Project Narrative

Applicant: The Seneca Nation is the largest tribe, in geographic area, of the Six Nations of the Iroquois Confederacy in New York State. Enrolled Seneca Nation membership currently stands at 8,487 members (Seneca Nation Tribal Enrollment, December 2020). Among the Nation’s territories, 4,388 enrolled members live on territorial lands, with much of the remaining membership living in proximity to the territories in Western New York (Seneca Nation Tribal Enrollment, December 2020). The Seneca Nation holds title to five non-contiguous territories in Western New York situated in portions of Allegany, Cattaraugus, Chautauqua, Erie and Niagara Counties. Allegany and Cattaraugus are the Nation’s two residential territories; Seneca Nation government offices and departments are also housed at here. The Buffalo Creek, Niagara Falls and Oil Spring Territories are home to Seneca gaming enterprises.

The Allegany Territory borders towns and villages in southern Cattaraugus County near the Pennsylvania state line. This territory is the only instance where Native American territorial lands have a non-Native municipality, the city of Salamanca, NY, within its boundaries. The Allegany Territory has a combined population that includes 1,721 enrolled members (Seneca Nation Tribal Enrollment, December 2020) and a total population of 5,497 in Salamanca (American Community Survey 5-Year Estimates, 2019, Table S0101). The territory is home to the Seneca Gaming Corporation’s Allegany Resort & Casino.
The Cattaraugus Territory borders Erie, Cattaraugus and Chautauqua Counties in Western New York and is 35 miles north of the Allegany Territory. This territory has a population of 2,667 enrolled members (Seneca Nation Tribal Enrollment, December 2020). The Cattaraugus Territory is rural, located 40 miles southwest of Buffalo, NY. There are no schools on our territories, so Seneca youth may attend one of many Western New York school districts. The following districts are participating in this project: Salamanca City Schools, Gowanda, Silver Creek, Lakeshore, Randolph, Bishop Walsh, Ellicottville and Hutch Tech (Buffalo City Schools).

Need

Issues of Poverty, Unemployment and Income - As a Sovereign Nation, the Seneca Nation does not have a tax base for generating revenue to support public services. Generally, these services are supported by the Seneca Nation’s diversified revenue streams and investment portfolio, which have become exceedingly limited in their ability to generate new revenue due to COVID-19. On March 16, 2020, the Seneca Nation temporarily closed all its gaming facilities, thus severely impacting the Nation’s ability to generate new revenue. Investment revenues have also taken a very large loss. All non-essential Nation programs and services have undergone layoffs, and the certainty of future programming continues to be unclear because of the pandemic.

The Seneca Nation has experienced higher instances of poverty compared to the surrounding counties, with 27.7% of individuals at the Allegany Territory and 34.0% of individuals at the Cattaraugus Territory living below poverty. In contrast, poverty is estimated at 16.5% in Cattaraugus County, 18.7% in Chautauqua County, and 14.5% in Erie County.

The unemployment rate for Cattaraugus County is estimated at 5.5%, while the rate is estimated at 6.1% for Chautauqua County and at 4.3% for Erie County. The unemployment rates
for the Seneca Nation’s two residential territories are much higher, with a rate of 7.5% estimated for the Allegany Territory and 19.9% estimated for the Cattaraugus Territory.

Median household income (MHI) for the territories is significantly lower than for the surrounding counties. MHI is $31,266 for the Allegany Territory and $35,519 for the Cattaraugus Territory. For Cattaraugus County, MHI is $48,403. For Chautauqua County, MHI is $46,820, while for Erie County, MHI is $58,121.¹

The Seneca Nation meets all the economical mile markers to be an Opportunity Zone; however, the Governor of New York failed to identify and label any of the Native Nations within the State of New York as Opportunity Zones.

**Graduation/Dropout Rates** - Data from the New York State Education Department (NYSED) reveal significant differences in high school graduation and dropout rates for Seneca/Native students attending schools near the Allegany and Cattaraugus Territories and the corresponding rates for all students at these schools. The table below sets forth this data.

<table>
<thead>
<tr>
<th></th>
<th>Gowanda High School</th>
<th>Lake Shore High School</th>
<th>Silver Creek High School</th>
<th>Salamanca High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduation Rate: All Students</td>
<td>82% 84% 86%</td>
<td>89% 91% 92%</td>
<td>89% 91% 89%</td>
<td>84% 84% 79%</td>
</tr>
<tr>
<td>Graduation Rate: Native Students</td>
<td>71% 56% 79%</td>
<td>95% 86% 96%</td>
<td>82% 88% 83%</td>
<td>83% 86% 75%</td>
</tr>
<tr>
<td>Dropout Rate: All Students</td>
<td>11% 9% 11%</td>
<td>4% 4% 5%</td>
<td>7% 8% 4%</td>
<td>3% 6% 3%</td>
</tr>
<tr>
<td>Dropout Rate: Native Students</td>
<td>24% 19% 21%</td>
<td>5% 10% 4%</td>
<td>18% 13% 8%</td>
<td>0% 10% 0%</td>
</tr>
</tbody>
</table>

Census data details rates of individuals ages 18 to 24 with less than a high school diploma. The rate is 14.9% for the Allegany Territory and 18.7% for the Cattaraugus Territory, while the rate is 14.4% for Cattaraugus County, 13.3% for Chautauqua County, and 9.1% for Erie County².

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¹ All data: American Community Survey 5-Year Estimates, 2019.
² American Community Survey 5-Year Estimates, 2019, Table S1501
Faced with a school system that, in many cases, is not perceived as academically and culturally relevant, many Native students opt to drop out or distance themselves from what schools can offer. Seneca youth are in danger of becoming disconnected and may not be aware of the support services available to help them pursue training opportunities and embark on a career path. The proposed project will help to stem this tide of disengagement by offering training opportunities and related supports that can lead to well-paying, satisfying careers.

Coordination with Seneca Nation’s Economic Development Plans - This project aligns well with Seneca Nation economic goals. The Nation’s Comprehensive Economic Development Strategy (CEDS) document addresses, among other issues, the need for education and training, as well as career guidance, for Seneca students. The document acknowledges that high school graduates often struggle in deciding what career path to follow. Often, CEDS asserts, young people go into fields that do not interest them or that have poor employment opportunities. To counteract this, the Seneca Nation has committed to helping Seneca students focus on career choices that interest them, and for which employment opportunities are available.

