

Center of Applied Technology North

School Improvement Plan

2009-2010

Completed 8/14/09
Dan Schaffhauser, Principal

INTRODUCTION

The Center of Applied Technology North is a Career-Centered Magnet School that provides seven area High Schools with access to 25 skill development programs in eight career clusters:

- Arts Media and Communications
- Consumer Services, Hospitality and Tourism
- Construction and Development
- Environmental, Agriculture and Natural Resources
- Health and Bio Sciences
- Information Technology
- Manufacturing, Engineering and Technology
- Transportation Technologies

Students in grades 9 – 12 spend a portion of the school day at CATN to focus on the development of entry level skills in a career program of their interest. In addition, academic skill development is supported daily through the application of academic content in each specialized career pathway. Students that demonstrate academic skills deficiencies are identified and referred to our support service staff for remediation. Student support is also available from our guidance staff, work-based learning co-coordinators and student organizations: Peer Helpers and SkillsUSA leadership.

This school improvement plan addresses the three primary school system goals and those indicators of student performance/behavior that apply directly to CATN. The data used to determine improvement needs and annual objectives is largely anecdotal but includes information reported in the data warehouse, grade reporting, SASI, and the MSDE annual program quality index. The format used matches that of AACPS high schools and should be viewed as an extension of the school improvement plans of each of the following high schools: Arundel, Chesapeake, Glen Burnie, Meade, North County, Northeast, and Old Mill.

CATN has participated in the continuous school improvement process since its implementation in the AACPS. To capture the wide variety of initiatives that have become “institutionalized” at CATN, an archive section is included as a way to document and remind all who view this plan that school improvement at CATN is a continuous and on-going process that, when sustained and supported from all levels of the AACPS, has the capability of ensuring success for all students that elect to attend CATN.

CATN School Improvement Team:

Dan Schaffhauser, Principal
Web Dorsey, Coordinator of Applied Technology
Vicki Engleman, Assistant Principal
Annie Foster, Assistant Principal
Earl Anthony, Department Chair, Computer Graphics
Rodney Bolton, Department Chair, Transportation
Ed Bury, Department Chair, Construction

Tammy Diedrich, Teacher and Work Coordinator
Barry James, Department Chair, Support Services
Jennifer Montagnino, Department Chair, Nursing
Ellen Myers, Department Chair, Production & Services
Jo Pionke, Department Chair, Guidance
Fran Shorter, Secretary II, Registrar

Additional staff who contributed to this plan: Elaine Horan, Deborah Sabel

*Due to the number and varied nature of schools and communities involved in our programs, elements of this plan will be reviewed during CAC meetings as a means to acquire additional suggestions for program improvement.

School Improvement Plan 2009-2010

Action Steps – Page 1

School: Center of Applied Technology North

Goal: All students will reach high standards, as established by Anne Arundel County Public Schools and state performance level standards in English/Reading/Writing, Mathematics, Science and Social Studies. Achievement disparities among all No Child Left Behind (NCLB)* groups of students will be eliminated.

Indicator: By the end of 2011/2012 school year, 100% of students requiring HSA support will be serviced.

Statement of Need: Academic attainment data reported in MSDE PQI has been modified to reflect student performance in English II and Algebra High School Assessments (HSA).

Annual Objective: Develop a support system at CATN to target and provide assistance to underperforming students.

Action Steps	EQ (linked to Statement of Need)	Person Responsible	Implementation Team	Resources/ Staff Development Needed	Monitoring Procedure/ Evidence	End Date
Continue to update faculty & staff understanding of HSA program so that we reinforce the importance of HSA success.		Principal	<ul style="list-style-type: none"> • Guidance • Assistant Principal • DC 	<ul style="list-style-type: none"> • Faculty meeting • Department meeting 	<ul style="list-style-type: none"> • Presentation • Department meeting minutes 	June 2012
Update school based access to system data needed so that problem areas are identified.		Principal	<ul style="list-style-type: none"> • Assistant Principal • Guidance • VSST 	<ul style="list-style-type: none"> • Central Office support • Laptop • Secure area 	<ul style="list-style-type: none"> • Access to SASI District • Access to HSA Dashboard 	June 2012
Maintain base-line profile of students so that services are provided to those in need.	X	<ul style="list-style-type: none"> • Guidance • VSST 	<ul style="list-style-type: none"> • Guidance • Administration • VSST 	<ul style="list-style-type: none"> • SASI access • RST management 	Dashboard Report	June 2012
Maintain support service team as liaison to Home School Bridge Project advisor so that continuity of support exists.		Principal	<ul style="list-style-type: none"> • STC – Home School • Guidance • VSST 	<ul style="list-style-type: none"> • Central Office support • Establish access to SASI • Laptop/PC • Scheduled Intervention 	<ul style="list-style-type: none"> • Update support materials needed-HSA coach texts • Documentation of interventions 	June 2012

School Improvement Plan 2009-2010

Action Steps – Page 2

School: Center of Applied Technology North

Goal: All students will reach high standards, as established by Anne Arundel County Public Schools and state performance level standards in English/Reading/Writing, Mathematics, Science and Social Studies. Achievement disparities among all No Child Left Behind (NCLB)* groups of students will be eliminated.

