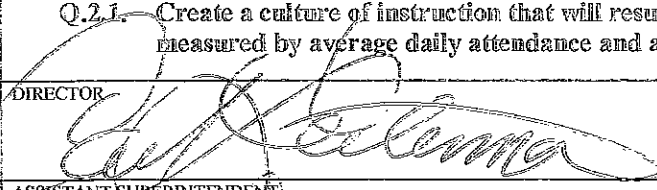

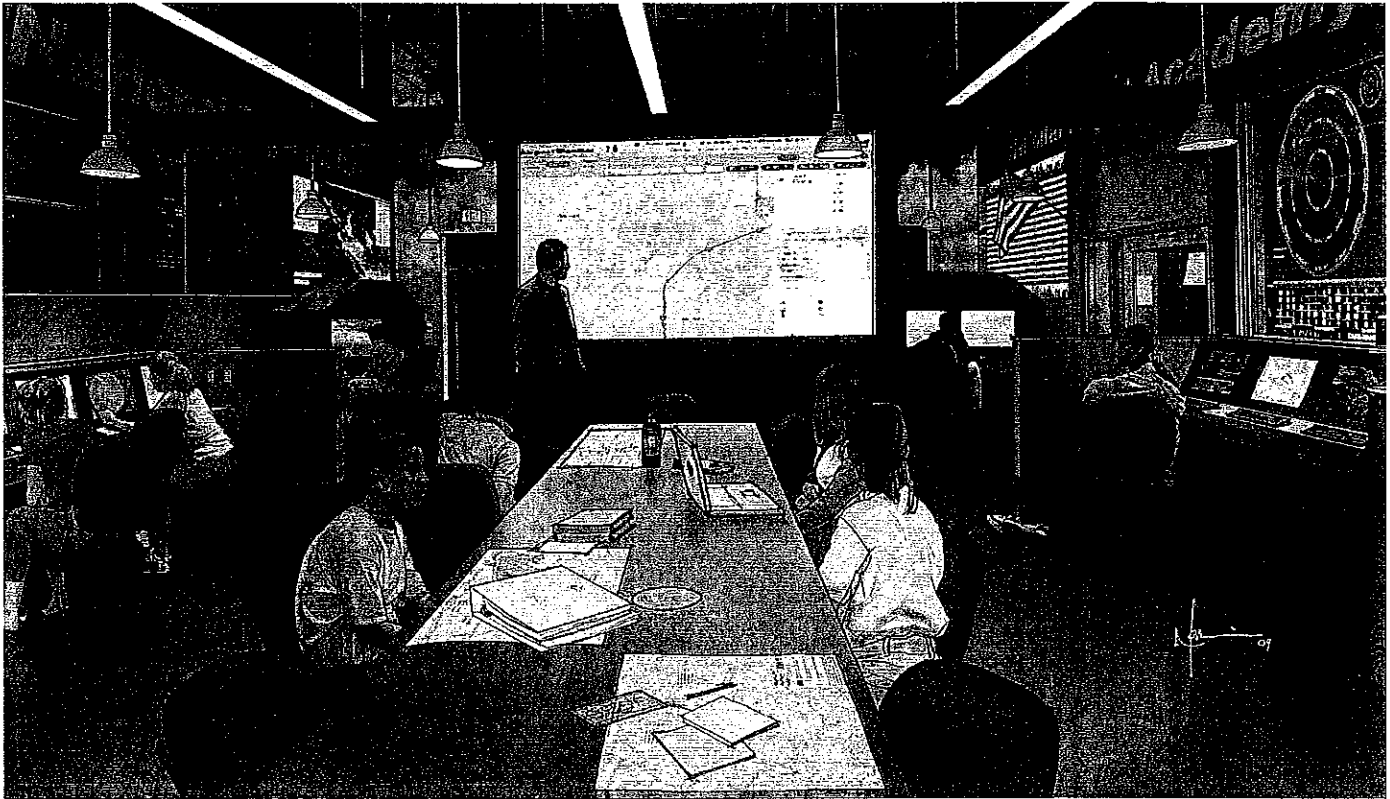


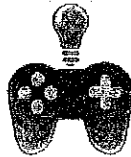
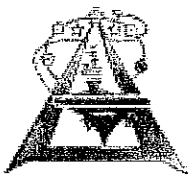
<b>THE SCHOOL DISTRICT OF ESCAMBIA COUNTY</b> <b>Curriculum &amp; Instruction/Human Resource Services/</b> <b>Risk Management</b>		<b>SCHOOL BOARD AGENDA</b> <b>EXECUTIVE SUMMARY</b>	
<b>TITLE</b> <b>Establishment of Warrington Middle School Flight Academy</b>		<b>SUBMITTED BY:</b> <b>PAUL FETSKO</b> <b>ASSISTANT SUPERINTENDENT CURRICULUM AND INSTRUCTION</b>	
<b>PERIOD OF GRANT/CONTRACT/REQUEST</b>  <b>Beginning with the 2010-11 school year</b>	<b>FUNDING SOURCE</b>  <b>Staffing from VOC FTE</b>	<b>PROJECT COORDINATOR AND DEPARTMENT</b>  <b>CARL LETTERMAN</b> <b>DIRECTOR, WORKFORCE EDUCATION</b>  <b>JEFF ELLIOTT</b> <b>WORKFORCE SPECIALIST</b>	
<b>AMOUNT OF FUNDING REQUEST - \$ <u>NEW PROJECT</u></b> Is amount more, less or same as last year? (Explain differences at end of Purpose section if additional space is required) <b>N/A</b>		<b>TOTAL PROJECT - \$ <u>NEW PROJECT</u></b> Is amount more, less or same as last year? <b>N/A</b>	
<b>PURPOSE</b> <b>To establish a Flight Academy at Warrington Middle School.</b>			
<b>IMPLEMENTATION PLAN</b>  <b>Recruit and enroll students interested in Science, Technology, Engineering, and Mathematics (STEM) to support economic and workforce development by creating a skilled workforce.</b>  <b>Design and implement curriculum that provides rigorous and relevant instruction in academics and technical areas that leads to industry certifications and enables students to work in internships related to career pathway area.</b>  <b>Provide in-service opportunities for staff to develop professional skills in order to deliver quality instruction.</b>  <b>Establish partnerships with business community to develop an advisory board and internship opportunities.</b>			
<b>PARTICIPATING SCHOOLS/AGENCIES</b> <b>Warrington Middle School and National Flight Academy</b>			
