“Progress Towards A Technological Learning Center”

HUGH MOORE PARK
Lafayette College Technology Clinic

Presented at Two Rivers Landing
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Mid Year Report
Lafayette College Technology Clinic
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Lafayette College Technology Clinic Mission

To design a building which will house an interactive Technological Learning Center that can be utilized by people of all ages. The building will be aesthetically pleasing, structurally sound, and easily expandable. The contents of the Learning Center will be exhibited in such a way that will encourage hands on, interactive learning. The Center will convey a story of the technological advances in the Lehigh Valley as well as the United States during the canal era. A major focus of this story will be transportation and industry. The final objective is to design programs that will allow artisans, artists, students and the general public to participate, enjoy and fully understand the technological history found in the museum.
Acknowledgments

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Bob Doerr, Historical Preservationist

Paul Finken, Professional Blacksmith

Dr. Charles Best

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Introduction to Technology Clinic

The Lafayette College Technology Clinic, is a program which brings together small groups of selected students with faculty mentors in order to solve real-world problems proposed by an industry or government sponsor. The year-long study addresses the social, technological, and economic factors relevant to a successful solution. Students work on campus as a team, at times independently, and on site with the sponsors.

While this description, based on the Lafayette College Course Catalogue, defines the general nature of the course, such a basic explanation can hardly express the wealth of opportunities for growth and experience that this type of course provides. A Technology Clinic is typically a team of five or six students aided by two faculty advisors. The students are nominated for the program by faculty members and interviewed by a faculty committee. Selected students are assigned to a team based on their abilities. The advisors, as well as client liaisons, work closely with the students to provide direction and advice. During its ten-year history, Technology Clinics have been sponsored by agencies such as Olin Hunt, Merck, Ingersoll Rand, the Lehigh Valley Hospital, and Lafayette College.

The Technology Clinic strives to solve real world problems over a full academic year using the unique abilities and perspective that the students possess. Rather than using the traditional professor-student methods, the Technology Clinic operates on a theory called Synectics. This theory encourages the creative process by viewing the proposed problem from many different perspectives in order to identify potential
solutions. In addition, Synectics uses a team approach to solve problems of much greater scope than an individual could accomplish alone.

Our Technology Team

Michael Haynes is a BS Civil Engineering major. He is a member of the 1999 graduating class at Lafayette College. His hometown is Long Valley, New Jersey. He has spent two summers interning for Merck's Corporate Finance Computer Support Division at their corporate headquarters in Whitehouse Station, New Jersey. His outside interests include hiking, working with computers, as well as playing ping pong.

Lisa A. Henriques will be graduating from Lafayette College this year with a major in AB International Affairs, as well as a minor in Finance. She is from Southbury, Connecticut. She has successfully completed a term as President for the Sorority, Kappa Kappa Gamma. She is also the President of the International Affairs Club. This past summer she had an internship working for the European Commission, located in Madrid, Spain. Her outside interests include traveling and playing tennis.

Kathryn Ann Pallotta will be graduating from Lafayette College this year with a joint major in AB Math, and Economics. She is from Mahwah, New Jersey. She is continuing with her summer work throughout this year as an EXCEL Scholar, assisting an economics professor in researching organizational effectiveness. Her interests include horseback riding, reading, and playing volleyball.
**Christopher Thompson Patterson** will be graduating this year from Lafayette College with a major in Art, and minor in Finance. He is from Wynnewood, Pennsylvania. He is a brother in the Zeta Psi Fraternity. He has completed three years as a member of the Men's Varsity Lacrosse Team. He is also currently a member of the Investment Club. This past summer he had an internship with Bear, Sterns & Co., Inc., located in Boston, Massachusetts. In his spare time he enjoys playing squash, flyfishing, traveling, and reading.

**Leanne Kate Pescatore** is a member of the class of 1999. She is majoring in AB Engineering. Her hometown is Ridgefield, New Jersey. She is currently Vice President of Delta Gamma Fraternity. She is also the Co-President of the Leonardo Society for AB Engineers, and a member of the Lafayette Environmental Awareness Protection Organization. This past summer she worked as an intern for the Store Planning Department of the Children's Place. Her outside interests include reading and traveling.