Indicator: All teachers will have incorporated instructional technology into delivery of daily lessons.

Statement of Need: The regular and appropriate use of technology has tremendous potential to improve student understanding & performance; therefore, staff must keep current on existing/emerging instructional technology and its best use to improve instruction.

Annual Objective: Incorporate the regular use of instructional technology into all instructional programs and provide teachers with appropriate yearly staff development experiences.

Action Steps	EQ (linked to Statement of Need)	Person Responsible	Implementation Team	Resources/ Staff Development Needed	Monitoring Procedure/ Evidence	End Date
Ongoing/regular teacher training in the use of instructional technology so that teacher proficiency improves.		<ul style="list-style-type: none"> • Administration • IT Liaison CATN 	<ul style="list-style-type: none"> • Tech Committee • DC • Asst. Principal. • CATN IT liaison 	<ul style="list-style-type: none"> • Instructional Technology – various types • Planning sessions • Staff Development sessions • Teacher – Best Practices 	<ul style="list-style-type: none"> • Staff development sessions • Observation reports 	June 2012
Observe use of technologies in each instructional program so that best practices can be identified and shared.		Administration	<ul style="list-style-type: none"> • DC • Teacher • Lab Tech • VSST 	<ul style="list-style-type: none"> • Operational devices • Pre-Observation conference • Teacher initiated walk through 	<ul style="list-style-type: none"> • Observation Reports • Walk through 	June 2012
Attend training sessions pertaining to new & emerging technologies offered by AACPS IT and approved vendors so that current IT is used to support instruction.		<ul style="list-style-type: none"> • Principal • Instructional Tech Committee • IT liaison CATN 	<ul style="list-style-type: none"> • Tech Committee • IT Division Liaison 	<ul style="list-style-type: none"> • Awareness Sessions • Vender literature • Faculty meetings • Vendor demo's • ACTE Conference 	<ul style="list-style-type: none"> • Documentation of sessions attended • Equipment literature file • Vendor Demo's 	June 2012
Planned acquisition of new & emerging technology to support instructional programs so that technology is current & available.		<ul style="list-style-type: none"> • Principal • Coordinator Applied Tech 	<ul style="list-style-type: none"> • Financial Sec. • Coordinator • Director • S&T • Tech Committee 	<ul style="list-style-type: none"> • Equipment Funds *Local *State 	<ul style="list-style-type: none"> • Requisition Records • Equipment inventory 	June 2012

School Improvement Plan 2009-2010 Action Steps – Page 3

School: Center of Applied Technology North

Goal: All students will reach high standards, as established by Anne Arundel County Public Schools and state performance level standards in English/Reading/Writing, Mathematics, Science and Social Studies. Achievement disparities among all No Child Left Behind (NCLB)* groups of students will be eliminated.

Indicator: By the end of 2011/2012 school year, 80% of all programs will have EOP assessment.

Statement of Need: MSDE Guidelines for CTE programs indicate all (EOP) programs must have an end of program assessment to qualify for financial assistance from grant source.

Annual Objective: Continue to research and identify appropriate EOP assessments for programs in need.

Action Steps	EQ (linked to Statement of Need)	Person Responsible	Implementation Team	Resources/ Staff Development Needed	Monitoring Procedure/ Evidence	End Date
Identify possible options to match programs/alternatives without EOP so that all programs comply with MSDE guidelines.		<ul style="list-style-type: none"> • Principal • Coordinator of Applied tech 	<ul style="list-style-type: none"> • Administration • DC • Teacher 	<ul style="list-style-type: none"> • On line literature • CAC resources • National organizations 	<ul style="list-style-type: none"> • List of options • Sample assessments 	June 2012
Implementation of new and established EOP assessments on a yearly basis so that performance data can be generated.	X	<ul style="list-style-type: none"> • Principal • Coordinator of Applied tech 	<ul style="list-style-type: none"> • Administration • Guidance • DC • Teacher • Financial Sec. 	<ul style="list-style-type: none"> • Funding/Per test cost • Proctor training • Test site schedule 	Documentation of statistical results	June 2012
Analyze results and incorporate strategies so that appropriate instructional strategies can be developed to address deficiencies.	X	<ul style="list-style-type: none"> • Principal • Coordinator of Applied Tech 	<ul style="list-style-type: none"> • Administration • Guidance • DC • Teacher 	<ul style="list-style-type: none"> • Planning time • Technical upgrade funds • Instructional specialist 	<ul style="list-style-type: none"> • Yearly statistics per program • Recommendations for improvement 	June 2012