Local Labor Market - In 2019, the Bureau of Labor Market Information, Division of Research and Statistics of the New York State Department of Labor published Significant Industries: A Report to the Workforce Development System. The Western New York edition identified 12 industries that it deemed significant, due to rapid or large growth, high wages, or strong predicted growth into 2026. These industries provide a gauge to assess the employment outlook for the next several years in Western New York, which is home to the Seneca Nation’s two residential territories, as well as the city of Buffalo, where many Nation members also reside.

Skilled trades in the construction industry will continue to offer job opportunities as the current workforces ages and retires. Although employment in manufacturing has declined, it still
comprises a major regional component. Fabricated metal product manufacturing currently provides 10,800 high-paying jobs locally. Computer and electronic product manufacturing experienced a 5.9% rate of growth between 2013 and 2018, while transportation equipment manufacturing saw 28.6% growth. Each of these areas offer average wages over $60,000.

In 2018, professional, scientific, and technical services jobs paid an average of $66,300 per year. This sector is forecasted to enjoy 9.7% growth between 2016 and 2026. Educational services employs a greater number of workers in the region than any other industry in the list. This industry increased 0.2% between 2013 and 2018 and paid an average wage of $50,900.

Health-related professions (ambulatory health care services, hospitals, and nursing and residential care facilities) are expected to experience continued growth over the next decade. These three industries employed 85,900 workers in 2018, which represents 13.6% of all those employed in the region. Ambulatory health care services added more jobs than any of the other regional significant industries and paid an average wage of $57,800. This industry is projected to add the greatest percentage of jobs from 2016 to 2026. In 2018, hospitals paid averages wages of $66,400.

Agricultural Landscape Technology - New York is a leading agricultural state, worth $5.75 billion in revenue. According to the USDA 2017 Ag Census, there were 33,438 farms in New York State and 6,866,171 acres in production. New York farms employ 55,363 people. Dairy and milk production accounts for nearly 26,000 jobs in New York State. Grain and oilseed farming employs nearly 15,500. Vegetable and melon farming is responsible for 7,750 jobs. All sectors of agriculture, including processing, are responsible for nearly 200,000 jobs in New York State. Locally, corporate farming makes up one of the greatest number of employers and seeks skilled tradesman to fill vacant or retiring positions. With the software and mission planning tools on the market, there is a growing demand for knowledge and understanding of its use and limitations.
Skilled agricultural pilots typically make from $60,000 to $100,000 a year, and those who own spraying businesses can earn much more. These skills are also transferable for employment in high-end landscape operations ($75,000). Students graduating from this program will have great local and national work opportunities in Agricultural Landscape Technology. SAMI’s Agricultural Landscaping program will prepare students to work as drone technologists for agricultural operations ($60,000) and GIS technicians ($68,000) for data collection and mapping. Students can transfer the college-credit towards a full associate or bachelor’s degree in Geographic Information Systems, Landscaping Science or Agricultural Studies. These skills are also transferable for employment in high-end landscape operations ($75,000+).

Agricultural Business Managers - Agricultural business managers typically supervise all steps of crop production. They evaluate factors such as market conditions, disease, soil conditions, and availability of federal programs. They use different strategies to protect the business from unpredictable changes in the markets. They also manage financial, tax, production, and employee information. Although the job outlook for employment of farmers, ranchers, and other agricultural managers is projected to show little or no change from 2018 to 2028, over the past several decades, increased efficiencies in crop production have led to consolidation and fewer, but larger, farms, which are seeking qualified business associates to fill business management positions. According to the New York State Department of Labor, corporate industries are looking for bilingual skill white collar business executives that hold a business degree and expertise in crop specialty. This associate degree program will set students apart from other candidates as it trains them in accounting, HR, economics and gives them the knowledge to make informed decisions relating to a choice of large farm equipment mechanics, organic farming and animal care. The associate degree program in Agricultural Business Management will prepare students for an emerging and
rewards career to help run a corporate farm ($78,000) or manage a local business enterprise ($58,000). Students can transfer the college-credit towards a full bachelor’s degree in Business Management, Accounting or Agricultural Studies. The skills are also transferable for employment in business management in the manufacturing, logging, service & mining industries ($58,000).

Wildlife & Forest Management Technology - Globally, there are over 900 million hectares of natural forests used for wood production, with the economic value of industrial wood north of $200 billion dollars. In New York, more than 787,000 acres of forests are managed by the NYSDEC; this includes areas designated as state forests, reforestation areas, multiple-use areas, and unique areas. Locally, the Seneca Nation Fire Marshalls looks after Seneca Oil Spring Territory that sits adjacent to the Alleghany State Park and the 513,175 square acre Allegheny National Forest. According to the US Bureau of Labor Statistics (BLS), geographers and forestry consultants earn an average of $81,540 annually. According to Indeed, GIS developers and land managers account for some of the highest percentage of job postings in this field. Between local forestry and oil operations and the neighboring state and national park systems, students graduating from this program will have excellent local and national job prospects. The Forestry and Wildlife program will prepare students to work in the natural resource’s management field. Upon completion of the program, students will be prepared to serve as a state forest ranger ($58,000), coordinating search and rescue missions for police and fire marshals ($85,000) or work with commercial forest operations in the logging, mining and oil industries ($140,000). Students can transfer the college-credit towards a full associate or bachelor’s degree in Geographic Information Systems, Agricultural Studies or Environmental Science. These skills are also transferable for employment in scientific research and environmental conservation ($47,000).
Electrical Code & Inspection Technology - The United States’ power infrastructure is aging and always looking for qualified technicians in electrical code, smart technology and inspections. Digital technology for smart grid design is now being implemented, allowing for two-way communication between the utility and its customers. With this comes the demand for a new utility worker who can work efficiency and inspect, map or repair both the system and smart electronics components. Work related to the grid is expected to result in about 280,000 new jobs. These jobs include engineers, technicians, and construction workers. In addition to employment with utilities, many workers will be hired by suppliers and contractors. In the Twin Tiers region alone, there are over 310 jobs advertised for tower work. Technicians may test and evaluate products, using measuring and diagnostic devices to adjust and to repair equipment currently. As the grid ages, technicians work for code and tower inspection is expected to increase. According to the Bureau of Labor Statistics (BLS), this occupation is expected to experience a 7.2% increase in jobs over the next ten years. These jobs skills are transferrable to the electrical-manufacturing operations in the region, including work in Elantas, Prestolite Electric, Eaton & LJUNGSTRÖM plants.