**Dani Rebecca Shotel** will be graduating this year with a major in American Studies, and a minor in Art. She is from Gaithersburg, Maryland. She has completed three years as a member on the Varsity Women's Fastpitch Softball Team. Over the summer she was a player on a Women's Majors Fastpitch Team that won the Atlantic Coast Conference, as well as qualifying for a National Tournament. She hopes to attend George Washington University to study Special Education and Human Development. This summer she will be a Director of a Nature Day Camp, located in Boyds, Maryland. Her outside interests include both children and animal care.
Dan Bauer is a Social Anthropology Professor at Lafayette College. He is originally from Redwood City, California. He has formerly been employed as an auto mechanic instructor, as well as a photographer. Today, his interests include historic preservation of buildings and automobiles.

William Best is a visiting Instructor in Engineering and Technology Studies. He is originally from Easton, Pennsylvania, but has lived in Virginia, Vermont, and London, England. His interests include the role of technology in society, and Biomechanics. He is eagerly awaiting the 1998 World Cup.

Team Building

On a beautiful Sunday morning in October, before the rest of Lafayette awoke, our team of eight brave individuals headed north on an unknown journey. Upon arrival, we found ourselves confronted with white rapids of tremendous proportions. Our team was divided into two groups, in order to conquer this massive body of water.

We signed our lives away, and entered the boats with no fear in our hearts. We knew that if we won this battle, together we could accomplish anything. Our group was able to survive whatever was thrown in our direction, including other technology clinic members. A couple of us were tossed by the rapids into the deep, dark, and violent waters. With full knowledge that this group could not afford any casualties, each member was rescued, and returned to Lafayette unharmed. Upon reaching shore, our
technology clinic reached out to one another with strong embraces and praises of heroism.

Although this tale may be hard to believe, this trip down the river was a necessary step in making our team become a cohesive unit. We individually needed to develop our own self-confidence, become aware of each other's strengths, and be able to cope with each other's weaknesses. Through all of this drama, our team was able to unite and prepare for our work with the Hugh Moore Park Project.
Background

Once our team had come together and learned a little about one another, we sat down and decided on a number of goals we needed to achieve by the end of this semester. These goals were derived from questions we had about the project, but could not answer. Our primary obstacle was defining the problem: "How do we develop an Technological Learning Center?" Our first step in approaching this problem was to visit many museums and Learning Centers, in order to obtain a variety of ideas for our project. We also felt it was necessary to meet with numerous people to enhance our understanding of different perspectives. These visits have helped us to obtain valuable information for the development of an interactive Technological Learning Center.

Throughout the semester our team has visited a number of sites, attended lectures and met with numerous professionals in hopes of achieving our goal. Our first visit to the proposed site at the Hugh Moore Park was to gain a better understanding of the assignment. There, we not only surveyed the site, but also experienced a ride aboard the canal boat, Josiah White II. After gaining a sense of where the Technological Learning Center was to be built, we moved onto identifying models to help shape this interactive center. These places included: the Mercer Museum in Doylestown, PA, the SMART Museum in Bethlehem, PA, the Crayola Factory and the National Canal Museum in Easton, PA, the Children's Museum and the National History Museum-Smithsonian in Washington D.C, and the Hunterdon Historical Museum in Clinton, NJ.

The trip to Mercer primarily gave us ideas for the physical structure of the
museum. Although the items in the museum were interesting, there was no theme connecting them. Most of the museum was just a collection of artifacts, which did not seem to tell a story. However, the trip to Mercer did help us with some conceptual ideas, such as the bright green interactive exhibits and the unique use of space. The museum also showed us that a concrete floor is feasible and aesthetically pleasing. We also realized that in order to avoid shadowing on the exhibits, we need to provide as much natural light as possible.

In visiting The SMART Museum, we discovered the benefit of receiving souvenirs from the day's activities. Although there were many enjoyable hands-on activities, there were no museum personnel available to explain them. This detracted from the learning aspect of the museum.

The Crayola Factory offered numerous interactive ideas for our Technological Learning Center. Every activity involved all visitors of the museum. The activities were extremely inviting; bright colors, recorded voices (instead of dull readings), and smiling volunteers made the experience fun. Again, being able to make things and take them home increased our sense of interaction.

Another Easton attraction, the National Canal Museum, used an interactive system effectively. Once the visitor approached each exhibit, motion sensors were used to activate a soundtrack that voiced the stories of the lives of canal workers. Unfortunately, the limited size of the museum compromised the extent of this interaction.

