

Albemarle County Public Schools Health & Medical Sciences Academy

at Monticello High School



ing Excellence, Innovation, and a Future of Service

Mission

The Monticello High School Health and Medical Sciences Academy's mission is to empower students for success, utilizing 21st century skills, while exploring health science career opportunities. The program will provide students a foundation for post-secondary education or workforce readiness in certified health related professions. Students will explore core content with technology through integrated projects, case studies, and focused learning experiences.



DATA from: US Department of Labor
-Bureau of Labor Statistics

The Need...

- Healthcare was the largest industry in 2008, providing 14.3 million jobs for wage and salary employees
- Ten of the 20 fastest growing occupations are healthcare related
- “Healthcare will generate 3.2 million new wage and salary jobs between 2008 and 2018.”

Why a Health and Medical Sciences Academy?

***Virginia Employment
Commission Report – MSA
Community Profile
Charlottesville - Oct. 2011***

The Need.....

- This community profile includes data for Albemarle, Fluvanna, Greene, and Nelson Counties, as well as the city of Charlottesville.
- Employment projections through 2018 show an increase in positions for Healthcare Practitioners and Technical Occupations of 8,104.
- Employment projections for Healthcare Support Occupations through 2018 will increase by 4,478.

Why a Health and Medical Sciences Academy?

"We learn what we **do**."

A stylized, handwritten signature of John Dewey in black ink, with a yellowish-gold background behind the text.

What will students **do**?

Plan and conduct research with a focus on integrated curriculum and case study analysis

Clearly communicate ideas, knowledge, and processes

Think analytically, critically, and creatively to pursue new ideas and acquire knowledge

Participate in clinical internships & job shadowing opportunities in health fields

Adapt a variety of strategies to solve increasingly complex problems

Learn critical thinking strategies within the context of Health & Medical Sciences

PROGRAM GOALS

*"Whatever you are, **be a good one.**"*
Abraham Lincoln

What will the Academy **be**?

- A groundbreaking academy focusing on integrated core curriculum
- A model for schools around the nation and a center for professional development and best practices
- An innovative program that utilizes community partnerships to design curriculum that supports skill sets needed for local and national job markets
- A premiere program that facilitates a smooth transition to four year collegiate opportunities, two year community college, and/or work

PROGRAM GOALS

"Tell me and I forget. Teach me and I remember. Involve me and I will learn."

Benjamin Franklin

What will the Academy teach?

- Integrated core curriculum through the lens of health and medical sciences during 9th and 10th Grade (*English, History, Science, Latin, & Health & Medical Science – 5 credits across 4 blocks*)
- Four additional blocks for core and elective coursework
- Specialized Content to include Biomedical Innovations & Body Systems (*11th and 12th grade*)
- Content designed and developed by a team of teachers and professionals from ACPS, UVA, PVCC, and community health professions

CURRICULUM

“Those that know, do. Those that understand, teach.”
Aristotle

Who will the Academy teach?

- Up to 200 students in grades 9 – 12 interested in diverse Health and Medical Science career opportunities
- Students identified as early as elementary school and nurtured in preparation for this program
- Students curious about post high school opportunities in health related careers

STUDENT BODY

Academy Vision

Students will explore and pursue health-related career opportunities within three pathways.

- **Pathway 1:** Allied Health Technicians *(to include a variety of industry certification programs – PT Assistant, Dental Assistant, Pharmacy Tech, Medical Coding)*
- **Pathway 2:** Technical, Bio-Engineering, Medical Equipment *(Research, Genetic Engineering, laboratory work, scientist, chemists)*
- **Pathway 3:** Medical Practitioners – *(Medical Doctor, D.D.S., RN, LPN)*

Pathways for Lifelong Learners



2012 - 2013

50 STUDENTS

9th Grade

1 Director/Teacher (10 months + 2 weeks)
4 – 8 sections Integrated Core Curriculum

2013 - 2014

100 STUDENTS

9th & 10th Grades

1 Director/Teacher (10 months + 2 weeks)
8 – 16 Sections Integrated Core Curriculum

2014 - 2015

150 Students

9th through 11th Grade

1 Director/Teacher (10 months + 2 weeks)
8 – 16 Sections Integrated Core Curriculum
2 – 4 Sections Biomedical Innovations 1 & Body Systems 1