School Improvement Plan 2009-2010 Action Steps – Page 4

School: Center of Applied Technology North

Goal: All students will reach high standards, as established by Anne Arundel County Public Schools and state performance level standards in English/Reading/Writing, Mathematics, Science and Social Studies. Achievement disparities among all No Child Left Behind (NCLB)* groups of students will be eliminated.

Indicator: Data from varied categories and sources will be collected and analyzed as a step in addressing disparities in NCLB groups.

Statement of Need: Current AACPS data sets do not reflect school/student performance in technical programs.

Annual Objective: Define data sets that will be useful in making decisions effecting school performance and begin collecting data that will prove useful in the development of a comprehensive school performance profile.

Action Steps	EQ (linked to Statement of Need)	Person Responsible	Implementation Team	Resources/ Staff Development Needed	Monitoring Procedure/ Evidence	End Date
Identify categories of data needed and methods used to collect data so that NCLB groups can be identified.	X	<ul style="list-style-type: none"> • Principal • Guidance D • Coordinator of Applied Tech 	<ul style="list-style-type: none"> • Asst. Prin. • DC • MSDE Data Specialist 	<ul style="list-style-type: none"> • SSI • MSDE PQI • Survey data • DC meeting • SIT meeting 	<ul style="list-style-type: none"> • List of data categories • Data reports prepared 	June 2012
Prepare yearly report per category so that achievement disparities among NCLB groups can be analyzed.	X	<ul style="list-style-type: none"> • Principal • Guidance DC 	<ul style="list-style-type: none"> • Asst. Prin. • DC • MSDE Data Specialist • Design Specialist 	<ul style="list-style-type: none"> • Statistical information per category • DC meeting • SIT meeting 	Yearly report	June 2012
Share yearly report with larger school community in appropriate setting so that the larger school community can be informed of current achievement disparities among NCLB groups.		Principal	<ul style="list-style-type: none"> • Asst. Prin. • DC • Guidance 	<ul style="list-style-type: none"> • Power point • Tech Times 	<ul style="list-style-type: none"> • Meeting minutes • Publication, various 	June 2012

School Improvement Plan 2009-2010 Action Steps – Page 5

School: Center of Applied Technology North

Goal: All students will reach high standards, as established by Anne Arundel County Public Schools and state performance level standards in English/Reading/Writing, Mathematics, Science and Social Studies. Achievement disparities among all No Child Left Behind (NCLB)* groups of students will be eliminated.

Indicator: By the end of 2011/2012 school year, each teacher will expand their repertoire of strategies to differentiate instruction.

Statement of Need: To provide for the diverse needs of learners, teachers need to employ various techniques/strategies of instruction.

Annual Objective: Expand instructor's repertoire of skills to include thinking maps, strategies for differentiated instruction and teaching for mastery.

Action Steps	EQ (linked to Statement of Need)	Person Responsible	Implementation Team	Resources/ Staff Development Needed	Monitoring Procedure/ Evidence	End Date
Plan and facilitate multiple staff development sessions on the topics of Differentiation & Thinking Maps		Administration	<ul style="list-style-type: none"> • Administration • Department Chairs • Leadership Team 	<ul style="list-style-type: none"> • Wormeli Disk • Language for Learning Training Guide 	<ul style="list-style-type: none"> • Guide questions • TM teacher samples 	June 2012
Conduct a book study so that teachers can process philosophy of DI		DC's Administration	<ul style="list-style-type: none"> • All Instructional Staff 	<ul style="list-style-type: none"> • Book – Tomlinson • Guide Questions 	Department Mtg. minutes	June 2010
Teachers begin to experiment with Thinking Maps & various differentiated instructional and management strategies so that appropriate strategies are matched to content areas.	X	Instructors	<ul style="list-style-type: none"> • Instructors/TA • Department Chairs 	<ul style="list-style-type: none"> • Text • Lesson Plan • Support materials • Online resources 	<ul style="list-style-type: none"> • Lesson/Unit Plans • Observation reports 	September 2009
Teachers share best practices so that they develop a repertoire of instructional and management strategies for differentiation.		Instructors	<ul style="list-style-type: none"> • Administration • Department Chairs • Instructors 	<ul style="list-style-type: none"> • Lessons/activities • Student samples 	<ul style="list-style-type: none"> • Faculty Mgt. • Department Mgt. minutes 	June 2012