The Children's Museum and The National History Museum were both incredibly large and contained many activities as well as exhibits. However, due to lack of maintenance, the Children's Museum has allowed interactive exhibits to deteriorate.
the contrary, the National History Museum exhibits tended to be well-kept and high quality. While it is difficult to maintain an interactive museum of this scale, the Smithsonian has succeeded in creating an interactive learning environment. Furthermore, the rotation and traveling exhibits in the Smithsonian made each visit unique and inviting.

The trip to the Hunterdon Historical Museum was very informative for our understanding of the layout of a blacksmith shop and possible programming ideas. This museum also gave us a chance to experience a living history theme. Although the cluster of related buildings in a village type setting might not necessarily be our vision for the Technological Learning Center; we did come away with some structural ideas, such as the use of stalls.

We visited the Hugh Moore Park maintenance building/yard to gain a better understanding of the sizes of the different items in storage. These artifacts are essential to our exhibit area, and although they are in poor condition, we feel that their restoration can become an integral part of the Technological Learning Center.

Our team also felt that it was necessary to meet with experts on restoration, museums, and technology. One of the individuals that we met with was Paul Finken, a professional Blacksmith who has been collecting blacksmith equipment for the past forty-five years. Mr. Finken has donated this collection of Blacksmithing equipment and handcrafted ornaments to the Hugh Moore Park. Mr. Finken informed us about the Artist Blacksmith Association, which we may want to contact to find full or part-time blacksmiths. He is extremely interested in helping the Technological Learning Center to
create and maintain a functioning and historically accurate blacksmith shop.

Another individual that has helped guide us was Bob Doerr, an historic preservationist. In our meeting, he explained potential construction costs. One important idea that we came away with was the idea of acquiring recycled/historical attributes (windows, doors, etc.). He also mentioned the possibility of salvaging and relocating a barn that is to be destroyed that may serve as a central core of the Technological Learning Center. He feels that this would achieve historical accuracy, create a sense of the past and possibly cut costs.

Another event that our team attended was the Northampton County Historical Society Dinner. Dr. Steven Lubar, from the Smithsonian Institute, was the key speaker. In his speech, he explained the importance of People, Places, and Things in the creation of a new museum. We have taken his suggestion to heart and are designing our Technological Learning Center around this point.

The structure of the proposed building was created in collaboration with Ruth and Jim Rowe, both certified architects. They introduced us to the idea of Timber Frame construction, the use of an architects scale, and the publication, Builders Illustrated. After talking with this couple, our structural design plans began to take shape.

To help us come to a better realization of what we had to work with, Tom Heard, the collections Manager of the Hugh Moore Park, supplied us with a list of the artifacts that have already been collected. The list included the name, function, and dimensions for each of the objects, which helped us visualize their inclusion in the Technological Learning Center.
Physical Structure

One of the major challenges in developing a Technological Learning Center is the design of the physical structure itself. The team realizes that our design needs to reflect our vision of a modern interactive learning site while at the same time accounting for budgetary, historical and construction constraints. In many ways the theme and scope of the Technological Learning Center programming will ultimately determine the final structure. Therefore, we are acutely aware that any limitations imposed by the structure will affect future uses for the Technological Learning Center. We feel that the actual floor plans, and more importantly the external look of the Learning Center, are essential to the success of attracting and exciting potential visitors to what the Technological Learning Center has to offer.

As a team we have visited other museums and photographed many historic structures, which fueled many brainstorming sessions throughout the term. Our individual likes and dislikes have encouraged debate on many issues that we feel are necessary to settle, in order to reach a preliminary physical structure design. In this section our thoughts and plans, to date, are summarized.

Basic Site Layout

The site for the Technological Learning Center is located along the towpath approximately 25 feet from the canal and 100 feet from the Canal Boat Store. After visiting the site several times, we have concluded that the structure should blend with the surrounding bucolic park-like environment, while at the same time expressing the
history of the canal and industrial era of the late 19th century.

We have decided that the main shape of the entire Technological Learning Center should be an 80 by 100 foot rectangle. A concrete foundation slab would be set to these dimensions once the necessary loads are calculated. The decision to keep our basic slab rectangular, although somewhat ordinary in nature, will allow maximum flexibility and ease of construction for a wide variety of building profiles and interior floor plans.