2015 - BEYOND

200 STUDENTS

9th through 12th Grade

1 Director/Teacher (10 months + 2 weeks)
8 – 16 Sections Integrated Core
4 – 8 Sections Biomedical Innovations 1 & 2 and Body Systems 1 & 2

2012

2013

2014

2015

ACADEMY STAFFING TIMELINE

TIMELINE: 2011-2012 – Planning Year

FALL

- Board & Community Presentations
- Select Advisory Board
- Establish Partnerships
- Guide to High School Credit Courses

FALL/WINTER

- Career Fair
- Develop Outreach & Application Process
- Middle/Elementary School Connections

SPRING

- Select & Invite Students
- Identify Academy Space
- ***Select Director***
- **Select Staff**

SUMMER

- Curriculum Writing

*Curriculum Writing,
Collaboration, and
Site visits ongoing*

Fall

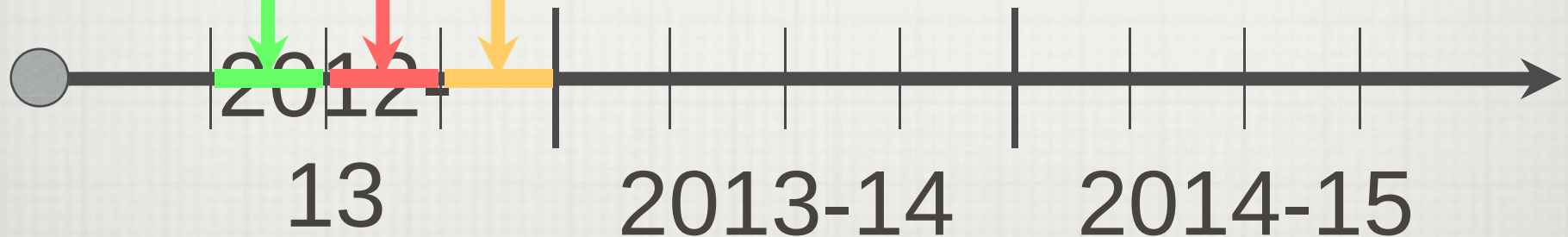
Open Academy for up to 50 9th Graders

Winter

Career Fair
Develop curriculum, outreach,
and application process

Spring

Select & Invite Students
Curriculum Development
Assess Staff Needs



TIMELINE FOR ACADEMY

Fall

Open Academy for up to 50 9th Graders

Winter

Career Fair
Develop curriculum, outreach,
and application process

Spring

Select & Invite Students
Curriculum Development
Assess Staff Needs

Fall

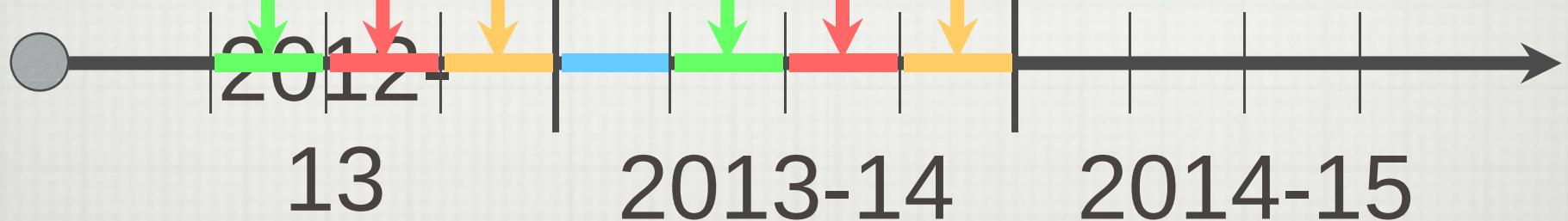
Open Academy for up to 100 9th & 10th Graders

