEE WAIVER						
NO FEE WAIVER	1,906	86.01	1,892	83.83	1,802	79.81
FREE OR REDUCED FEES	310	13.99	365	16.17	456	20.19
	2,216		2,257		2,258	
EDUCATIONAL DESIGNATION						
GENERAL EDUCATION	1,943	100.00	2,000	100.00	2,013	100.00
	1,943		2,000		2,013	

FAIRFAX COUNTY PUBLIC SCHOOLS School Demographics by Cluster and School

**CLUSTER 1
HERNDON HIGH**

Category	June 2001		June 2002		June 2003	
	#	%	#	%	#	%
SPECIAL EDUCATION SERVICES*						
AUTISTIC RESOURCE	0	0.00	1	0.39	0	0.00
EMOTIONALLY DISABLED RESOURCE	47	17.22	30	11.67	25	10.20
EMOTIONALLY DISABLED S-C	3	1.10	1	0.39	4	1.63
HEARING IMPAIRED ITINERANT	0	0.00	1	0.39	0	0.00
HEARING IMPAIRED TOTAL	1	0.37	0	0.00	0	0.00
LEARNING DISABILITY RESOURCE	82	30.04	76	29.57	48	19.59
LEARNING DISABILITY S-C	122	44.69	103	40.08	105	42.86
MILD RETARDATION RESOURCE	0	0.00	1	0.39	0	0.00
MILDLY RETARDED	8	2.93	9	3.50	17	6.94
OTHER HEALTH IMPAIRED RESOURCE	1	0.37	14	5.45	22	8.98
OTHER HEALTH IMPAIRED S-C	0	0.00	9	3.50	17	6.94
PHYSIC'LY HANDICAP'D ITINERANT	1	0.37	2	0.78	0	0.00
PHYSIC'LY HANDICAP'D S-C	0	0.00	2	0.78	0	0.00
SPEECH HANDICAPPED ITINERANT	6	2.20	6	2.33	5	2.04
VISUALLY IMPAIRED PARTIALLY	2	0.73	2	0.78	2	0.82
	273		257		245	
MOBILITY						
MOBILITY RATE		14.42		16.71		

Special Programs

Global Information

Herndon High School has many special programs to help students to achieve. All programs have an impact on students and some assist students in non-academic ways, building their self-confidence, and allowing them to do better in all facets of their lives. These programs include:

- Alcohol and Drug Services Outreach Program, with presentations by Mike Torres to students and parents
- Advanced Placement Classes
- After School SOL Remediation
- Asian Club
- Black History Month endeavors
- Brown Bag Lunch for English and math to support increased achievement on SATs, funded by an award of \$12,000 from a Target 5 grant.
- Capacity Building Grand/Inclusive Schools – to assist staff to serve a broader range of students with disabilities
- Career Center Outreach including night meetings and extended hours for the Career Center
- Character Education and Honor Code
 - Project X – after school on Thursdays to involve students in Character Education
 - Prom Promise Week
- Chesapeake Bay Foundation Water Quality Study
- College Partnerships
- Community Connections –professionals from the minority community speak with students about success in Careers
- Community Outreach through the Greater Herndon Community Coalition and the HHS Pyramid PTAs, on topics such as peer pressure, honors and AP courses, internet safety, helping children cope with bullying, and recognizing depression in adolescents
- Community Partnerships with the Dulles Hyatt Hotel, the Herndon Chamber of Commerce, and the Herndon United Methodist Church
- Concepts Science
- Concepts Social Studies
- Department chair reading study group to investigate literature related to promoting an understanding of minority achievement issues
- Department chair/school leader seminar prior to school opening in August 2003 to assess school needs and goals for 2003-2004. This daylong in-service also included data analysis of standardized testing and school demographics data, as well as SOL data for 2001-2003.
- Developing Literacies
- Developmental Reading
- EDSL training for department chairs and counselors
- Education for Employment
- Expanding Literacies

