There are 42,204 students in Frederick County ages 5 to 20. By the government census it has been recognized that 8% of this population carries some form of disability. In most cases, public schools provide programs for those in need of special education but there are still the remaining few who continue to struggle in the mixed population. The Rock Creek School is a learning environment in our community that serves those with very severe physical and learning disabilities. Rock Creek was designed to provide education for 242 children, but only 83 are enrolled. Since the school was built in 1972, we have experienced an increase in the population of disabled students. Surrounding areas, such as Montgomery County - which hosts 5 schools solely for special education - are up to date with the growth. While it can be argued that Frederick County is still experiencing low enrollment rates, providing a more convenient route to local schools may make education for the severely disabled at home more desirable. Our handicapped students in Frederick County simply cannot reach their full potential without the right educators and necessary equipment. In Rock Creek School, every room is expected to be ADA compliant; sadly, it’s far from being up to date with these standards. Outside of this, it still serves a purpose as the only local school with full attention on all of the children's needs. Therefore, it was an easy choice to use Rock Creek as a case study. The Maryland educational system has improved the lives of nearly all adolescents county-wide but ‘nearly’ is not enough. We must account for the underrepresented students with disabilities and we have selected this project with high hopes of inspiring change for our peers.

Our project goal is unique because of the fact that we go beyond a simple educational building. Hawking Academy is specially designed from the ground up to cater to the specific needs of students with disabilities. The lot we have chosen for Hawking Academy will be used for a real redesign of Rock Creek School in the near future, which neatly ties our own design into a similar real-world project. Before we started any design work however, we came up with a list of words that we hoped to embody. We eventually narrowed the list down to five: inclusive, inspiring, interactive, fulfilling and flexible; these five words became the foundation of our “parti pris”, or ‘big idea’ of the project: a purposeful experience. We know what a ‘purposeful’ building means to us, but to understand what a ‘purposeful’ experience means to the students and staff of Rock Creek, we had to talk to them personally. We visited Rock Creek, toured the school, offered our services to them and, in the process, gathered suggestions from the students and staff to include in our school. With help from those who call Rock Creek home, we designed a 21st century education based school that is ADA compliant and technologically advanced, to fully support the students’ learning experience.
As we approached the design phase of the project, we needed to address the many current problems at Rock Creek, most of which being directly related to the schools noncompliance with today’s ADA standards. Rock Creek suffers from extremely overcrowded hallways and classrooms that cannot support the disabled students who are bound to wheelchairs, therefore space was a top priority for our design of The Hawking Academy. Our team incorporated several wheelchair and equipment storage rooms so the hallways are clear and easy to pass through. We also doubled the classroom size, allowing for easier wheelchair access. Rock Creek School has special movement and sensory rooms that the students use during their school day to relax and experience quality therapeutic time. The staff of Rock Creek talked highly about these rooms and their positive effect on the students’ progress. Currently, Rock Creek School does not include any outdoor learning environments or a centrally-located collaborative space. The Hawking Academy incorporates a central courtyard in an atrium design, allowing natural light to enter the building as well as create a centralized collaboration area for both students and staff.

The Hawking Academy provides a quality education for students with severe disabilities in Frederick County. This kind of dedicated education is necessary for these students, who would otherwise fall behind in a traditional school setting. This project came together with help from Melissa Wilfong - an architect for Grimm and Parker, Beth Pasierb - the planner for Frederick County Public Schools, and John Kriner - an industry professional and teacher in Frederick County. They gave us insight into different requirements and aspects of the design that were necessary for this school, such as exterior windows for the standard classrooms, and offered professional advice on the logistics of the design, like the budget and construction timeline. Their contributions helped further our ideas into a fully developed design. The Hawking Academy was designed to embody five virtues: inclusive, inspiring, interactive, fulfilling and flexible. These philosophies were taken into consideration when creating every aspect of the school. Overall, achieving a design that exemplifies our Parti Pris: a purposeful experience.