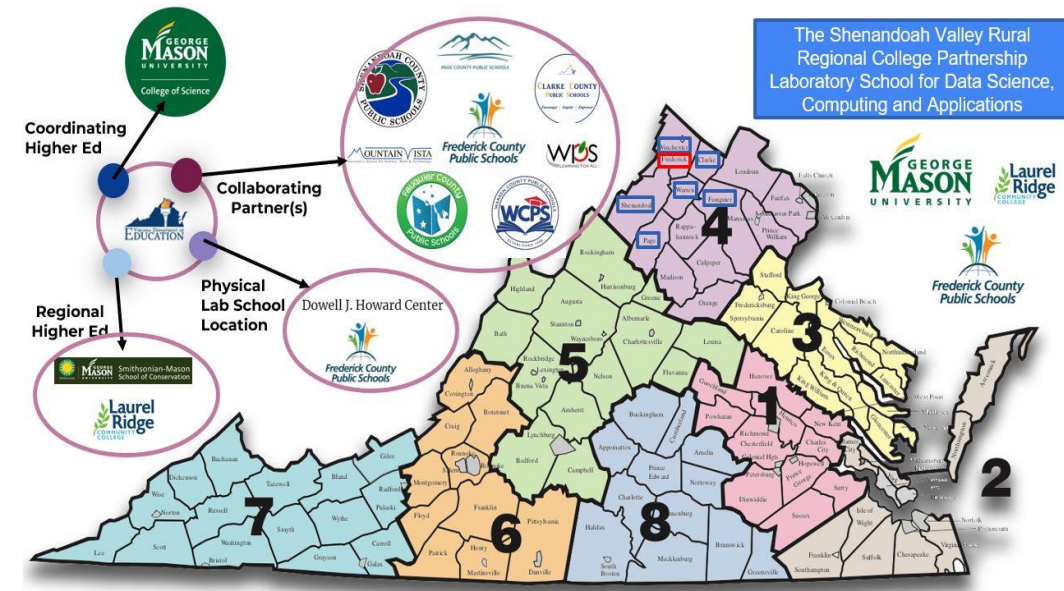


Shenandoah Valley Rural Regional College Partnership Laboratory Schools

OVERVIEW: The Shenandoah Valley Rural Regional College Partnership Laboratory School for Data Science, Computing and Applications is a collaborative project led by George Mason University with Frederick County Public Schools as lead K-12, in partnership with six partnering rural and rural-fringe school districts in the Shenandoah Valley including Clarke County, Fauquier County, Page County, Shenandoah County, Warren County, Winchester Public Schools as well as Governor's School at Mountain Vista, GMU Smithsonian Mason School of Conservation and Laurel Ridge Community College.

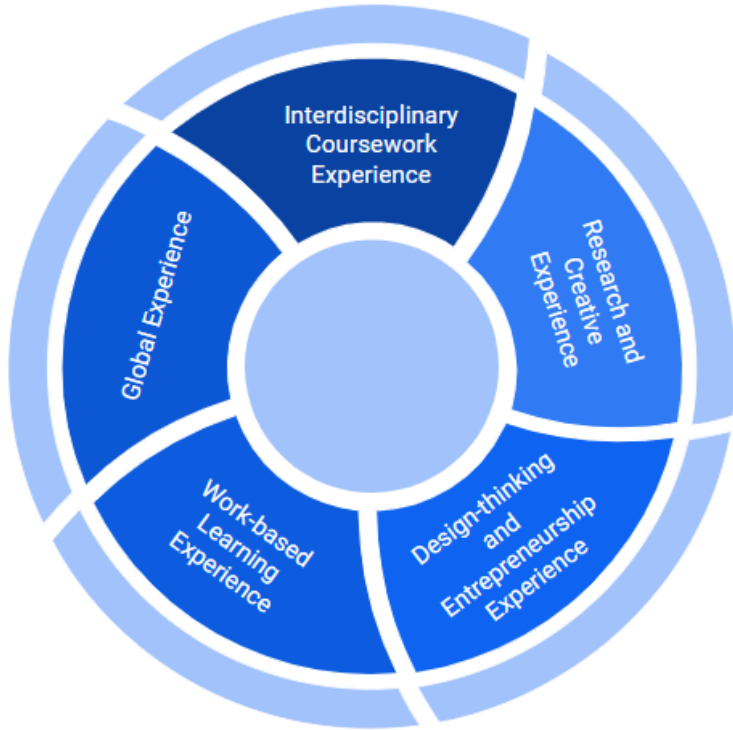
MISSION: To create innovative pathways designed to help students and teachers from rural and rural fringe school divisions add Data Science, Computing and Applications expertise to their skill set and make informed data-driven decisions to contribute meaningfully to their communities.