- Guidance initiatives including rising 9th grade orientation for students and parents and an electives faire
- Fast Math
- Forest Bio-Diversity Study through Conservation Research Center at the Smithsonian Institute
- onors Breakfast is held in June each year to recognize students with a 4.0 or above grade point average. This event is attended by school board members and the Dranesville District representative.
- Honor Roll – each grade level recognizes honor roll students each quarter
- Honor Society (NHS, math French, Spanish, Latin, German) – provide peer tutoring to students
- Individual remediation for students
- International Club – hosts International Night for minority parents and students
- Latino PTSA Association
- Latinos Unidos Club
- Leadership class
- LEAD Fairfax with StrenthsFinder training, teacher-leader and support staff training, Gallup Workplace Climate (Q12) audit
- Lunch and Learning
- Math Empowerment
- Minority Student Leadership Training at William & Mary
- Multicultural Authors in Residence – student seminars with authors
- Muslim Student Alliance
- Political science interns
- Robotics
- School/community service
 - Project Excel – Pyramid approach
 - ROTC
 - SAGA (Students Against Global Abuse) for recycling A Green Flag School – the only high school in the USA so honored
- Science used across the curriculum via the Planetarium
- Special Education Parent Network
- Special Education/Regular Education Team Training with an emphasis on co-teaching
- Teacher In-Services for ESOL, Reading in the Content Area, Ethnic and Language Minority Students
- Technology emphasis with a special course for tech aides, FCPS pilot for IGPro and Classxp, award winning Web page linked to teacher web sites and school programs, and many interactive web sites for students
- Vertical Teaming
- Word of the Day to encourage English across the curriculum by all staff members
- Work Awareness Training (WAT) Program
- Young African American Achievers

In addition, every student in the classes of 2004-2006 whose SOL scores were from 375 to 399 was personally called, told that they had only missed 1 (or 2, or 3, etc.) question(s), and were encouraged to attend SOL 3-week prep classes and to re-take the exam. Many students did, with satisfying results.

An Achievement Breakfast is held mid-year for all students who have shown improvement in their grades, and special note cards are sent out with the principal's signature, lauding the

students for their improvement. In this way, many students who might not otherwise be recognized have the opportunity to be honored. Many of these are minority students.

Regular meetings are held with minority parents to discuss the needs and concerns for their students. Translators are available to assist with communication.

Standards of Learning School Accreditation Goals

(provided by VDOE)

Fully Accredited

Title I

**School wide Program Budget and Justification Report
(if applicable)**

Not Applicable

Mathematics

Objective: Students will improve achievement in mathematics.

Indicators of Achievement:

Mathematics Indicators	Target if Applicable	Achieved Indicator (yes or no)
The percent of students passing at the proficient or advanced levels on the Standards of Learning tests in Algebra I, Geometry, and Algebra II will increase	2	
The percent of students passing the Standards of Learning tests will increase.	2	
Students successfully completing Algebra I and successfully passing the SOL Algebra I test will increase.	4	
The percent of juniors and seniors enrolled in AP mathematics courses will be maintained or increased from 2002-2003 levels.	3	
The percent of Black and Hispanic students enrolled in AP mathematics will increase from 2002-2003 levels.	3	
The percent of students taking AP mathematics courses who receive a 3 or higher will increase from 2002-2003 levels.	3	

Areas of Focus:

- The achievement gap on SOLs and the participation gap in AP courses for Black and Hispanic students will decrease.
- Increase Sol Performance for all students especially students with disabilities and LEP students.
- Maintain/Increase AP Math enrollment
- Increase the number of students who receive 3 or higher on the AP exam.