Winter

Career Fair
Develop Curriculum

Spring

Select & Invite Students
Curriculum Development
Assess Staff Needs



TIMELINE FOR ACADEMY

Fall
Open Academy for up to 50
9th Graders

Winter
Career Fair
Develop curriculum,
outreach, and application
process

Spring
Select & Invite Students
Curriculum Development
Assess Staff Needs

Fall
Open Academy for up to
100 9th & 10th Graders

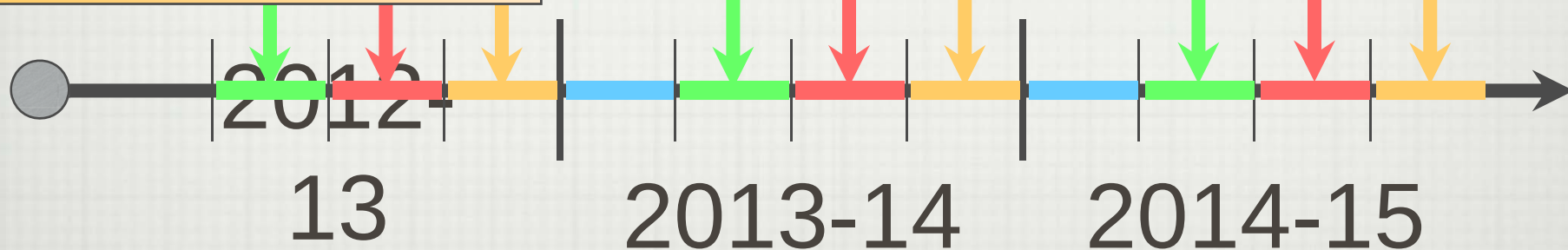
Winter
Career Fair
Develop Curriculum

Spring
Select & Invite Students
Curriculum Development
Assess Staff Needs

Fall
Open Academy for up to 150
9th, 10th, & 11th Graders

Winter
Career Fair
Develop Curriculum

Spring
Select & Invite Students
Curriculum Development
Assess Staff Needs



TIMELINE FOR ACADEMY

Fall

Open Full Academy for up to
200 9th – 12th Graders

Winter

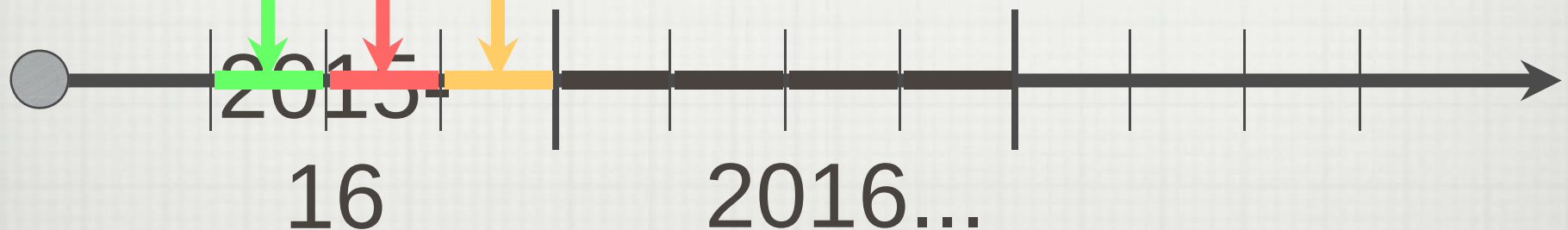
Career Fair
Develop curriculum, outreach,
and application process

Spring

Select & Invite Students
Curriculum Development
Assess Staff Needs

Continued/Ongoing

- *Curriculum Development
- *Staff Assessment
- *Program Evaluation
- *Community Outreach
- *Partnership Growth
- *Job Skill-set Needs



TIMELINE FOR ACADEMY

Budget Implications

- .5 FTE for Coordinator/Teacher – 10 Months + two weeks
 - .5 FTE for Integrated Core Curriculum
 - Curriculum Writing, & Lesson Planning Stipends for teachers
 - Lab equipment, resources, and texts
 - One to one technology (estimated 50 laptops per year)
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Inspiring Excellence, Innovation, and a Future of Service