Engineering Technology & Manufacturing Technology - Mechanical engineering technicians assist with design processes in factories or with development phases in research and development labs. Most employers prefer to hire candidates with an associate’s degree or other postsecondary training in mechanical engineering technology. In the Cattaraugus-Allegany County region, advanced manufacturing makes up the greatest engineering technologist employers. According to Bureau of Labor Statistics data, not only are more than a quarter of manufacturing workers over the age of 55, but the BLS also notes that manufacturers have the highest tenure compared to other sectors. That translates into more institutional knowledge within the sector, which is now steadily declining, as is the productivity that these experts bring. Locally,
the demand for quality Engineering Technologists is great. Local manufacturing plants Cutco and Prestolite Electric & Ontario Knife Company have requested local schools to offer CTE programs in Engineering Technology. Open jobs in these occupations are expected to increase by 22% over the next ten years, making a very positive job outlook for students in the engineering technology program. The associate degree program in manufacturing will prepare students for a career to help design, develop, test, and produce parts/products. Upon completion of the program, students can work as an engineering ($75,000) or production technologist ($68,000). Students can transfer the college-credit towards a full bachelor’s degree in Engineering Technology, Industrial Engineering Management and Professional Engineer programs. These skills are transferable for employment in the service, machinist ($54,000) and warehouse industries ($60,000).

Quality of Project Design

Project Description - The Seneca Nation will utilize the award from the Native American Career and Technical Education Program (NACTEP) to fund the Salamanca Agricultural Maker Initiative (SAMI). Project SAMI will provide a progressive distance-learning career and technical education program, modeled after the competency-based paradigm. The project will be a collaboration of the Seneca Nation and the Salamanca City Central School District (SCCSD).

This program will be offered free to Seneca students at Salamanca and neighboring school districts, whose already skeleton budgets are now impossibly stretched due to New York State’s recent announcement to slash education funding by 30 percent. Project SAMI will empower Seneca Nation youth with critical CTE workforce skills and will also help maintain and support both emerging and established rural industries, which drive the state and national economies.
What sets Project SAMI apart from other programs that prepare students for careers in technology is the project’s goal of providing these educational experiences for Native students, who have traditionally been underrepresented in these fields. By offering comprehensive, hands-on STEM learning experiences to Seneca youth, Project SAMI will help to increase the number of Indigenous students who will be well-prepared to take their place in the workforce in high-paying, in-demand jobs. In each of the participating school districts, staff who are experienced in working with Native youth will provide instruction and mentoring that will enhance the educational experience of these students. Moreover, including parents in the education process will help to keep the project grounded in the traditions of the community and increase successful completions.

The Seneca Nation and the SCCSD have collaborated with three premier colleges and industry partners to add college credit to these programs and help guide curriculum development. This project will include four college-credit certificate programs, and three full associate degree programs. All programs include industry-driven capstone activities and certification exams: College Certificate in Agricultural Landscape Technology, College Certificate in Wildlife and Forestry Technology, College Certificate in Electrical Code and Drone Inspections, College Certificate in Information Technology and Digital Forensics, Associate of Applied Science in Manufacturing Technology, Associate of Applied Science in Engineering Technology, and Associate of Applied Science in Agricultural Business Management.

Grant funds will be used to acquire a competency-based LMS learning platform (PFX) and curriculum, which will allow students to work from home toward gaining competencies that employers are looking for. For the programs that require physical kits and materials, such as Drone Inspections, Salamanca will purchase all physical materials required for the course, using grant money. These kits will be delivered to each participant’s home.
Every student in SCCSD is provided a Lenovo laptop for classroom and distance learning use. For regional students who do not have a home computer, a Lenovo will be purchased for the student through the grant. The school district also provides a limited number of cellular Wi-Fi hubs for homes without internet access. These 4 by 3-inch cellular hubs create an instant internet hotspot in family homes. Each device attaches itself to the Verizon network and has automatic filters and settings that SCCSD can keep or customize for how they are used for academic purposes.

Participants in Project SAMI will be Native American students, with an emphasis on recruitment of Seneca students who live on or near to the Seneca Nation’s two residential territories, Allegany and Cattaraugus, or who reside in or near the city of Buffalo, NY.

Program Operation - According to the US Department of Education, approximately 77% of secondary students participate in career-technical education programs (students who took at least one occupational training class), and of those participants, 61% of New York pupils are rural (NYSED, 2018). Students in career-technical education programs are given real-world examples to help them make connections to what they learn in academic classes and are provided the opportunity to work in a team, which is a crucial element of any career.

Locally, corporate farming and advanced manufacturing make up the greatest number of employers in our region and seek skilled tradesman to fill vacant or retiring positions. According to the Perkins Collaborative Resource Network, projected national job openings for the technical trades are 68% larger than annual completions of related educational programs across selected occupational groups. This highlights a significant skills gap that must be addressed in order to meet expected industry demands.

Across the nation, COVID-19 related school building closures and state education funding cuts have greatly impacted the ability of career and technical education (CTE)
students to complete hands-on training on specialized equipment, work-based learning experiences and core content hours needed to earn required credentials in these career fields. According to the Association for Career and Technical Education (2020), many industry-recognized credential preparations require hands-on lab instruction that traditional CTE schools find challenging to replicate through remote learning. For example, while online videos can demonstrate proper welding techniques, physically handling a welding torch and practicing techniques in real-time are critical to skill development. In some cases, job placement, lab or experiential learning hours are a requirement for earning an industry-recognized credential. According to a 2019 report from the Federal Communications Commission, approximately six percent of families in America (21 million families) lack access to broadband at home. Most of these families are from rural locations. All these issues can act as immense barriers to CTE instruction on a distance-learning platform, and the Salamanca community is no exception. Project SAMI is the response of the Seneca Nation and the SCCSD to the distance-learning crisis faced in rural career and technical education.

Seneca students will be able to sign up for the program as a high school elective. Salamanca students have three 45-minute elective blocks, five days a week in which to take CTE or special classes. The regional schools structure student electives in a similar manner. This program will work alongside state-required liberal arts proficiency. These online CTE programs will be an option to choose for class electives. If the school building is open, SAMI students will report to the library during their elective time, where the regional instructor will be available to monitor progress and help students with questions. For regional students, instructors will be available to students during select times over video chat. If schools are closed due to COVID-19, all coursework can be completed online through the same online learning management
system (LMS). Regional faculty will be present during scheduled office hours as a content resource, authentic assessment evaluators, and academic coaches to project participants.