WORK PLAN FORMAT

Objective: Students will improve achievement in mathematics.								
Work Plan	Data Sources	Status	Person(s) Responsible	Staff Development	Materials Needed	Time Line	Parent and/or Community Involvement	Evidence of Completion
What will you do to achieve the objective?	What data indicate this is an area of need?	Is this a new (N) or continued (C) work plan?	Who will be responsible for this work plan?	Is staff development required? If so, briefly describe.	Are materials or funding required? If so, what and at what cost?	What will the time line be? (dates for accomplishing work plan)	Will parents or the community be involved? If so, how?	Did you complete the work plan? (evidence to be entered July 2003)
Teachers will give more opportunities to practice assessing information using a multiple-choice format on unit and/or quarterly tests.	SOL Data	C	All Teachers	Curriculum Team Meetings Abacus Turn-around training. Test Pak Training	Access Data Base VDOE Released Items Abacus Database Textbook Test Generators Test Pak Materials	October 1, 2003 through the end of the year.	No	
Teachers will analyze SOL strand data to determine which strands need improvement and develop sample SOL questions to be used on a daily basis as warm-ups.	State Item Analysis SOL Strand Data	C	All Teachers in SOL Curriculum Teams	Curriculum Team Meetings	SOL Disaggregator Access Data Base	October 1, 2003 through end of the year.	No	

Objective: Students will improve achievement in mathematics.								
Work Plan	Data Sources	Status	Person(s) Responsible	Staff Development	Materials Needed	Time Line	Parent and/or Community Involvement	Evidence of Completion
What will you do to achieve the objective?	What data indicate this is an area of need?	Is this a new (N) or continued (C) work plan?	Who will be responsible for this work plan?	Is staff development required? If so, briefly describe.	Are materials or funding required? If so, what and at what cost?	What will the time line be? (dates for accomplishing work plan)	Will parents or the community be involved? If so, how?	Did you complete the work plan? (evidence to be entered July 2003)
Teachers will provide extra review sessions before the AP test and a practice AP Exam before the official test date.	EDSL Database College Board AP Test Results	C	AP Teachers	No.	Previous AP Exams AP Test Prep Textbooks Websites for self paced student prep	Jan-May 2004	Parents will be informed of after school review sessions.	
Identify students (particularly minority students) who could enroll in AP Math Courses next year.	Teacher recommendation	C	Pre Calc, Trig/MA & Adv Alg II teachers	No.	None.	Feb-Mar 2004	No	

Objective: Students will improve achievement in mathematics.

Work Plan	Data Sources	Status	Person(s) Responsible	Staff Development	Materials Needed	Time Line	Parent and/or Community Involvement	Evidence of Completion
What will you do to achieve the objective?	What data indicate this is an area of need?	Is this a new (N) or continued (C) work plan?	Who will be responsible for this work plan?	Is staff development required? If so, briefly describe.	Are materials or funding required? If so, what and at what cost?	What will the time line be? (dates for accomplishing work plan)	Will parents or the community be involved? If so, how?	Did you complete the work plan? (evidence to be entered July 2003)
Teachers will compare student SOL scores by ethnicity to heighten teacher awareness of SOL failure rates.	SOL Test Scores & Ethnicity Data	C	All Teachers	Curriculum Teams	SOL Disaggregator EDSL Data	Beginning of 2 nd quarter.	No	
Teachers will analyze AYP test results to learn math participation & pass rates in NCLB population categories	NCLB Data	N	All teachers	Dept Meeting	NCLB Data	Oct Dept Meeting	No	

Objective: Students will improve achievement in mathematics.

Work Plan	Data Sources	Status	Person(s) Responsible	Staff Development	Materials Needed	Time Line	Parent and/or Community Involvement	Evidence of Completion
What will you do to achieve the objective?	What data indicate this is an area of need?	Is this a new (N) or continued (C) work plan?	Who will be responsible for this work plan?	Is staff development required? If so, briefly describe.	Are materials or funding required? If so, what and at what cost?	What will the time line be? (dates for accomplishing work plan)	Will parents or the community be involved? If so, how?	Did you complete the work plan? (evidence to be entered July 2003)
Use item analysis report to identify subject specific SOL concepts students need to strengthen.	Item Analysis Report & Strand Analysis	C	All teachers in curriculum teams.	No.	Item Analysis Report.	November Teacher Work Days	No	
Use SOL practice tests to prepare students for the SOL tests in the Spring.	SOL Test Results	C	All teachers of SOL courses	Test Pak Training	VDOE Released SOL Items Access Database Textbook test generator Test Pak Materials Jlab website	End of first quarter through the SOL test date.	No	