<b>ACTION REQUIRED</b> <b>School Board approval</b>			
<b>STRATEGIC ALIGNMENT - Include number and definition of Goal and Objective.</b> <b>Pillar: Quality</b> <b>Goal Q.1: To increase rigor at all levels</b> <b>Measurable Objectives:</b> <b>Q.1.1. Strengthen existing academics through differentiated instruction and increased use of data as measured by a district developed teacher survey collected in the spring of each year.</b> <b>Goal Q.2: To improve attendance and discipline of students</b> <b>Measurable Objectives</b> <b>Q.2.1. Create a culture of instruction that will result in increased attendance and fewer discipline problems as measured by average daily attendance and a reduction in the percentage of referrals in schools.</b>			
<b>DIRECTOR</b> 		<b>DATE</b> <b>2/1/10</b>	
<b>ASSISTANT SUPERINTENDENT</b> 		<b>DATE</b> <b>2/1/10</b>	<b>DATE OF BOARD APPROVAL</b>

# CAREER ACADEMY APPLICATION

## Flight Academy



utilizing the  
Aviation Classroom Experience (ACE) Curriculum




Games



# Warrington Middle School

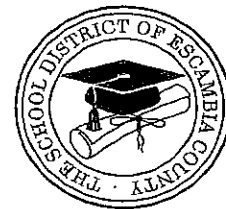
Escambia County School District



## Workforce Education

"Empower Your Mind"

<http://career.escambia.k12.fl.us>



## Escambia County School District Middle School Career Academy Application

**Directions:** School administration shall be responsible for completion and submission of the application. Upon completion, the original shall be forwarded to the Director of Workforce Education. The application must address each of the following items:

1. **Date:** January 28, 2010
2. **School:** Warrington Middle School
3. **Principal:** Sandra Rush-Riley
4. **Name of proposed academy and school year for implementation:**

Flight Academy, Implement 2010/2011

5. **Academy's mission and goals.**

***Mission:***

The mission of the Warrington Middle School Flight Academy is to provide students with an opportunity to gain knowledge and understanding in the field of aviation.