**Building Profile & Floor Plan Options**

In designing the skeleton of the building, we explored many cross-sectional plans. The two designs we feel, at this point, are worth further consideration feature a center peak roof and an end peak roof. Each of these roof designs allow for different interior plans and possibilities.

Regardless of the skeleton plan chosen for the building, there are several common components that we feel should be incorporated in any design. The first element is the inclusion of an overhead walkway, for a more complete visual experience. This walkway would be an industrial metal grating between five and ten feet wide running the length of the building, approximately 14 feet above the museum floor. For space efficiency, spiral staircases will provide access to the walkway. This will add a new dimension of excitement by allowing exhibits to be viewed from a variety of angles.

Another component we believe is important to include in the floor plan is an office area. This area can be used to store documents and records pertaining to the
functions of the Technological Learning Center. It can also contain a telephone and main
computer for the building and serve as a central location for staff and volunteers. We
estimate this area to be about 15 by 15 feet with a dropped ceiling.

Space for restoration is also a key component in any floor plan layout. After
viewing potential artifacts stored at the park, such as a coal car and a steam locomotive,
we have concluded that much restoration will be necessary before items can be
displayed in a "traditional museum" sense. However, we do not see this as a negative.
In the early life of the Technological Learning Center, we would recommend that the
restoration process be a "dynamic" event that would allow for visitors, to actively view
and, where appropriate, participate in the restoration of industrial artifacts. This
expandable restoration area will be achieved through the use of a movable curtain or
temporary walls. A large service door to move artifacts into the restoration area would
be provided along the side of the building opposite the canal. This service door should
be at least 14 feet high and 12 feet wide. Although we realize that this door must be
functional we would recommend a type consistent with the historical nature of the
exterior design.

Other components we feel necessary to include are an interactive learning
classroom, a reading room and an art studio. Our recommendations for the locations of
each of these components will be dictated by the building floor plans.
End Peak

The end peak profile features a single slope beginning on the side furthest from the canal, approximately 38 feet high, sloping down to a vertical set of clearstory windows. At the base of the clearstory windows another slope roof completes the profile. The idea for the end peak roof came from the maintenance building at the Hugh Moore Park.

The end peak roof led us to our first interior layout design (See Appendix A). A major advantage of this layout is that the walkway is along an outside wall and is supported by the wall. Visitors on the walkway will be able to see into the restoration area behind the curtain as well as the main exhibit area. The walkway also provides area along its length to display smaller artifacts and artwork. In this plan, the office is located in the front right corner when entering the building through the main entrance. The classroom, art room, and reading rooms are towards the canal side of the interior. This configuration creates a welcome area that orients visitors to the scope of the
museum. A hallway is also created in this design, which allows for access to the
restoration area on the floor level, and to the doorways that lead to the stalls. The curtain
that separates the restoration area from the main exhibit area could begin at the
classroom and extend to the far wall.

Center Peak

   The center peak is the traditional roof design seen on many barns and homes. Like the end peak design, this plan also features a set of clearstory windows. Our idea for this came from the Bethlehem Corporation building. Research has shown that the center peak design is common to many industrial buildings of the late 19th century.
The floor plan associated with the center peak design, features the walkway running down the center of the building, supported by the roof trusses (See Appendix B). The electronic interactive classroom is located along the left wall adjacent to the stall, to facilitate access from the classroom to the exterior stall. The office is located in the same place as the end peak design, and both the office and the class have a dropped ceiling. The art studio location would not be permanently fixed, but has been tentatively placed in rear of the building near the service door (the service door is in the same location as the end peak design). A major advantage of this design is more open sight lines. This floor plan also offers greater flexibility in the utilization of the space for restoration. Again, as with the previous design, restoration space can be separated from the main museum by a curtain or movable walls.

**Construction Options**

As a result of our observations and research of other structures, we have identified building components that we feel would enhance the physical look of the Technological Learning Center. These components must be researched further to ensure historical accuracy, structural functionality and cost efficiency. The following is a compilation of structural elements that we intend to analyze in the coming semester in order to finalize a design.

- **Skeleton:** Several different options concerning the internal “gross” structure have been considered. These include a timber frame, masonry block wall and a standard “Butler Building”
steel frame structure. We will also investigate the possibility of relocating a barn structure to the site that could form the central core. Fire safety will also be considered.

- **Roof**
  Options for roofing include asphalt shingle, simulated slate, corrugated metal, rubber and raised channel.