All materials needed for successful completion of the program will be provided to participating students. For the automated and manual flight labs required in the College Certificate programs (Agricultural Landscape Technology, Wildlife and Forestry Technology, Electrical Code and Drone Inspections), SCCSD will provide “experiential learning tools” to make the educational experience industry-driven and authentic. Salamanca will provide a browser-based drone flight simulator and a physical drone for outdoor practice. For the Manufacturing Technology, Engineering Technology, and Agriculture Business Management Programs, a combination of hands-on kits, simulators and open lab experience will be provided to students to practice the skills they are learning. Hands-on electrical tools and kit materials for the physical labs required for Electrical Code and Drone Inspections will be shipped to students. Additionally, all certificate students will be able to utilize a commercial-grade inspection drone and/or the open regional lab for capstone work.

Students will be provided simulators such as a browser-based drone flight tool, CNC virtual machine and computer network laboratory for simulated application and practice. Students will be able to borrow a commercial-grade inspection drone from the school for capstone fieldwork in the certificate programs that require a drone. Additionally, regional labs will be open during select hours for SAMI students to practice their skills on live industry equipment (CNC machines, Resin 3D printers, PLC, etc.). Once a month, Salamanca will provide transportation for remote students who wish to access these labs.

Recruitment and Retention - Project SAMI seeks to become a national and regional leader for distance learning science, technology, engineering arts, and math (STEAM) and CTE
education. To achieve this, SCCSD will seek to recruit, admit, and enroll a diverse, adept student population. Once enrolled, SCCSD will conduct ongoing data review and personal contact plan to ensure student interest and retention until graduation.

Recruitment and Retention Plan Overview: Recruiting students for Project SAMI will involve identifying potential Indigenous students, raising an awareness of, and educating them on, program offerings and removing barriers to program enrollment. Effective recruitment strategies include being visible to students and creating open dialogue and the exchange of information.

This plan seeks to identify the best regional partner schools for the recruiting efforts, schools with high populations of Seneca/Indigenous students. Planning and recruitment events will seek to reach out to potential project participants, as well as to school principals, guidance counselors, community leaders, government assistance organizations, and teachers.

To accomplish this, SCCSD and the Seneca Nation’s Education Department will continue to create contact lists, presentations, and marketing materials that will be used by all program staff to recruit for all programs. The next steps are establishing an event timeline and executing it.

The recruitment plan will seek to identify and implement proven best retention practices. The plan will be flexible and responsive to the needs of the school, community, and prospective students. SCCSD will seize new educational and learning opportunities as they emerge and modify the recruitment plan as best practices become available.

Despite making up more than half of the U.S. workforce, women hold less than 25% of all jobs in STEM and the trades. This lack of women in these careers is most profound in engineering, where only 13% of all practicing engineers are women. Additionally, women earn less than 20% of all STEM degrees. Females’ low representation in STEM fields is troubling, given national calls for more STEM education to maintain a competitive edge in the global economy. Researchers
point to a few common causes, including: lack of female role models in STEM and CTE, gender stereotyping against women interested in STEM and CTE, limited engagement for females in CTE.

Therefore, gender support is a vital dimension of the Project SAMI structure. Finding ways to nurture these positive connections with females through a distance-learning interface will be a focus and priority of Project SAMI. This encompasses marketing and recruitment procedures, as well as distance learning culture and instructor training to best support Indigenous female students.

When recruiting female learners into Project SAMI programs, the Marketing Team will use multiple forms of media to market to schools, parents, and learners since the decision to enroll in a career or educational pathway is often a community decision. It is crucial to dispel stereotypes held by instructors, parents, and/or the learners themselves regarding CTE occupations by raising awareness of nontraditional careers early in the recruitment process. A goal of a recruitment strategy will be to promote a message that suggests to an Indigenous student that she can succeed in a nontraditional career. The message will promote this idea among more traditional student populations, faculty, and high school staff. The following are some of the strategies Project SAMI will use to counter gender equity barriers:

- Design activities that include family members and encourage students to achieve educationally.
- Discuss values and social responsibilities related to career goals with students to better understand the value that a Project SAMI career can have for their immediate community and the region at large: to “help people.”
- Ensure that recruitment materials reflect a diverse representation of Indigenous learners, including gender, age, race, and disabilities.
• Use promotional materials that feature photos and testimonials of current female Indigenous learners and graduates of CTE programs who are working in nontraditional occupations.

*Instructor Training & Distance Learning Culture* - Instructors and the training institution play an integral role in the process of women being successful in nontraditional vocations; therefore, Project SAMI will serve as an agent for change. Young people who have chosen a nontraditional career path often cite a teacher who provided them with the encouragement they needed to be successful. Project SAMI instructors will get training and support with the SN’s standards and equality initiatives. The project will incorporate gender awareness, such as differences in motivations and needs, into professional development for faculty and Project SAMI orientation for principals and guidance counselors, to address subconscious ways we may treat girls and boys differently in CTE education. Individual teachers, especially female instructors in nontraditional vocations who have a rapport with students, will be encouraged during the recruitment initiative, as well as student and faculty orientation programs, to dispel pessimistic attitudes and the negative images of women participating in nontraditional vocations.

The following recruitment and retention strategies/action plans will be implemented in varying stages through 2020/2021. Action plans may be changed, updated, and even eliminated as factors that influence enrollment change, as budgets dictate, or as evaluations of specific programs or activities warrant. These actions will be coordinated and tracked by the SCCSD Coordinator, Career and Technical Education Programs.

<table>
<thead>
<tr>
<th>Recruitment Populations</th>
<th>Engagement Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Students 10-12th Grade</td>
<td>One on one or peer referral with student directly - develop an email/phone program follow-up on potential recruits.</td>
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<tr>
<td></td>
<td>School Social Media Campaign</td>
</tr>
<tr>
<td></td>
<td>*Create a logo and marketing video campaign for Project SAMI.</td>
</tr>
<tr>
<td></td>
<td>Communication with Parents – newsletters, brochures, fact sheets, school meetings</td>
</tr>
</tbody>
</table>
Create presentations and recruiting materials that can be used by all program staff to recruit and advise for all programs:

- Communication and outreach with school Guidance Counselors
- Communication and outreach with Classroom technology services (CTS) program
- Communication and outreach with Technology and STEM teachers
- Communication and outreach with Principals/other school staff.