***Premise Statement:***

In pursuing their quest for flight, humans expand both their world and their intellectual abilities.

***Academy Description:***

Did you ever wonder how mankind figured out how to fly? In the Flight Academy, you'll learn the scientific fundamentals of flight. You'll follow the development of flight, beginning with animals, continuing with a study of non-powered flight and finishing with powered flight and rocketry. Projects include building and flying kites, aerobics, parachutes, hot air balloons, and gliders. You will use flight simulators based on the National Flight Academy and TEQGames Aviation Classroom Experience (A.C.E.) curriculum to get a feeling for what it is like to be a pilot and see how math and science principles are used in flight. You will also visit the Naval Air Museum and possible participate in the National Flight Academy that is currently being built.

***Possible Culminating Activities & Goals:***

- BIRDS, BATS, BUTTERFLIES, AND THE GOSSAMER ALBATROSS -- Cooperative groups of students produce a video presentation or a scrapbook comparing and contrasting groups of muscle-powered flying animals.
- PARACHUTES AND HANG GLIDERS-- Students organize and participate in a model competition event.

- DIRIGIBLES, BLIMPS, AND BALLOONS --Student flight teams construct and launch their own hot air balloons.
- KITES -- Students design, construct and fly different types of kites at the Warrington MS Kite Festival.
- AIRPLANES ... PAST, PRESENT, AND FUTURE -- Students plan and participate in an aircraft symposium which includes student-constructed models and displays, multimedia presentations, glider flight contests, and guest speakers from the aviation industry.

(Curriculum concepts and excerpts adapted from Brown-Barge Middle School and TEQ Games ACE Curriculum)

**6. Number of potential students for academy from residential school, including student survey results.**

**FCAT STAR – Demographic School Report**

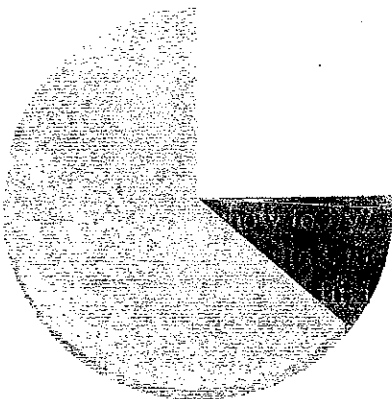
**WARRINGTON MIDDLE (0561)**  
450 S OLD CORRY FIELD RD, PENSACOLA, FL 32507

School Year: **2009-2010**

Enrollment: **822**

2010 School Grade: **N/A**

2010 AYP: **N/A**



Student Demographics: (Roll your mouse over the pie chart)

Race	Total	Percent	Female	Male	Lunch	ESE
White:	203	24.7%	99	104	79	42
Black:	522	63.5%	267	255	146	109
Hispanic:	28	3.4%	11	17	13	4
Multiracial:	28	3.4%	16	12	7	4
Asian:	33	4.0%	19	14	19	1
American Indian:	8	1.0%	3	5	4	3
Totals:	822	100%	415	407	268	163

*\*Lunch=Code 2 and 3; ESE=All ESE minus gifted.*

**Grade Level**

**Today's Student Count**

Grade 06	269
Grade 07	271
Grade 08	316

**7. Name of district high school career academies in which the proposed middle school career academy students could apply for continuance of similarly, career-themed preparation.**

- Escambia High School - Engineering Academy (Project Lead The Way)
- Pensacola High School – Computer Aided Design Academy (CAD)
- West Florida High School – Engineering Academy (Project Lead The Way)

There is a high school version of the Aviation Classroom Experience (ACE) program that would be ideal for the Warrington Middle School students to continue in high school. An ideal location for a future high school career pathway focusing on aviation would be at Escambia High School. Students living in the Warrington Middle School district are zoned for either Escambia or Pensacola High School with a majority of the students going to Escambia High School. Escambia High School is also a perfect location for a future Flight Academy because of the position near NAS Pensacola and the National Flight Academy. Escambia High School also has a Navy JROTC program that could benefit from the Flight Academy.