- **Siding Types**
  Options for the exterior walls include (a) board-and-batten, (b) stucco, (c) finished barn wood and (d) exposed rough-cut cinderblock. Each wall may be of a different siding type.
• **Windows & Doors**  In order to maximize natural lighting we recommend the use of clearstory windows and skylights. We will investigate the possibility of acquiring historic windows and doors. One possible company that has been recommended to us is Sylvan Brandt, Lititz, Pennsylvania.

• **Hinges**  Historically accurate and functional hinges will be considered for the exterior stall doors and the service door.

• **Lighting**  Track or theater lighting would be installed in the closed rooms. In the main exhibit areas and restoration space, industrial vapor lighting would be a possibility.
• Wiring Security, and fire protection systems, would need to be provided. Wiring the office and classroom for Internet access, will be researched with Dr. Jack Kayser (Skillman Library Educational Technology Specialist, Lafayette College).

Blacksmith Paradigm

Stall Concept

A major component of the unique programming aspect of the Technological Learning Center is what we call “Stalls”. They will provide space for a more interactive museum experience, as well as offering passersby and canal boat riders an opportunity to view exciting exhibits. These stalls will be used to demonstrate 19th century crafts. Ideas for such stalls include: Blacksmithing, furniture making, glassblowing, wheelwrighting, coopersmithing, candle making, and textiles. In addition, one of the stalls could be an engine house that provides power for the other stalls.

The one idea we have chosen for our stall paradigm is Blacksmithing. The purpose for this is twofold. Blacksmithing played a major role in the development of the canal and industrial technology of the late 19th century, and secondly, Paul Finken, a professional blacksmith from Easton, Pennsylvania, has donated a complete set of blacksmith tools to the Park. The blacksmith stall will be a functioning shop with a proposed seasonally hired blacksmith. It will contain both the tools, able to be handled by visitors, and products made by the blacksmith. Our intention in creating this type of atmosphere is to attract
visitors of all ages to experience and appreciate technological processes.

**Stall Design**

The stalls will be rectangular in shape and constructed along the towpath side of the building, facing the canal. Each stall will have a large door, or doors, to facilitate observation and exploration by the visitors. Ideas for the design of the doors include swinging outward, sliding to the sides, and opening upward to provide cover for the visitors.

A smaller door at the back of the stall could be provided for access to the main museum. During the initial construction, the dividing walls may not necessarily be constructed depending on budgetary constraints. However, we feel that the slab and roof of the stalls must be constructed as part of the main structure, because erecting the stalls after the completion of the main museum would be more costly.

After meeting with Mr. Finken our team learned that a blacksmith shop from the canal era would have either a dirt or wooden floor. In our case, we would use a dirt covering over the concrete slab. He also suggested Post and Beam (Timber Frame) construction, to allow open space for viewing, track lighting, and a display table for finished products. Having the stalls face the canal, they will serve as an additional focal point to encourage visitors to explore the rest of the museum. The blacksmith shop will also help bring the canal era to life by interpreting the daily contributions made by the blacksmith, such as shoeing mules, forging tools, and fabricating hardware.
Programming

Whereas the physical structure of the Technological Learning Center is necessary, without thoughtful programming the building will be reduced to a warehouse of deteriorated artifacts. Over the course of the semester, we, as a team, have developed a philosophy that we hope to utilize to guide our thinking and suggest recommendations for the programming of the Learning Center.

In his book The Engines of Change, Dr. Steven Lubard wrote that, in his view, technology is a social product that is only useful if understood within the fabric of society. Technology as an entity must be comprised of these uniquely intertwined ideas: People, Places, and Things. Stories relating these ideas must be told in order for one to completely understand and appreciate technology.

Since the early days of the Post-Industrial Revolution era, the Lehigh Valley, by virtue of its location, has often been referred to as the “Birthplace of the American Industrial Revolution.” For this reason, we believe the Learning Center should adopt this general theme in programming. Stories can be told of People, Places, and Things during the 19th century concerning the following:

- **Transportation:** Follow the development of transportation from horse to canal boat to railroad to truck.

- **Manufacturing:** Many different types of manufacturing processes were present in the Lehigh Valley. We recommend a focus on furniture making (Buehler Collection), textile making, and wire making.
• **Power:** Most 19th century mills and factories were water or steam powered. Programs could be implemented to follow the development of steam power that the availability of vast quantities of coal afforded.