School Improvement Plan 2009-2010
Action Steps – Page 6

School: Center of Applied Technology North

Goal: All students will be educated in a safe, positive and supportive learning environment with a focus on security enhancements that support system-wide safety and discipline standards. AACPS will eliminate disparities among all No Child Left Behind (NCLB) student groups in the referral, suspension, and expulsion rates for violation of the Code of Student Conduct.

Indicator: By the end of the 2011/2012 School Year, 100% of the CATN staff will work to ensure a safe, secure learning community for all students, parents & communities.

Statement of Need: CATN Emergency procedures satisfy minimal requirements for school safety.

Annual Objective: Expand emergency procedures to incorporate new thinking and technology into the development of a comprehensive approach to school safety.

Action Steps	EQ	Person Responsible	Implementation Team	Resources/ Staff Development Needed	Monitoring Procedure/ Evidence	End Date
Develop guidelines and implement student safety assistant program so that classroom teachers have an assistant the event of a classroom emergency		<ul style="list-style-type: none"> • ICS • DC 	<ul style="list-style-type: none"> • Teacher • Guidance • DC 	<ul style="list-style-type: none"> • Meeting Schedule • Emergency procedure binder, SCEMP 	Guidelines	June 2012
Provide safety training opportunities to include: CPR, Defib, OSHA trainings so that administrators, faculty and staff can provide appropriate emergency and/or safety assistance		Principal	<ul style="list-style-type: none"> • ICS Team & DC's. • Certified trainer. 	Staff development sessions. Classroom. Training devices & materials. MSDS Organizational System.	<ul style="list-style-type: none"> • Staff listing • Emergency procedure binder 	June 2012
Participation in monthly school emergency drills, fire drills, and 800 MHZ radio checks so that students, faculty and staff practice correct emergency procedures.		Principal	<ul style="list-style-type: none"> • ICS team • Staff 	County emergency drill/table top exercises	Monthly drill reports	June 2012
Provide students with safety training appropriate to the program they are enrolled so that students will work safely.		<ul style="list-style-type: none"> • Teachers • Guidance 	<ul style="list-style-type: none"> • Admin • DC 	<ul style="list-style-type: none"> • SkillsUSA /OSHA online youth safety training • Peer Helper training • NCCER • SP2 	<ul style="list-style-type: none"> • Lesson Plans • Safety Test • Handouts 	June 2012

School Improvement Plan 2009-2010 Action Steps - Page 7

School: Center of Applied Technology North

Goal: All Anne Arundel County Public School students will be educated in a school that has a family-friendly, welcoming environment. Anne Arundel County Public Schools will eliminate disparities in parent and community representation and participation in traditional and non-traditional School-community activities.

Indicator: By the end of the 2011/2012 school year 90% of parents and select community members will indicate that CATN communicates effectively and is welcoming with respect to interviews, surveys, focus groups, etc

Statement of Need: Misconceptions continue to exist about CATN programs both in the school system and local community environments.

Annual Objective: Develop a multi-faceted approach to improve school and local community understanding.

Action Steps	EQ (linked to Statement of Need)	Person Responsible	Implementation Team	Resources/ Staff Development Needed	Monitoring Procedure/ Evidence	End Date
Refine and improve community access to the CATN website so that information about CATN programs is easily accessible.		Principal	<ul style="list-style-type: none"> • Webmaster • IT & Facilities committee 	Software	Website	June 2012
Upgrade presentation materials, program information, publications, and Magnet program applications so that parents, students and community can connect to CATN.	X	Principal Coordinator of Applied Tech	Design Specialist Public Relations Committee Administration <ul style="list-style-type: none"> • DC's 	<ul style="list-style-type: none"> • Committee meetings • CAC meetings • Online data source 	New presentations, publications, application	June 2012
Establish a team approach to public relations so that communications are presented in a consistent manner.		Principal	<ul style="list-style-type: none"> • Principal • Guidance • DC's 	Design Specialists AACPS Groups CAC	Presentation materials	June 2012
Develop a standard assessment tool so that each public relations activity can be evaluated for effectiveness.		Principal Guidance DC's	<ul style="list-style-type: none"> • P R Committee • Asst. Principals • DC's 	Planning time Committee meetings DC's/SIT	Assessment device/strategy	June 2012
Translate materials, publications, and applications to Spanish so that information can be understood by the Hispanic community.	X	Asst. Principal Guidance DC's	ESOL liaison Public Relations Committee	ESOL liaison Design Specialist	Production of new publications, materials, and applications	June 2012

School Improvement Plan 2009-2010
Action Steps – Page 8

School: Center of Applied Technology North

Goal: All Anne Arundel County Public School students will be educated in a school that has a family-friendly, welcoming environment. Anne Arundel County Public Schools will eliminate disparities in parent and community representation and participation in traditional and non-traditional school-community activities.