**8. Industry certifications associated with related high school career academies.**

- Escambia High School - Engineering Academy (Project Lead The Way)
  - Industry Certification: AutoCAD Inventor Certified Associate
- Pensacola High School – Computer Aided Design Academy (CAD)
  - Industry Certification: AutoCAD Certified Associate
- West Florida High School – Engineering Academy (Project Lead The Way)
  - Industry Certification: AutoCAD Inventor Certified Associate

All 3 of the certifications listed above are currently approved on the 09/10 CAPE Funding list that can positively impact the school grade.

**9. Postsecondary certificates and/or degrees associated with academy completers (possible dual enrollment and/or ).**

- Pensacola Junior College: Pre-Engineering A.A., Civil Engineering Technology AAS
- University of West Florida: Engineering BS, (Electrical)
- Embry-Riddle Aeronautical University (Programs: Aeronautical Science, Aerospace Engineering, Air Traffic Management, etc.)

**10. Academy contact (lead instructor) name, department, and telephone number and extension.**

N/A – This instructor will have to be hired

**11. List anticipated costs such as facility upgrades, equipment, materials/supplies, and personnel which are currently not on site.**

1	TEQ GAMES - 3 Simulators & ATC Station	\$ 50,045.00
2	Dell Classroom Computers total (18 Student Computers & 1 Teacher Laptop)	\$ 17,868.00
3	Microsoft Flight Simulator Software	\$ 1,140.00
4	Flight Controls	\$ 6,460.00
5	Facility Upgrades - Classroom Treatment	\$ 6,000.00
6	Classroom Network Upgrades and Video Surveillance	\$ 11,370.00
7	Ultra-Short Throw Projector and Interactive Whiteboard	\$ 4,500.00
8	Furniture Upgrades	\$ 1,000.00
9	Network Printer - Reused from another location on campus	\$ -
10	Deluxe Headphones w/ Mic & Volume	\$ 500.00
11	Audio System - Voice Amplification	\$ 2,500.00
12	Interactive Response System	\$ 3,000.00
13	Contingency Fund	\$ 2,087.66
<b>TOTAL</b>		<b>\$ 106,470.66</b>

**12. Funds that may be available for academy support (including school, district, grants, and business funds).**

**Funding Sources**

Title 1	\$ 29,008.00
NFA Private Donor	\$ 25,000.00
Foundation For Excellence	\$ 40,000.00
IT Networking Budget	\$ 11,370.00
Facilities	\$ 6,000.00
<b>Total Funds Available</b>	<b>\$ 111,378.00</b>

- The National Flight Academy (NFA) is also providing \$20,000 in scenic treatment work to transform the classroom into looking like the inside of a ship. The goal is to make the students feel like they are submersed into the experience of naval aviation.
- The NFA Private Donor is also providing \$10,000 a year of 5 years for sustainment of the Flight Academy.

**13. Marketing plan for the academy (including how academy will be marketed to students/parents and business/industry partners).**

Students that live within the Warrington Middle School attendance zone may apply by indicating their preference of being in the academy by selecting 1 of the courses taught within the academy. Students that reside outside of the Warrington Middle School attendance zone must apply with the Office of School Choice to attend Warrington Middle School as a Flight Academy student within the required timeline. Interested students and parents can learn more about the Flight Academy from informational brochures that will be

created. Information about the Warrington Flight Academy will also be located on the Workforce Education website (<http://career.escambia.k12.fl.us>).

The Flight Academy at Warrington Middle School will be working closely with the National Flight Academy located at NAS Pensacola and TEQ Games of Orlando.

#### **14. Academy Education Plan**

**a) Describe how the academy design will service all levels of students.**

The Aviation Classroom Experience (ACE) curriculum provided by TEQ Games is a cutting-edge program that addresses the interest and energy of middle school students, while incorporating national standards in mathematics, science, and technology. ACE is “activity oriented” to show students how math and science is used in aviation.

The ACE curriculum provides project-based learning—a hands-on approach—that is exciting and fun for the full-range of students in today’s 7th and 8th grade classrooms. The ACE curriculum also promotes communication and collaboration by emphasizing a teaming approach in the instructional units. This approach utilizes the strengths of each team member to accomplish the goals of the project, while offering students learning challenges at all ability levels.

