

Warner Library STEM Mini-Grant Proposal

‘Sustainability in Urban Development’

The Warner Library would like to receive a \$1,000 Mini-Grant to fund professional assistance, training and the purchase of MINECRAFT Educational Software. Our goal is the use the funds received through the grant to enable students to participate in a village wide initiative to redesign the Metro North Train Station area in Tarrytown and develop an architectural layout that will provide greater accessibility to services and resources in the surrounding areas.

- **PURPOSE**

Currently, the Planning Board of the Village of Tarrytown is conducting a study of the train station area with a public input component called “It Takes a Village”. The goal of the study is to encourage good design, smart planning and sustainable development in an area that is evolving quickly. The Village of Tarrytown Planning Board is asking the entire community “How can the village reach its full potential in the 21st Century”? We believe that feedback from young people is an essential part of the answer to that question. The Village of Sleepy Hollow is also facing planning challenges. With the upcoming development of the Sleepy Hollow riverfront with new housing, retail and leisure space, it will be necessary to accommodate a new population of residents and visitors. Alternate commuter options in Tarrytown and Sleepy Hollow to reduce traffic congestion will need to be developed. We propose to engage students in this process using an educational version of the online software Minecraft. Utilizing MinecraftEdu students can build creative structures, creations, and artwork to map a layout in their own vision. *The Independent*, a UK publication reports that Minecraft "is the best-selling

independent game of all time, but its use in the real world – in urban development, mapping, history and the arts – makes it a crucial resource for building the future".

- **SPECIFIC ACTIVITIES**

Project participants will be asked to create a digital model village design and participate in a contest to create the ‘Best Village Plan’. They will initially receive an introduction to municipal planning with architect Joan Raiselis and, through the course of the project, receive three educational sessions with an expert instructor of MinecraftEdu Software from Digital Arts Experience(DEA). In addition, a member of the Warner Library Staff will be part of the training experience so that he may act as Project Technology Assistant. Each of the first trainees will try to engage and instruct at least one other student participant, and the Project Assistant will further facilitate training. It is estimated there will be two or three teams of five(5) to ten(10) participants, each working competitively to map a new village plan. Students should become sufficiently skilled to fulfill the requirements of the Project through a collaborative work process with other participants. At project completion, each team will present their design to the Mayor of Tarrytown and the village planning board and the winning ‘Best Village Plan’ will be announced. As an additional feature, our staff member and project assistant trained in Minecraft EDU will assume a ‘Train the Trainer’ role by holding an educational workshop for WLS librarians interested in learning more about the Minecraft design tool. The following are the particular planning issues students will address:

- Develop better routing for car, taxi, bus and pedestrian traffic around the train station
- Create new parking areas that are more convenient and space saving
- Make the Hudson River shoreline and walking trails more accessible and safe
- Establish an intra-village trolley or bus loop to connect people to resources and services
- Propose a better traffic design in Tarrytown and Sleepy Hollow to reduce congestion

- **STRATEGIES FOR ENGAGING PARTICIPANTS**

Warner Library will recruit twenty to thirty participants in the fourth through ninth grades.

Students in the higher grades will be responsible for more sophisticated aspects of the project while younger students will engage in activities appropriated to their grade level.

Recruitment will take place through advertisements in our library and on our library website; promotional flyers to be distributed to local schools, and community and church bulletin boards; and communications on the social media sites such as Facebook and Twitter. Local newspapers such as The Hudson Independent and The River Journal will also be contacted.

Project Dates

The Project will be initiated September 7, 2015 and be completed by December 31, 2015.

- **Project Goals**

The aim of our Project is to promote sustainability education and leadership among young people and empower them to have a voice in their communities. The project should establish the existence of an ongoing learning model for students and help inspire creativity and imagination. With skills acquired using the Minecraft Educational Software , participants should be able to invent new, innovative uses for this learning tool and develop a greater understanding of the creative process and cooperative collaboration. Students should appreciate the interconnectedness of society and the environment and feel they can make a contribution towards building a healthier future for themselves and their neighbors. A special feature of our project will be to acquaint librarians and more members of the community to the potential benefits and applications of MinecraftEDU; how it can be used in unique and innovative ways, and how it can facilitate creativity.

- **Community Impact**

The feedback our project participants provide should help the Villages in their goal to become more liveable, enjoyable and sustainable.

- **Participating Professionals and Community Partnering:**

Joan Raiselis: Architect; Graduate of Carnegie Mellon Institute; Member of the Village of Tarrytown Planning Board; founder of Sustainery Inc.: A Center for Resourceful Living, Renewables and Environment; formerly at Stone Barnes Center for Food and Agriculture; former member of the Warner Library Board of Trustees

Rob Kissner, The Digital Arts Experience(DEA), 170 Hamilton Avenue, White Plains, NY, 10601: instruction, Minecraft

Sleepy Hollow High School Staff: Project promotion, recruitment of participants.

- **Culminating Activity:** Each project team will make a formal presentation of their completed Village Plan to the Mayor of Tarrytown and the Village Planning Board and culminate in the announcement of the team that delivered the ‘Best Village Plan’.

Appropriate models of the completed team designs will also be on exhibit at the Warner Library. The time and date of a formal viewing and reception for all participants and interested residents will be announced.

- **Total Project Budget Amount:** Total cost for the proposed project = \$1,000.
- **Total Project Request Amount:** The Library is requesting \$750 for assistance with project costs.

Itemized Project Budget for ‘Sustainability in Urban Development’:

Professional Software Training	\$450 (3 sessions) (\$150 fee per session)
MinecraftEdu Hosting Services for 1 yr.	\$240 (\$20 fee per month)
Minecraft Licenses for 10 participants	\$180 (\$18 subscription fee per computer)
MinecraftEdu Server Software	\$40
Recruitment and Presentation Materials	\$90
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Total Budget:	\$1,000