VISION: To create a data-literate next generation workforce empowered with the skills, knowledge, and mindset necessary to thrive and solve problems in a data-driven world to bring about positive change.



Shenandoah Valley Rural Regional College Partnership Laboratory Schools

INSTRUCTIONAL MODEL



Day-in-the Life Data Science & Computing Applications Lab School Student			
<i>Dual-enrollment credit*; University credit**; Industry certification***</i>			
Travel from the Base School 7:30-8:15 am (varies)			
	11th Grader (Modified A/B)	12th Grader A/B Day	12th Grader A/B Day
Block 1 (A/B) (100 minutes)	Data Science I /Science	Data Science II* /Science*	SMSC: WBL Elective: University Research, Apprenticeship with Smithsonian Scientists**
Block 2 (A/B) (100 minutes)	English/SS	English/ Government	
Lunch 30 min.			
Block 3 50 min.	Data Hub: CS	WBL Electives (Choice of 2/sem) 1. University Research**, 2. Apprenticeship 3. CS II** 4. Data Analytics Certificate***	Data Hub: CS II** and Data Sci II*
Block 4 50 min.	Elective: University Research Class** or World Language		English/ Government
Travel back to the Base School 2:00-2:30pm Students can participate in sports, clubs, etc. and take bus transportation home.			



Shenandoah Valley Rural Regional College Partnership Laboratory Schools

SUPPORT & PARTNERSHIPS

University Mentors



Data & Statistical Computing (SU)



Math Ed/Research (GMU/FCPS)



Data Science & Computational Mathematics (GMU)



Software Engineering/Mobile Apps



App Development (GMU Graduate Assistant)



Machine Learning/Neural Networks (ODU)



Applied Mathematics (SU)



Micro-Pilot Lab School Student-Led Research



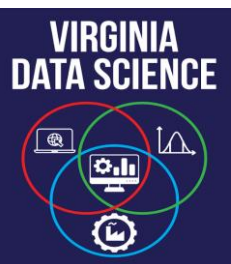
High School Teacher Mentors



Smithsonian



BLACK SKY
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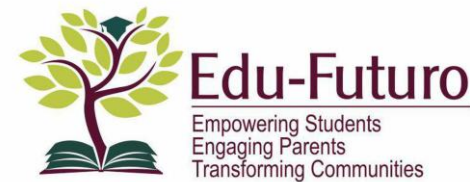