Objective: Students will improve achievement in mathematics.								
Work Plan	Data Sources	Status	Person(s) Responsible	Staff Development	Materials Needed	Time Line	Parent and/or Community Involvement	Evidence of Completion
What will you do to achieve the objective?	What data indicate this is an area of need?	Is this a new (N) or continued (C) work plan?	Who will be responsible for this work plan?	Is staff development required? If so, briefly describe.	Are materials or funding required? If so, what and at what cost?	What will the time line be? (dates for accomplishing work plan)	Will parents or the community be involved? If so, how?	Did you complete the work plan? (evidence to be entered July 2003)
Encourage Sp Ed students in teamed & self-contained classes to attend Math Empowerment	Preliminary AYP Test Results from FCPS	N	Teamed & Self-contained Teachers	Use the 195 th day for team teachers to meet to plan.	None	End of 1 st quarter.	No	
Include Special Ed teachers in curriculum team meetings	AYP Test Results	N	Curriculum Team Teachers	None	None	Oct 2003 - June 2004	No	

English

Objective: Improve student achievement in English

Indicators of Achievement:

English Indicators	Target (if Applicable)	Achieved Indicator (yes or no)
Student scores on SOL writing for grade 11 will be maintained or increase from 2002-2003 (96.4%) level.	2	
Student scores on SOL RLR for grade 11 will be maintained or increase from 2002-2003 (97.5%) level.	2	
The percentage of students taking AP courses will be maintained or increase from 2002-2003 levels.	3	
The percentage of students scoring 3 or better on the AP tests will increase from 2002-2003 levels (AP Language and Composition = 72%, AP English Literature = 61%).	3	

Areas of Focus: The English department's program of studies is centered on the following areas: reading comprehension, composition process, editing process, and use of resource materials. Data from 2002-2003 SOL test results, NCLB AYP charts and the College Board indicate the current program of studies prepares students for success. While maintaining a central focus on instruction, all teachers, grades 9-12, will work to identify students who may benefit from the variety of remediation options available at school.

Work Plan Format

Objective: Students will improve achievement in English.								
Work Plan	Data Sources	Status	Person(s) Responsible	Staff Development	Materials Needed	Time Line	Parent and/or Community Involvement	Evidence of Completion
What will you do to achieve the objective?	What data indicate this is an area of need?	Is this a new (N) or continued (C) work plan?	Who will be responsible for this work plan?	Is staff development required? If so, briefly describe.	What materials will be used to implement work plan?	What will the time line be? (dates for accomplishing work plan)	Will parents or the community be involved? If so, how?	Did you complete the work plan? (evidence to be entered July 2004)
By grade level, teachers will share strategies and materials they've found helpful in SOL preparation.	Student assessment and individual student scores Determined from SOL Disaggregator Results from TEST PAK Practice exams	C/N	Teachers 9-12	Department meetings and grade level meetings will be used to share strategies and materials.	Cost – none Individual teacher materials Computers	Sept 2003-June 2003		
Teachers will create testing situations similar to that of the SOL or AP	AP prompts Released test items TEST PAK software	C.	Honors & AP teachers for AP preparation. Teachers 9-12 for SOL preparation.	None	AP materials 2003 test scores (AP and SOL) VDOE released test items Flannagan materials	Sept 2003-June 2003		

Objective: Students will improve achievement in English.