Advertise: Locally – social media, press releases, regional school publications. Nationally – professional publications

Plan and participate in recruitment events - Class sign-up (usually in February); Career fairs/special events; Professional-technical student organization events

Self-hosted events: Open houses; Regional CTE competitions; Virtual Demonstrations; Teaser classes – community education; STEM fairs; Summer camp programs

### Recruitment Goals

Increase the enrollment of qualified Indigenous students to meet the cohort enrollment goals (281 Indigenous students) of Project SAMI.

Meet a program goal of 35 Project SAMI enrollees by the Spring of the 2020-2021 academic year.

Expand recruitment programs to attract an increased number of out-of-state students and international students.

Continue to infuse technology in all stages of the recruitment and admission process.

Move from a “be everywhere approach” to a targeted strategy.

Inventory existing scholarships and design a strategy to use them to help enrollment and retention.

Design, fund, and implement new scholarships to maximize student enrollment and retention.

### Retention

<table>
<thead>
<tr>
<th>Retention Goal</th>
<th>Retention Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>85% of students successfully completing their first Project SAMI</td>
<td>Maintain consistent reliable communication with all instructors.</td>
</tr>
<tr>
<td></td>
<td>Maintain consistent reliable communication with all program advisors.</td>
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<td></td>
<td>Develop resources and data collection and analysis to assist efforts to retain students throughout their college experience.</td>
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<tr>
<td></td>
<td>Provide a contact and resource point for students’ parents.</td>
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<td></td>
<td>Collaborate with colleagues in the home school to promote “student-first” environment.</td>
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<tr>
<td></td>
<td>Provide programs and services that integrate new students into the Project SAMI community.</td>
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<tr>
<td></td>
<td>Foster students’ success in the academic environment.</td>
</tr>
<tr>
<td></td>
<td>Survey and exit interviews with students who drop out of the program.</td>
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<tr>
<td></td>
<td>Survey and interview current students on how to increase retention and completion of the program.</td>
</tr>
</tbody>
</table>

### Adequacy of Resources

**Partners** - The extent to which Project SAMI has been coordinated with similar or related efforts and with community, state, or federal resources, where such opportunities and resources exist, has been extensive. It is because of those relationships and partnerships that the project will be able to hit the ground running.

The Seneca Nation is collaborating with the Salamanca City Central School District (SCCSD) in Salamanca, NY to provide the instructional content for Project SAMI; a signed MOU is provided in the attachments. SCCSD staff will design and facilitate community outreach events and activities to attract new students to the program and will also mentor students in the program.
to ensure that as many as possible complete. No other strand in K-12 education requires the ongoing engagement of a diverse set of stakeholders more than Career and Technical Education. The CTE programs at SCCSD were conceived through a multidisciplinary approach, based on a need outlined by industry professionals in Manufacturing, Forestry and Agricultural Business.

To help form the SCCSD CTE program, the Seneca Nation and SCCSD collaborated with several similar and/or related community efforts to make this program successful. DiDi is the catalyst organization of the Dream It Do It manufacturing career initiative that provides Allegany County and Cattaraugus manufacturers with a labor force that has the skill and training levels required to meet their demands. In the past, they helped SCCSD develop and implement a comprehensive pipeline strategy for manufacturing lab that included: industry tours, manufacturing camps and monthly stakeholder meetings with industry partners. For these CTE programs, DiDi will continue to bring SN advanced manufacturing professionals to help assess and guide the structure and industry-driven goals of the programs as well as to secure industry placements in manufacturing for student field and capstone work. (https://www.didiwny.com/)

WNY STEM Hub is an organization that mobilizes schools and stakeholders to develop, nurture and maximize interest in STEM learning and careers through hands-on, one-of-a-kind experiences. Before the pandemic, WNY STEM Hub helped SCCSD develop award-winning STEM programs, including SCCSD’s Flight Space Experiments Program, STEAM Summer School and STEAM Café, a monthly industry, career guest speaker program. In STEAM Café, students have the opportunity to meet with STEM professionals in drone, engineering, and advanced agriculture to learn about and explore career opportunities, shadow these professionals for a day, and participate in a summer internship at a STEM career workplace. SN will continue to partner with WNY STEM Hub to provide these same programs at a distance. From the pool of
STEAM Café Guest speakers, SCCSD will continue to glean professionals to help assess and guide the structure and industry-driven goals of the SAMI program as well as to secure industry placements in STEM or student field and capstone work. (https://wnystem.org/)

The Seneca Nation Geographical Information Systems Department services the Seneca Nation by maintaining a central data repository, publishing interactive web maps, and providing technical support for GIS-related applications and content. SCCSD’s computer science teachers have consulted with this department in the past for GIS operations and crop management. SN’s GIS Department continues to be a close partner for SCCSD’s certificate programs. Project SAMI will collaborate with this agency for the program’s conceptional framework for education, student field placement, stakeholder program review and post-certificate work opportunities in the Wildlife and Forest program for student field placement, stakeholder program review and post-certificate work opportunities. (https://sni.org/departments/gis-department/)

Another partnering program is the Seneca Nation’s Marshal’s Department. Their mission is to uphold the laws of the Seneca Constitution and keep the community safe on all territories including Allegany, Cattaraugus and Oil Spring. The 20-person squad enforces all Seneca laws as first responders and works with neighboring local, state and federal offers as necessary. Recently the Marshal’s Department has demonstrated an interested in developing special unit operations and development related to GIS mapping, drones, and search and rescue operations, which Salamanca Schools helped start and developed in the region. Project SAMI will collaborate with this agency for the program’s conceptional framework, student field placement, stakeholder program review and post-certificate work opportunities in the Wildlife and Forest Program. (https://sni.org/departments/marshals-office/)
Founded in 1977, Salamanca Lumber Company is situated in the most northern part of the North Appalachian region, ensuring a steady supply of fine-textured, slow grown, high-quality hardwoods. The Salamanca facility contains modern drying facilities to process North American hardwood. ([http://salamancalumber.com/](http://salamancalumber.com/)) Project SAMI will collaborate with this business for program’s conceptional framework, student field placement, stakeholder program review and post-certificate work opportunities for Agricultural Landscaping Technology. ([https://wnycma.com/](https://wnycma.com/))

Cattaraugus County Sheriff’s Office is the chief law enforcement agency for Cattaraugus County. Recently the office has been involved in special unit operations/development for GIS mapping, drones, and search and rescue operations, which Salamanca Schools helped start and develop. Project SAMI will collaborate with this agency for student field placement, stakeholder program review and post-certificate work opportunities for students in the drone programs.