• **Iron & Steel Industry:** The successful utilization of coal to produce iron and steel was a hallmark of the Lehigh Valley during the 19th century. Programs could be developed that would illustrate the leading role iron and steel manufacturing had in the subsequent technology innovations in heavy forging.

We feel that any programs developed in the above-mentioned areas should be particularly sensitive to hands-on interactive pedagogy. For example, we foresee an *illustration of manufacturing* where a visitor can see the belts, shafts and gears of power generation. We envision turning machines that could produce a product, one that the visitor could possibly take with them as a memento of their Industrial Revolution experience.

Other ideas of programs that we will investigate include:

• **Art**

We foresee a rare opportunity for the Technological Learning Center to be the hub of Industrial era artwork. Through collaboration with the Lafayette College art department, local schools, and local artists, we envision a place where study and research concerning 19th century industrial history will result in works of art (painting, photography, sculpture). It is our hope that this artwork can be exhibited throughout the Technological Learning Center. One example of this might be an exhibit by local photographer Walter Berko, a specialist in the Pennsylvania
Railroad, who has exhibited his work in Easton this past year. A sample of his work can be seen at the left. (Also See Appendix C)

**American Studies**

Every semester Lafayette College students search for independent study opportunities. We feel that the Learning Center should be the catalyst to involve college students with the work and history of the Lehigh Valley region. Professor Deborah Rosen, the Chair of the American Studies program at Lafayette College, is extremely interested in creating independent study projects involving the proposed Learning Center at the Hugh Moore Park. Rosen also suggested that the History and Anthropology departments might be interested in developing similar programs.
Goals for Next Semester

To continue our progress towards the development of a Technological Learning Center, we propose new goals for the upcoming semester.

We need to finalize the building structure plan so that construction can commence as soon as possible. It is necessary to finalize:

✓ Location and dimensions of the concrete foundation slab
✓ Skeleton structure of the building
✓ Type of roof
✓ Wiring plan for the security and fire systems
✓ Layout for the floor plan, including the locations of the interactive classroom, its wiring, and the machine shop
✓ Cost of construction

We need to investigate any necessary approvals before construction can commence by:

✓ HMHP&M, Inc. Board
✓ HMHP&M, Inc. Commission
✓ State of Pennsylvania
✓ City of Easton

Once the structural design is chosen, we will continue progress in developing the scope of the Learning Center by:

✓ Researching industrial history and present industry of the Lehigh Valley and surrounding areas
✓ Deciding which artifacts we want to include in the exhibit
✓ Researching individual artifacts that we already have so that we can decide what
other artifacts we would like to acquire
✓ Creating stories of “People, Places, and Things” to make the exhibits and programs a cohesive unit

Once the exhibit goals are defined we can further develop the program ideas for the Learning Center and explore the cost of:

✓ Restoration of the artifacts
✓ Programs we want to incorporate
✓ Staff necessary for the general exhibit area, specific programs, and restoration
✓ Operation and maintenance of the building

We will also investigate and develop potential fund raising techniques and ideas:

✓ Naming a stall
✓ Naming a classroom
✓ Creating a dedicated brick walkway, similar to Two Rivers Landing

During this process we hope to research and gather information and suggestions not only from books and meetings, but also from travel to:

✓ The Wilcr & Company Machine Shop
✓ Hagley Museum in Delaware
✓ Eckley Miners Village in Eckley, Pennsylvania
✓ Cooperstown Living History Center in Cooperstown, New York
✓ Saugus Iron Works in Saugus, Massachusetts
✓ History Center in Lowell, Massachusetts

We need to create and follow a formal time line to chart our progress of these activities throughout the semester.
Conclusion & Vision

As a result of the Crystal Palace Exhibition of 1851, the world finally recognized U.S. industrial prowess. During the next century, fueled in large part by the American entrepreneurial spirit, the increase in technological advances seemed almost exponential. It is this era that we envision to be captured by the proposed Technological Learning Center.

We envision a continuously expanding learning center where the exhilaration of invention is celebrated and the impact of technology on society is understood. We envision a center where names such as Sayre, White, Hazard, Buehler, Schwab and Roebling all come to life to excite and engage new generations of visitors to the wonders and accomplishment of 19th century Lehigh Valley Technology.

Appendices

A.) End Peak Floor Plan
B.) Center Peak Floor Plan
C.) Background on Walter Berko