Indicator: By the end of the 2011/2012, overall CATN enrollment will be increased by 10 % with a 5 % increase in NCLB groups.

Statement of Need: Enrollment figures as reported in PQI indicate a trend of declining enrollment. Changes in graduation requirements may result in a continuation or even an acceleration of this trend.

Annual Objective: Develop a comprehensive recruitment strategy that incorporates informative outreach efforts to stabilize/improve enrollment.

Action Steps	EQ (linked to Statement of Need)	Person Responsible	Implementation Team	Resources/ Staff Development Needed	Monitoring Procedure/ Evidence	End Date
Develop a comprehensive public relations plan that has a student recruitment focus so that CATN faculty and staff are informed of upcoming information outreach (IO) activities.	X	Principal	Public Relations committee	Dates of AACPS recruitment events	Completed plan	June 2012
Develop internal network of support so that relationships with feeder high schools may be improved.		Principal DC's Guidance	Administration Guidance Dept. Coordinator of Applied Technology HS Principals Public Relations Committee	Orientation Sessions Applications	Enrollment figures/ survey	June 2012
Refine magnet school program application process so that parents and students understand the selection method.		Principal	Guidance DC's	Process history	Refined application process	June 2012
Refine STEM Summer Bridge program offerings so that more students are exposed to CATN opportunities.	X	Principal	STEM Specialists Administration Teachers	Facility funding	Attendance figures	June 2012
Monitor NCLB student enrollment so that CATN can evaluate effectiveness of the Public Relations activities.	X	Principal	Administration Guidance P R committee	Data Revised application	Enrollment Data CATN application forms	June 2012

ARCHIVE SECTION

The final section of this plan has been established to list those items from past SIP that are deemed to be “institutionalized” into the culture of CATN. They have been moved to this section to highlight the importance they have played in the establishment of a culture of continuous improvement at CATN.

GOAL I: Student Achievement

- Provide teacher training in instructional technology by program and need.
- Investigate new technology and strategies for use in the classroom.
- Establish baseline data to measure student achievement.
- Monitor graduation rate for all student groups.
- Develop, implement and improve instructional initiatives for all students.
- Provide students with technical skills and related academics to achieve employment, certification, qualifications, licenses, continuing education or entrepreneur opportunities.
- Explore certification, license and exam opportunities.
- Coordinate employment and post-secondary educational opportunities.
- Incorporate applied Math, Science, and Language Arts concepts into daily instruction to support High School Assessments.
- Identify CLG and indicators in unit and lesson plans.
- Identify yearly student membership to National Technical Honor Society.
- Developed a list of programs in need of End of Program Assessment.

GOAL II: Safety and Security

- Prevent security lapses at CATN.
- Continue to reinforce school wide security measures and AACPS emergency plans.
- Provide a safe learning environment for technical and academic development.
- Decrease student safety violations through reinforcement of student and staff safety precautions.
- Improve staff and community knowledge of and use of emergency/security technology including: Raptorware, PA, 2-way radio, digital devices.

GOAL III: Workforce Quality (Central Office Initiative)

GOAL IV: Community Engagement

- Develop public awareness of career and post secondary opportunities for students in technical careers.
- Promote to parents, students, businesses and schools the academic and economic opportunities for careers in technical fields.
- Presentation/Assembly to all 8th grade students at middle schools.
- Attend all High School & Middle School orientation and open house programs.
- Involve business community through participation in Open House, CAC, Mock Interviews, Work-Based Learning and SkillsUSA contest sponsorships.
- Establish communication through email and website.
- Conduct student recognition awards ceremony.
- Support SkillsUSA leadership initiative throughout all programs.
- Maintain student participation in SkillsUSA competitions.
- Support SkillsUSA membership drive.
- Development of a school-wide program to recognize specific cultures as appropriate in each career area.
- Assess impact of multicultural program.
- Support faculty /staff participation in AACPS Cultural Proficiency training.
- Explore possible extension of Open House to CAT-Career Exploration Parents/Students.