Shenandoah Valley Rural Regional College Partnership Laboratory Schools

BUDGET SUMMARY & SUSTAINABILITY

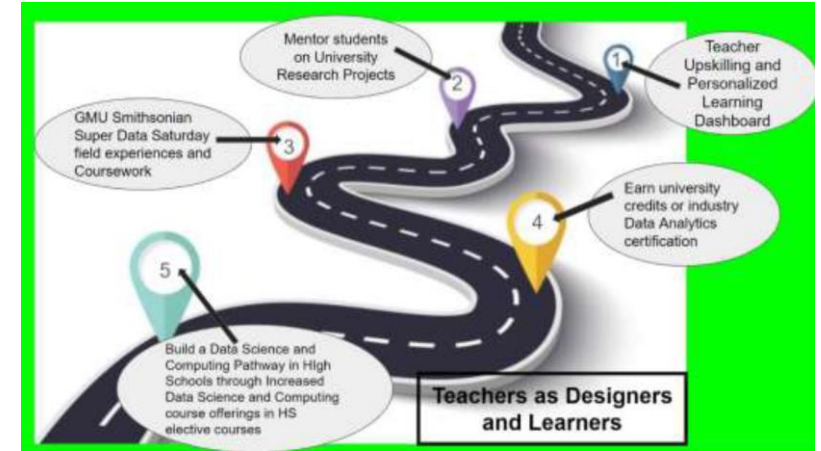
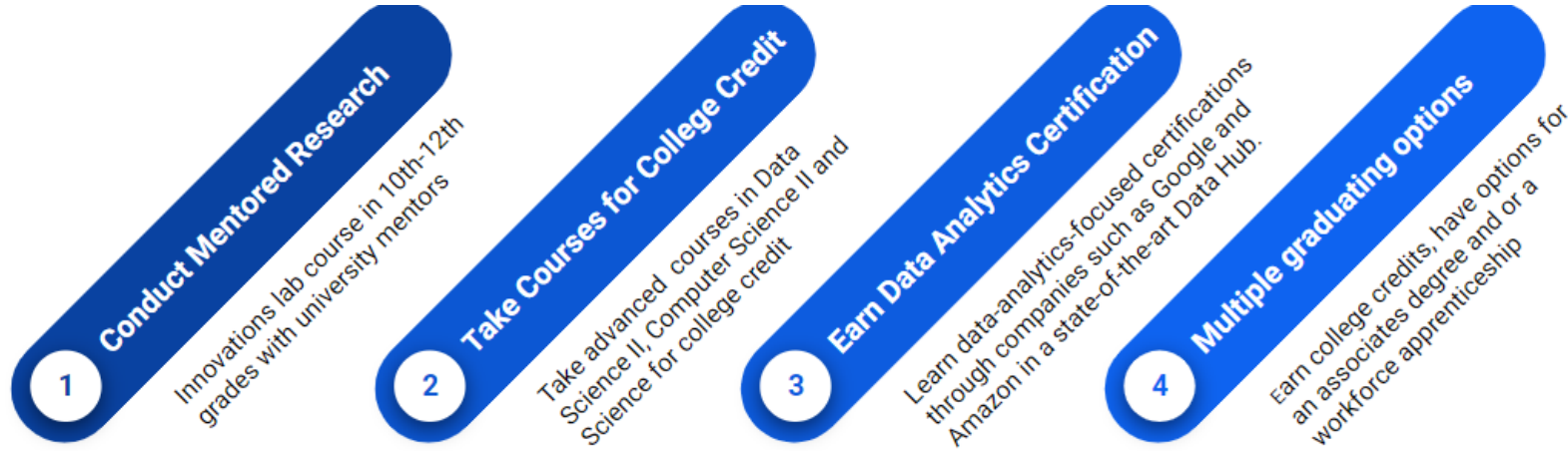
BUDGET SUMMARY

- Start up Year 0
- Years 1 - 5
- Total: \$ 6, 249, 565

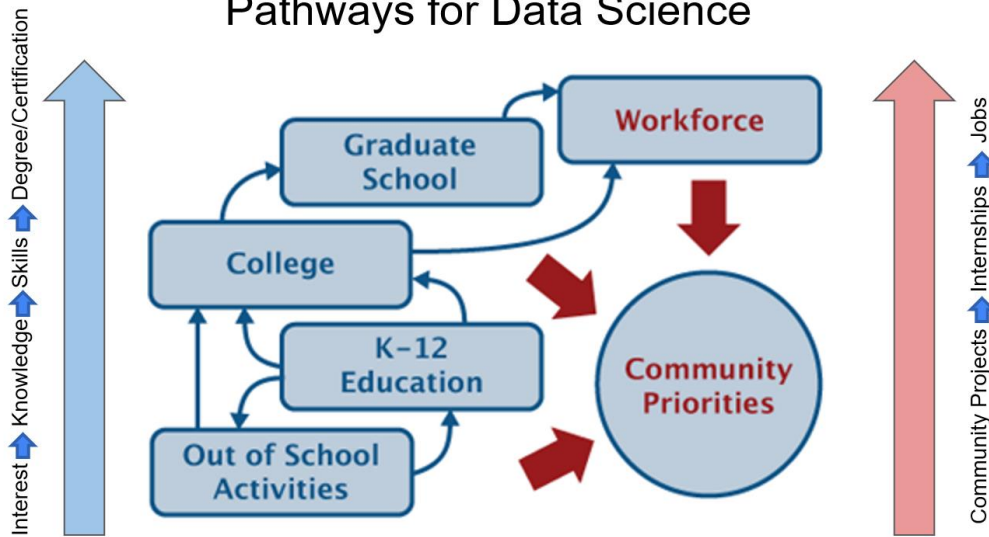


Shenandoah Valley Rural Regional College Partnership Laboratory Schools

OUTCOMES



Pathways for Data Science



Accessibility

Many digital badge and micro-credential programs are available online, making them accessible to individuals regardless of their location or schedule. This accessibility democratizes education and allows more people to participate in skill-building activities.

Customization

Institutions and organizations can tailor digital badge and micro-credential programs to specific needs and interests. This customization ensures that learners acquire relevant skills that align with their career goals or organizational requirements.

Stackability

Digital badges and Micro-Credentials are often designed to be stackable, meaning that learners can earn multiple badges or credentials over time, gradually building their expertise and qualifications.



Frederick County Public Schools