**b) List school-based career academy leadership team members (lead academy teacher, academic teacher(s), guidance counselor, and administrator).**

Lead Academy Teacher: TBD

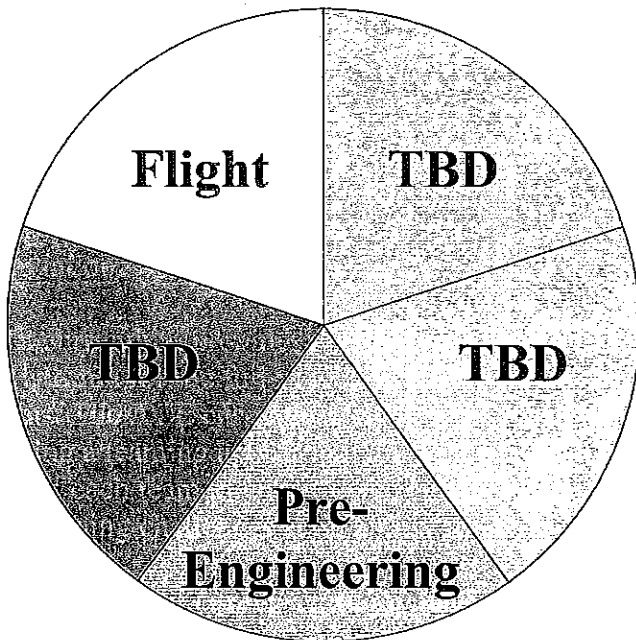
Academic Teachers: TBD

Guidance Counselor: TBD

Administration: Sandra Rush-Riley, Principal & Cassandra Andrews, AP of Curriculum

After FCAT, the school administration will find academic teachers that have an interest in teaching as a team around the theme of aviation and will develop a professional development plan for the summer and preschool to support integrated curriculum.

c) Identify the academic courses to be used in cohort scheduling of career academy students. Describe strategies to be used to integrate the career and technical and academic career academy curriculum.



Possible Career Themes for Warrington

**A Few Notes to help START the conversation:**

- A Small Learning Community (SLC) at WMS will consist of 6 teachers (Math, English, Science, Social Studies, Reading, & Elective).
- The Elective Teacher brings the background/technical knowledge for the themed instruction.
- During the Encore time, the SLC will have a common planning time to coordinate integrated themed instruction across discipline areas.
- It is highly encouraged for all teachers in an SLC to have the FOR-PD & CAR-PD training if they do not have a reading endorsement/certification. This will enable the teachers to have a common language and skill set to help students understand their content area through specific reading strategies.
- Professional Development will need to be specifically tailored for school wide alignment on common classroom design (board configuration, rules, assignment format, etc.), common classroom management and behavior management, project-based instruction, authentic assessment, common technology access for each classroom, etc.....
- This is only the beginning of the conversation and will require input from all stakeholders to develop a plan of action that will provide the faculty and staff with the professional development and technology resources to implement the plan.

The Flight Academy at Warrington Middle School will focus on the 7<sup>th</sup> and 8<sup>th</sup> grade. Students in the 6<sup>th</sup> grade will be involved in a career exploration program that will allow them to explore all of the 16 career clusters as well as the options available at Warrington.

Career & Technical Course Numbers for Flight Academy

Grade	Course Title
7th – 1 <sup>st</sup> Semester	Exploration of Aerospace Technology - 8600050
7th – 2 <sup>nd</sup> Semester	Exploration of Power & Energy Technology - 8600250
8th – 1 <sup>st</sup> Semester	Exploration of Production Technology & Career Planning - 8600042
8th – 2 <sup>nd</sup> Semester	Exploration of Transportation Technology - 8600240



**Small Learning Community: Careers in Communities (6<sup>th</sup> Grade Only)**

The 6<sup>th</sup> grade SLC will focus the theme of instruction on exploring careers in the communities, working in cooperative groups, building a foundation in computer literacy, and a sense of pride in the local community. The 6<sup>th</sup> grade year sets the foundation for students to succeed at Warrington MS and in life. It is critical for students to have an introductory understanding of the MS Office suite (Word, PowerPoint, & Excel), ability to locate quality information online while conducting research based projects, understand how to deal with conflicts, understand team roles & responsibilities, and have the ability to reflectively write about their experiences.