The New York State Public Safety Rangers provide general security services within the Division of Park Police of the Office of Parks, Recreation & Historic Preservation. They are responsible for insuring patron safety, and preventing unlawful activities, through patrol presence. Project SAMI will collaborate with this agency for student field placement, stakeholder program review and post-certificate work opportunities in the Wildlife and Forest program. ([https://parks.ny.gov/park-police/ranger-employment.aspx](https://parks.ny.gov/park-police/ranger-employment.aspx))

The Western New York Crop Management Association is a grower-owned cooperative providing nutrient management, crop scouting, soil sampling, CAFO planning and other services to over 450-member farms in Upstate New York and Northern Pennsylvania. Project SAMI will collaborate with this agency for the program’s conceptional framework, student field placement, stakeholder program review and post-certificate work opportunities for the Agricultural Landscaping Technology program. ([https://wnycma.com/](https://wnycma.com/))
The Manufacturers Association of the Southern Tier (MAST) is committed to enhancing the economic strength of the region, by acting as a primary resource for information and assisting in the promotion of manufacturing excellence. In conjunction with DiDi, a program that MAST sponsors, Project SAMI will collaborate with this resource for student field placement, stakeholder program review and post-certificate work opportunities. (http://www.mast-wny.com/)

Jamestown Community College’s (JCC) Manufacturing Technology Institute (MTI) develops hands-on technical training to support advanced manufacturing in the Southern Tier region. JCC has an MTI lab on the Jamestown and Cattaraugus County campuses, which SCCSD plans to utilize for the open lab experience for SAMI in addition to Salamanca STEAM Center of Excellence. JCC is a proud partner of the SCCSD’s STEAM/CTE program and provides college-credit to their dual-enrollment classes in engineering technology, science, and college (math. https://www.sunyjcc.edu/about/manufacturing-technology-institute)

Fredonia State College provides college credit and curriculum for SCCSD’s GIS certificate programs and an interdisciplinary experience preparing undergraduate students to use GIS within their chosen fields of study: Agricultural Studies, Wildlife & Forestry and Electrical Code & Tower Inspections. (https://www.fredonia.edu/academics/colleges-schools/college-liberal-arts-sciences/geographic-information-systems)

Saint Bonaventure University (SBU) offers Salamanca IT students the tools necessary to pursue a career in computer information assurance and digital forensics. SBU is a partner of SCCSD’s STEAM/CTE program and provides college-credit to the dual-enrolled students in Information Technology/Cyber Security. Their Cyber Security Research Center is available for utilization for student field and capstone work. (https://www.sbu.edu/academics/cybersecurity)
Training and Professional Development - Project SAMI has significant quality partnerships as well as quality training and professional development for the student and CTE faculty participating in the program. The coursework and hands-on experiential learning opportunities to be provided to SAMI participants align with the requirements of the certificate and associate degree programs that will signify successful program completion. Through either in-person or online classes, as well as simulated application and practice sessions outside of the physical or virtual classroom, participants will have opportunities to practice the skills they have learned and fulfill individual program requirements leading to a college certificate or associate degree.

At the inception of Project SAMI, CTE stakeholder meetings were held to discuss the needs of beginning CTE teachers and how to best address those needs. A key component of the program’s success lays in the education and training of regional teachers, CTE administrators, and students. This professional development occurs through the development of original training content, in-person training of mentor teachers, and regional teachers in meetings. Project SAMI will use three strategies to support teachers, students, guidance & school principals in this NEW innovative distance-learning platform: an orientation program; quarterly data meetings with faculty and administrators, and ongoing engagement and training with students, teachers, and administrators.

SAMI aligns with the New York Standards for the Teaching Profession and the competencies addressed are those described in the document, New York’s Teaching Performance Expectations. One of the goals of the trainings will be to facilitate a comprehensive, interactive orientation program for Project SAMI teachers, students, guidance and administrators. This is an initial support system for new distance learning teachers as they navigate their first year in the virtual classroom and covers topics such as: Engaging and Supporting All Students in Distance Learning
(teachers); A Tour of the LMS; Weekly Planning & Distance Engagement (teachers); Assessing Student Learning through Portfolio Review; and Common Technical Issues How to Solve Them.

On demand workshops are provided throughout a three-year period with teachers, as well as digital classroom walkthroughs and non-evaluative lesson observations and feedback. Veteran teachers who may require support and assistance or want to improve their teaching skills may take advantage of workshops and mentoring opportunities as well.

An important aspect of the Project SAMI orientation program for teacher, students, and administrators is evaluation. A program goal is to research and collect survey information on CTE teachers’ and students’ perceptions of their self-efficacy and pressing needs, and the quality of available supports to dictate future activities. Resources for Learning’s evaluation and research team will create a retrospective teacher/student self-efficacy survey with needs assessment.

Facility - The SCCSD has not only invested a great deal in establishing a comprehensive team of partnering agencies, a quality training and professional development program for the students and faculty, but SCCSD also has a state-of-the-art CTE Center.

CAD Room - Here, students explore design and engineering technology where CAD and Solid Works drive the STEM environment. Students explore concepts such as rapid prototyping to develop real-world solutions. Emphasis is placed on product design and process architecture.

3-D Prototyping Room - In this lab, students will take their designs for precision rapid prototyping of highly detailed, durable 3D objects and parts. The lab contains ZSpace computers, 3-D printers, 3-D scanners, laser cutters, vacuum formers and workspace for prototype assembly.

Large Maker Space - In this high school Maker Space, students take their small design prototypes from the 3-D Lab and assemble full-size solutions. Advanced product assembly will
be taught as well as metal manipulation. MIG & TIG welding, hydro dipping and airbrush finishing will be directed, as well as g-code and mechatronics programming.

Art Room - Ceramic art is a sculpture made from ceramic materials and includes artistic pottery, tableware, tiles, figurines and other sculptures. In the manufacturing industry, it is used to create moldings for products. This multipurpose room facilitates the “A” in STEAM through ceramic instruction, graphic design, and traditional art mediums.