Work Plan	Data Sources	Status	Person(s) Responsible	Staff Development	Materials Needed	Time Line	Parent and/or Community Involvement	Evidence of Completion
What will you do to achieve the objective?	What data indicate this is an area of need?	Is this a new (N) or continued (C) work plan?	Who will be responsible for this work plan?	Is staff development required? If so, briefly describe.	What materials will be used to implement work plan?	What will the time line be? (dates for accomplishing work plan)	Will parents or the community be involved? If so, how?	Did you complete the work plan? (evidence to be entered July 2004)
Teachers of 9th, 10th, and 11 th graders will show increased vigilance to identify at-risk students who may benefit from enrollment in Expanding Literacies (9 th), English 12 SOL focus class, or any English honors or AP classes for the 2004 school year.	Class performance Test performance Attitude and effort in class English Language proficiency	N	Teachers 9-11	At team grade level meetings in February teachers will create a list of students to give to guidance for class scheduling.	Grades Teacher input	Feb 2003 – Registration for Fall 2004	Letters will be sent home to parents and students informing them about the class options available to them.	

History and Social Science

Objective: Students will improve achievement in history and social science.

Indicators of Achievement:

History and Social Science Indicators	Target if Applicable	Achieved Indicator (yes or no)
The percent of students passing the SOL test in Grades 9 (World History to 1500AD), 10 (World History from 1500), and 11(US History) will increase.	2	
Enrollment of Black and Hispanic students in AP social science courses will be maintained or increased.	3	
The percentage of students scoring three or higher on AP exams in the social sciences will increase.	3	

Areas of Focus: The achievement gap on SOLs and the participation gap in AP courses for Black and Hispanic students will decrease.

Work Plan Format

Objective: Students will improve achievement in history and social science.								
Work Plan	Data Sources	Status	Person(s) Responsible	Staff Development	Materials Needed	Time Line	Parent and/or Community Involvement	Evidence of Completion
What will you do to achieve the objective?	What data indicate this is an area of need?	Is this a new (N) or continued (C) work plan?	Who will be responsible for this work plan?	Is staff development required? If so, briefly describe.	What materials will be used to implement work plan?	What will the time line be? (dates for accomplishing work plan)	Will parents or the community be involved? If so, how?	Did you complete the work plan? (evidence to be entered July 2004)
Analyze data to determine weakest areas of performance on SOLs by students in 2002-2003, with special focus on minority population stats	Item Analysis Reports Category Results Special Populations Results	C	Curriculum Team Leaders	Teachers who are new to FCPS will be enrolled in the Standards Based FCPS course, and be mentored by curriculum team members	See Data Sources Column for needed materials	By end of 2 nd Quarter	Utilization of parent organizations to disseminate information about importance and results of SOLs	
Focus on test taking strategies and available test banks for practice, review, and remediation	SOL test scores/Reports	C	Individual Social Studies Teachers	No	Flannigan tests which are purchases by FCPS and provided to individual schools & additional newly published SOL review books	May 2004	Parents will be informed of after-school review sessions and encouraged to utilize Tips for Parents on the VA web site.	

Objective: Students will improve achievement in history and social science.								
Work Plan	Data Sources	Status	Person(s) Responsible	Staff Development	Materials Needed	Time Line	Parent and/or Community Involvement	Evidence of Completion
What will you do to achieve the objective?	What data indicate this is an area of need?	Is this a new (N) or continued (C) work plan?	Who will be responsible for this work plan?	Is staff development required? If so, briefly describe.	What materials will be used to implement work plan?	What will the time line be? (dates for accomplishing work plan)	Will parents or the community be involved? If so, how?	Did you complete the work plan? (evidence to be entered July 2004)
Focus on raising AP Psychology scores and maintaining pass rate in remaining AP courses	AP Scores from 2002 - 2003	C	Social Studies Administrator, AP Coordinator, Department Chair, Psychology Teachers	College Board Training of additional teacher & funds to provide time for former and new teachers to develop curriculum and strategies	Additional teaching materials as recommended by the College Board Institute	By end of 1 st semester for staff development initiatives	No	
Encourage enrollment of Black and Hispanic students in AP courses	Minority achievement data & special populations results on AP and SOL tests	C	Individual teachers and guidance counselors	No	Resources to hold additional meetings with students and parents that are the focus of encouraged enrollment	By end of 2 nd semester	Communication with parents of students who are to be enrolled	

Science

Objective: Students will improve achievement in science.