	Semester 1	Semester 2
6 <sup>th</sup> Grade	<ol style="list-style-type: none"> <li>1. Math</li> <li>2. English</li> <li>3. Science</li> <li>4. Social Studies</li> <li>5. Reading</li> <li>6. CTE – Career Exploration</li> <li>7. ENCORE (PE, Band, ?)</li> </ol>	<ol style="list-style-type: none"> <li>1. Math</li> <li>2. English</li> <li>3. Science</li> <li>4. Social Studies</li> <li>5. Reading</li> <li>6. CTE – Personal Development</li> <li>7. ENCORE (PE, Band, ?)</li> </ol>

**Pre-Career Academy Focus: Flight**

The 7<sup>th</sup> & 8<sup>th</sup> grade SLC will focus the theme of instruction on exploring career opportunities within a given career cluster.

7 <sup>th</sup> Grade	<ol style="list-style-type: none"> <li>1. Math</li> <li>2. English</li> <li>3. Science</li> <li>4. Social Studies</li> <li>5. Reading</li> <li>6. CTE – Flight Teacher</li> <li>7. ENCORE (PE, Band, ?)</li> </ol>	<ol style="list-style-type: none"> <li>1. Math</li> <li>2. English</li> <li>3. Science</li> <li>4. Social Studies</li> <li>5. Reading</li> <li>6. CTE – Flight Teacher</li> <li>7. ENCORE (PE, Band, ?)</li> </ol>
8 <sup>th</sup> Grade	<ol style="list-style-type: none"> <li>1. Math</li> <li>2. English</li> <li>3. Science</li> <li>4. Social Studies</li> <li>5. Reading</li> <li>6. CTE – Flight Teacher</li> <li>7. ENCORE (PE, Band, ?)</li> </ol>	<ol style="list-style-type: none"> <li>1. Math</li> <li>2. English</li> <li>3. Science</li> <li>4. Social Studies</li> <li>5. Reading</li> <li>6. CTE – Flight Teacher</li> <li>7. ENCORE (PE, Band, ?)</li> </ol>

**d) Describe how the school will address recruitment of underrepresented student populations.**

All career and technical programs are open to all students without regard to race, age, national origin, sex or handicapping condition. Access to career and technical education programs will be provided to special populations students through recruitment activities including the dissemination of information to students about the availability of career and technical programs. The district will use data concerning special populations students (as self-disclosed by students on the application) enrolled in CTE programs to monitor the programs and to ensure that assurances prescribed for special populations will be conducted by appropriate staff. To assist the district in serving special populations, the following program opportunities will be provided to all students including students from special populations:

- Targeted community outreach and recruitment
- School and program orientation sessions
- Comprehensive career assessment and counseling
- Ongoing support counseling including referrals for agency assistance when needed
- Peer support and advisory groups
- Advisors and mentors from the business community
- Work-based learning opportunities through paid and non-paid experiences.
- Participation in Career and Technical Student Organizations
- Hands-on learning experiences
- Small learning environments with individualized, self-paced instruction
- Instructional staff trained to provide appropriate activities for students

Recruitment efforts will address recruitment of both male and female students.

**e) Describe the professional development plan to support the academy model.**

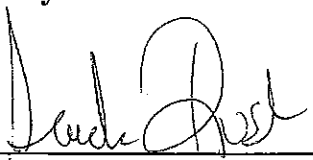
Staff Development will be needed for the following

- Integrated Curriculum
- Project Based Instruction
- FOR-PD
- CAR-PD
- Aviation Classroom Experience (ACE) training for CTE teacher

**f) Identify the business advisory council that will oversee the career academy.**

National Flight Academy, Kevin King  
TEQ Games, John Fitzgibbon  
Aerospace Industries

As the instructional leader of Warrington Middle School, I endorse this application for establishing the academy described above.

Principal signature  Date 1/29/10

If the academy is approved, the principal shall be required to submit an annual progress report using the Career Academy Assessment.

Date of Academy Application Review: 2/1/2010

- Application approved as submitted
- Application approved with required modifications  
(see attached)
- Application not approved

Review Committee Chair signature: 