Science Lab - Here, students will be able to research and engage in scientific inquiry. This room features state-of-the-art microscopes, data-collecting robots, 3D simulators and 3D printers.

Technology (Wood Shop) Room - In the middle school technology room, traditional shop and STEM instruction meet. This space will allow students to learn basic design and construction principles. Students will engineer product solutions that meet specific commercial needs. Students will cross-train on tool and wood-trade operation through project-based learning practices.

Robotics/Marketing - Electronics technology teaches students how to diagnose, repair, design, program and create new electronic components. This classroom space will be hands-on and design oriented. Students work with fiber optics, robotics, electronic repair and commercial drone technology to prepare them for larger high school projects and STEM occupations.

Geographic Information Systems (GIS) Lab - In this room, students are presented with the theory, components, and applications of Geographic Information Systems, including data structures, database management, data collection and verification, spatial analysis, and automated mapping technology. Lab work will introduce students to commercially available desktop and web-based GIS software, with an emphasis on agricultural applications.
Drones Lab - Drones are revolutionizing data acquisition in surveying, precision agriculture, construction, firefighting, accident forensics, landscaping and real estate services, providing a low-cost and minimally intrusive alternative to helicopters. Regulations have been developed in order to assure safe operation and to integrate drones into the national airspace. This course prepares participants to take the Federal Aviation Administration (FAA) Unmanned Aircraft General (UAG) test to earn a Remote Pilot Certificate with a Small Unmanned Aerial Systems (sUAS) rating. Students will learn flight principles and FAA guidelines through a combination of interactive flight simulators, readings and sUAS practice. Students will take The Part 107 Remote Pilot with a Small Unmanned Aerial Systems (sUAS) exam, as a license is required in order to fly drones commercially.

Sound & Media Production - This suite facilitates an introduction to the basic principles, procedures, and techniques of television production, video editing and sound engineering. Rigorous coursework prepares students for initial employment as television production operators, television broadcast technicians, camera operators, and YouTube personality careers.

Quality of Management

Staff/Leadership (resumes provided in attachments) - The Seneca Nation will collaborate with Salamanca City Central School District (SCCSD) for the project SAMI program conception and implementation as described in this proposal. SCCSD has a rich and nationally recognized CTE program instructed by qualified and award-winning instructors, who are licensed to teach in the field in which they will provide instruction. These instructors include:

MSc, MEd, is Certified in 7-12 Computer Technology & CTE. earned his undergraduate degree in Electronic and Computer Engineering Technology at Grantham
University, Master of Education in Educational Technology and Master of Advanced Study in Physics at the American College of Education. He has taught elementary and secondary courses in engineering, trades and instructional technology. He led a taskforce to help design Salamanca’s award-winning Career and Technical Education building, modeled after a STEM manufacturing firm and nicknamed the STEAM Wing because of its drone and electronic programs. has received several prestigious honors, such as the New York State Society of Professional Engineers Contribution to Education Award for his work with CTE program innovation. Straus will help supervise the Project SAMI program as well as facilitate the Computer Technology coursework.

, PhD - commands a long and successful career in implementing Geographic Information Systems for federal, state and local government entities, as well as firms like Praxair and Shell Oil. He conducted GIS projects at University at Buffalo (UB), the Seneca Nation, as well as taught university classes in GIS, environmental modeling and cartography. has experience with USDA WEPP software package, soil water assessment tool, remote sensed image processing and USACE HEC-GeoRAS flood modeling software that he frequently applies to award-winning projects in logistics. is certified to teach computer science and CTE. Hayes will function as one of the regional teachers for Project SAMI’s Agriculture Landscape program and supervise the college-credit classes in GIS.

 is a former Emergency Medical Technician and regional CTE Coordinator. He holds dual bachelor’s degrees in Forestry & Environmental Biology from SUNY Environmental Science & Forestry College. He enjoys volunteering for search and rescue operations for the County Sheriff’s Department. is FAA-certified to fly commercial drones and NYS teacher-certified in biology, general science, and chemistry. He helped start the award-winning drones and robotics programs at Salamanca. His dream is to
connect high school drone classes with industry forest management companies, which Project SAMI will help fulfill. He will function as one of the regional teachers for Project SAMI Wildlife program and supervise field experiences involving drones.

, Med - holds a bachelor’s degree in business marketing and has industry experience with marketing. runs Salamanca’s award-winning CTE Print Shop, where students can train and develop business skills in marketing and print technology. is an FAA-certified drone pilot, as well as business teacher, who helped start the drones and robotics program in Salamanca. Her dream is to connect high school drone classes with industry startup companies, which Project SAMI will help fulfill. She will function as one of the regional teachers for Project SAMI and supervise the Agricultural Business Program.

EE - is a retired Dell computer engineer with over 40 years of industry experience in electronic and computer engineering. assists with Salamanca CTE programs and supervises the evening operations of the award-winning STEAM Wing, which will serve as a regional lab for SAMI students. is involved in local philanthropy projects that involve electronic systems and community improvement. He has a pending CTE certification in electronics and will help guide the electronic classes for Project SAMI, the regional lab at Salamanca, and the Information Technology classes in computer hardware.

Med, SCCSD – holds industry mechanical technician experience, which he uses to engage his students in real-world examples. He is FAA-certified to fly commercial drones and helped start the award-winning drones and robotics programs at Salamanca. He is NYS certified to teach science and will be one of the regional teachers for Project SAMI and help supervise the field experiences involving drones.
Med – SCCSD Before coming to Salamanca, worked as a drafter in an architectural firm. He applies his unique industry experience with CAD to bring classroom instruction alive to Salamanca High School students. He will serve as a regional teacher for the Engineering Technology program and help supervise SAMI’s open lab experiences.

- Med, Educational Technologist, SCCSD – is a NYS-certified educator using technology to improve education. She will train faculty and teachers on Project SAMI learning technology, including the LMS, Cellular Wi Fi Devices & Portfolio Management.

, MEd - Technology Teacher, SCCSD – is a NYS-certified technology teacher and holds career-industry experience with machining and woodwork. Before coming to Salamanca, he worked as a drafter and machine operator for Ethan Allen Furniture Company. will serve as a regional teacher for the Manufacturing Program and help supervise SAMI’s open lab experiences.