Indicators of Achievement: .

Science Indicators	Target if Applicable	Achieved Y/N By June 2004
The percent of students passing the SOL tests in Science will increase.	2	
The percent of students passing at the proficient or advanced levels on the SOL end-of-course tests in Earth Science, Biology, and/or Chemistry will increase.	2	
Enrollment for juniors and seniors in AP science courses will increase.	3	
The percent of Black and Hispanic students enrolled in AP Science will increase over the 2002-2003 school year enrollments.	3	
The percent of students scoring a 3 or higher on an AP exam will increase over the 2002-2003 school year results.	3	

Areas of Focus:

- Increase SOL Performance for all students.
- The achievement gap on SOL's and the participation gap in AP courses for Black and Hispanic students will decrease.

Work Plans:

1. Students will practice assessing information using a multiple-choice format.
2. Teams for each area of science will meet on a monthly basis and focus on SOL strands.
3. Studies support the theory that a better understanding of subject specific vocabulary increases knowledge retention and supports thinking processes. This theory can be applied to content covered in the Science SOL's. Once areas of poor comprehension have been identified teachers will focus on key vocabulary terms and develop more overt methods of emphasizing that vocabulary throughout the year. Some possibilities are flash cards, flip charts, and non-linguistic (picture) definitions.

- 4. Close the gap in SOL scores between minority and non-minority students. Previous test results for all students will be reviewed to include report card grades, overall SOL test results for all subject areas, student performance by NCLB category and any standardized test results which may be available in the EDSL database. Teachers will use this information to help focus on areas of need for student subgroups based on ethnicity, economic background, etc, and to develop specific techniques that address those areas or need. Some examples of techniques include: remediation in appropriate math and study skills, math pre-tests, use of graphic organizers and reading a textbook by using a concept overview**
- 5. Collaborate with Special Education and ESOL departments to improve student achievement. 1. Special Education: Teamed teachers will meet on a regular basis during common planning periods to identify specific problem areas, propose solutions, and analyze the results of their efforts. 2. ESOL: Concepts 1 Science classes will be assigned to ESOL teachers to meet the more basic language needs of the students. Science teachers will be assigned to Concepts 2 Science classes to provide a stronger science component and prepare the students for Biology 1. ESOL teachers will provide in-class support for science teachers who are inexperienced in the Concepts science curriculum.**
- 6. Use regular warm-up activities to focus on basic science concepts. This will include techniques such as short question-answer sessions, mini-lectures, student presentations, and word of the day activities. Previously presented material will be reviewed, new concepts will be introduced, trouble areas will be emphasized and thinking skills will be practiced. Analysis of previous SOL practice test results indicates that many students are intimidated when reading long questions. Warm-up activities can help them to overcome this issue. Students will be guided in how to read and process a question and then develop an answer that addresses the question.**
- 7. Use departmental pre and post-tests to assess student knowledge and progress and as an aid in the analysis of grades and SOL scores.**
- 8. Biology SOL scores have been fluctuating over the past three years dropping from 85.1% in 2000-2001 to 79.8% in 2002-2003, however the pass advanced increased percentage from 8.4% to 13.1% and overall enrollment increased from 584 to 639. A department goal is to identify what has caused the drop in passing and how to explain the increase in pass advanced percentages. The Biology team will utilize information in the EDSL database to look for indicators of ability and difficulty for our current biology students. Once those areas have been identified Biology teachers will utilize various strategies to improve student performance such as: warm-up questions, Test Wizard to develop practice tests, coordinate practice questions among teachers, after school remediation (after 2nd quarter), homework club (after 1st quarter). The team has already identified some difficult areas from the 2002-2003 SOL results, which include scientific investigation and how to deal with long wordy questions. Weak**

performance in the Ecology strands has prompted a reorganization of the syllabus placing Ecology at the end of the year to increase student recall of the concept.

9. Geosystems teachers will: develop reinforcement strategies to ensure student comprehension of key words, reinforce astronomy concepts at the end of the year.
10. Chemistry teachers will: review and give a final exam before the SOL to prepare for the SOL exam, develop other culminating activities for the final exam period, do more review of first semester topics, and assign review sheets as homework during second semester.
11. Physics teachers will: work to unify their approach to the physics curriculum and areas of emphasis, distribute letters to parents of students with D's or F's asking for parental involvement, schedule after school help periods, identify students with low algebra skills and offer extra help to raise their level of proficiency.
12. Increase student interest and enrollment in AP science courses with emphasis on minority students for the 2003-2004 school year, continue to offer AP Physics C in a single period rather than a double period and concentrate only on the mechanics section and test. This should increase the enrollment in AP Physics and give students more flexibility in scheduling double-blocked AP Biology and/or AP Chemistry.

Science

Objective: Students will improve achievement in science.								
Work Plan	Data Sources	Status	Person(s) Responsible	Staff Development	Materials Needed	Time Line	Parent and/or Community Involvement	Evidence of Completion
What will you do to achieve the objective?	What data indicate this is an area of need?	Is this a new (N) or continued (C) work plan?	Who will be responsible for this work plan?	Is staff development required? If so, briefly describe.	Are materials or funding required? If so, what and at what cost?	What will the time line be? (dates for accomplishing work plan)	Will parents or the community be involved? If so, how?	Did you complete the work plan? (evidence to be entered July 2004)
1. Refer to number above	SOL test format	C	All science teachers	No	None	In addition to other test forms each teacher will utilize multiple choice questions as a regular part of their curriculum.	Parents may review test performance with their student.	
2. Refer to number above	Direction from FCPS and the commonwealth of VA to develop plans to improve SOL test performance	C	Curriculum teams and Department Chair.	Yes. Analysis of SOL results using EDSL to identify areas that require reinforcement. Example: EDSL training and NCLB workshops and in-services at HHS.	EDSL SOL test results	Monthly meetings as scheduled by each team, in-school in-services, consultation with Department Chair to request EDSL analysis data.		

Objective: Students will improve achievement in science.

Work Plan	Data Sources	Status	Person(s) Responsible	Staff Development	Materials Needed	Time Line	Parent and/or Community Involvement	Evidence of Completion
What will you do to achieve the objective?	What data indicate this is an area of need?	Is this a new (N) or continued (C) work plan?	Who will be responsible for this work plan?	Is staff development required? If so, briefly describe.	Are materials or funding required? If so, what and at what cost?	What will the time line be? (dates for accomplishing work plan)	Will parents or the community be involved? If so, how?	Did you complete the work plan? (evidence to be entered July 2004)
3. Refer to number above	Review of SOL scores, specifically strand and item analyses	C	Department Chair and all science teachers	EDSL training; workshop presented by Richard Strong related to Professional Learning Communities and teaching techniques.	EDSL database, SOL scores including strand and item analyses	Fall 2003 - review data to identify areas of poor comprehension, pinpoint specific concepts for reinforcement and incorporate methods to emphasize those ideas throughout the year.		
4. Refer to number above	SOL test results and end of year grades	C	Department Chair and all science teachers	EDSL training, Disaggregator training.	EDSL and Disaggregator Data	Fall 2003 - identify and compare student performance in the NCLB categories; identify concept areas to emphasize; develop differentiated instruction techniques to reach all students.		

Objective: Students will improve achievement in science.

Work Plan	Data Sources	Status	Person(s) Responsible	Staff Development	Materials Needed	Time Line	Parent and/or Community Involvement	Evidence of Completion
What will you do to achieve the objective?	What data indicate this is an area of need?	Is this a new (N) or continued (C) work plan?	Who will be responsible for this work plan?	Is staff development required? If so, briefly describe.	Are materials or funding required? If so, what and at what cost?	What will the time line be? (dates for accomplishing work plan)	Will parents or the community be involved? If so, how?	Did you complete the work plan? (evidence to be entered July 2004)
5. Refer to number above	SOL results and academic performance of students within special populations	C	Department Chair and all science teachers	Time to collaborate with the Special Education and ESOL departments. FCPS in-services related to team teaching and Concept Science classes	Materials from FCPS for the Concept Science classes	Fall 2003 - in-service; on-going interdepartmental teacher collaboration		
6. Refer to number above	Increased SOL scores for teachers using this technique	C	Department Chair and all science teachers	SOL results – reviewed and correlated with use of warm-up activities during monthly SOL meetings	EDSL - SOL test scores from previous years for comparison.	Review results during regular meetings.		
7. Refer to number above	SOL test results	C	Department Chair and all science teachers	No	Pre-test, post-test, course grades and SOL results.	Review results during regular team meetings.		

Objective: Students will improve achievement in science.

Work Plan	Data Sources	Status	Person(s) Responsible	Staff Development	Materials Needed	Time Line	Parent and/or Community Involvement	Evidence of Completion
What will you do to achieve the objective?	What data indicate this is an area of need?	Is this a new (N) or continued (C) work plan?	Who will be responsible for this work plan?	Is staff development required? If so, briefly describe.	Are materials or funding required? If so, what and at what cost?	What will the time line be? (dates for accomplishing work plan)	Will parents or the community be involved? If so, how?	Did you complete the work plan? (evidence to be entered July 2004)
8. Refer to number above	SOL test results, direct correlation between reading ability and success in Biology	C	Biology Team	EDSL training	EDSL, Test Wizard, no cost. After school remediation – funding for teachers and supplies.	Fall 2003 – Investigate student data in EDSL specifically reading scores and past performance on standardized tests, End of 1 st quarter – homework club. End of 2 nd quarter – after school remediation. All other work to go on throughout the year.		
9. Refer to number above	SOL test results	C	Geosystems Team	No	None	During regular team meetings		

Objective: Students will improve achievement in science.

Work Plan	Data Sources	Status	Person(s) Responsible	Staff Development	Materials Needed	Time Line	Parent and/or Community Involvement	Evidence of Completion
What will you do to achieve the objective?	What data indicate this is an area of need?	Is this a new (N) or continued (C) work plan?	Who will be responsible for this work plan?	Is staff development required? If so, briefly describe.	Are materials or funding required? If so, what and at what cost?	What will the time line be? (dates for accomplishing work plan)	Will parents or the community be involved? If so, how?	Did you complete the work plan? (evidence to be entered July 2004)
10. Refer to number above	SOL test results	N	Chemistry Team	No	None	2 nd Semester – review 1 st Semester concepts. Final exam prior to SOL. Culminating activity after SOL during final exam periods.		
11. Refer to number above	Result of Physics team meetings and analysis of student performance	C	Physics Team	No	None	Continuously throughout the year		

Objective: Students will improve achievement in science.

Work Plan	Data Sources	Status	Person(s) Responsible	Staff Development	Materials Needed	Time Line	Parent and/or Community Involvement	Evidence of Completion
What will you do to achieve the objective?	What data indicate this is an area of need?	Is this a new (N) or continued (C) work plan?	Who will be responsible for this work plan?	Is staff development required? If so, briefly describe.	Are materials or funding required? If so, what and at what cost?	What will the time line be? (dates for accomplishing work plan)	Will parents or the community be involved? If so, how?	Did you complete the work plan? (evidence to be entered July 2004)
12. Refer to number above	Current AP enrollment	C	Department Chair, AP teachers and Honors teachers	Continued meetings of AP and Honors teachers		Discuss results of changes of scheduling AP classes especially for AP Physics. Spring - do more outreach with the middle school to encourage advanced studies, more direct contact with rising Juniors and Seniors as they plan their schedules for the 2004 – 2005 school year.	PTSA sponsored special parent night in English and in Spanish for AP and Honors to explain how the process works, how students enroll, expectations, etc	