Management and Oversight of Federal Award - The Seneca Nation will be excellent stewards of NACTEP grant funds. The Nation has extensive experience in writing and managing grant-funded projects and currently administers several million dollars in federal grants annually through its Fiscal Affairs Department. The Seneca Nation Fiscal Affairs Department provides accurate, timely, and comprehensive financial and information services. Key department operations include accounting, budget management, grants and contracts management, fixed asset inventory control, invoice and payroll services, and procurement. Five offices comprise the Fiscal Affairs Department: the Comptroller Accounting Office, Accounts Payable Office, Purchasing Office, Grants Office, and Payroll Office.

The Nation’s financial management system will facilitate effective fiscal control over the proposed project and meet all requirements of the grant. All accounting records will be maintained
through accounting software, a computerized system that conforms to generally accepted accounting principles and allows activity to be posted and documented in one central structure.

The Grants and Contracts Office coordinates and facilitates all aspects of outside funding coming into the Nation: more than 100 federal, state and private foundation grants and contracts. This office is responsible for ensuring that all required financial and performance reports have been submitted to the appropriate agency. Grants and Contracts will facilitate effective procurement and contract control over the proposed project.

Quarterly reviews are conducted to ensure that timely progress toward grant goals and objectives is made and that funds are adequately, properly, and effectively expended. Expenditure of grant funding is carried out subject to the Seneca Nation Procurement Policy Statement, adopted by the Seneca Nation Council on June 2, 1999 and amended on seven subsequent occasions.

The Purchasing Office assists Seneca Nation departments in obtaining bids on essential goods and services. This office is also responsible for preparing purchase orders and confirming that Nation procurement policies and procedures are followed. The Purchasing Office, including the Director and Purchasing Officers, closely adheres to the Seneca Nation Procurement Policy Statement. The Director is responsible for purchase orders for procurement of materials/services and purchase requisitions. The Purchasing Office also obtains and manages prices, materials specifications, delivery dates, and invitations to bid. The Office follows strict bidding requirements based on the cost of materials and services and also compiles and closely monitors files, reports, price lists, and progress reports. Communication and documentation with contractors and subcontractors are handled by the Community Planning and Development Department.

As a result of the volume and amount of federal funding received, the Seneca Nation is required by law to be audited by an external firm on an annual basis. The Nation’s external audit
conforms to the requirements and standards of OMB Circular A-133, *Audits of States, Local Governments, and Non-profit Organizations*. The Seneca Nation has a contract with an independent CPA firm, R.A. Mercer & CO., P.C., in Orchard Park, NY, to conduct a single audit. The audits include all financial related activities including assets, liabilities, net assets, revenues and expenditures. The annual audit process assesses Seneca Nation fiscal health, presents the financial position of the Nation, and certifies if the financial statements of the Seneca Nation are free of material misstatement. Each year, the Nation closely analyzes its annual audits, using the audits as an opportunity to better manage its finances. If findings are identified, the Nation works quickly and efficiently to address and resolve identified them through Corrective Action Plans.

The Salamanca Central School District’s STEM program has received numerous local, regional and federal awards for their excellence in STEM education programs, listed below:

<table>
<thead>
<tr>
<th>Award Description</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEM School of Excellence Award (pending), International Technology and Engineering Educators Association (2021), International award – Recognizes robust, STEM education programs for excellence.</td>
<td></td>
</tr>
<tr>
<td>Champions of Change Award, New York State School Board Association (2020), granted to meritorious New York State programs/projects that exemplify creativity and accomplishment.</td>
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<tr>
<td>STEM Excellence Award, Future of Educational Technology Conference (2020), National award that recognizes program excellence in STEM.</td>
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<tr>
<td>Libraries Moving STEM Award, WNY STEM Hub (2019) – Recognizes schools whose library program has made a significant impact in promoting technology and STEM.</td>
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<tr>
<td>Schools on the Move-Advanced Award, WNY STEM Hub (2019) – Honors programs that score “advanced” on the six components of quality STEM initiatives.</td>
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<tr>
<td>Sustainability Education Award, WNY STEM Hub (2018) – Granted to initiatives designed to promote the furtherance of sustainability programs.</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Activities and Benchmarks:</th>
<th>Pre-Work</th>
<th>Year I</th>
<th>Year II</th>
<th>Year III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 1</td>
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<tr>
<td><strong>Activity/Benchmark</strong></td>
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<tr>
<td><strong>Persons/Agency Responsible</strong></td>
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PR/Award # V101A210040
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<table>
<thead>
<tr>
<th>Activities and Benchmarks:</th>
<th>Pre-Work</th>
<th>Year I</th>
<th>Year II</th>
<th>Year III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meet with Grant Team &amp; Disperse Assignment</td>
<td>SN; SCCSD</td>
<td></td>
<td>X</td>
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<tr>
<td>Develop, Sign SN/SCCSD MOU</td>
<td>n, SN</td>
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<td>X</td>
<td></td>
</tr>
<tr>
<td>Meet with HS Principals to Go Over SAMI Programs</td>
<td>SN</td>
<td>SCCSD;</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Post Coordinator Stipend Positions</td>
<td>SCCSD;</td>
<td>SCCSD</td>
<td>SCCSD</td>
<td>X</td>
</tr>
<tr>
<td>Produce Video(s), Promote Program for Cohort I</td>
<td>SCCSD;</td>
<td>SN; SBU</td>
<td>y, x</td>
<td></td>
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<tr>
<td>Sign MOU with Schools &amp; Register Participants</td>
<td>SCCSD</td>
<td></td>
<td></td>
<td>x</td>
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<tr>
<td>Select &amp; Order SAMI Equipment</td>
<td>SCCSD</td>
<td></td>
<td>SCCSD</td>
<td>x</td>
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<tr>
<td>Create Teacher Orientation Program</td>
<td>SCCSD</td>
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<td>SCCSD</td>
<td>x</td>
</tr>
<tr>
<td>Post Regional Teacher Stipend Positions</td>
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<td>SCCSD</td>
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<tr>
<td>Facilitate Orientation-Training for SAMI Regional Teachers</td>
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<td>SCCSD</td>
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<tr>
<td>Facilitate SAMI Certificate Training for Regional Teachers</td>
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<tr>
<td>Facilitate Orientation-Training for School Guidance Staff/Principals</td>
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<td>SCCSD</td>
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<tr>
<td>Facilitate SAMI Orientation for Students</td>
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<td></td>
<td>x</td>
</tr>
<tr>
<td>SAMI: Year I Cohort</td>
<td>Students &amp; Regional Teachers</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Program Review Meeting I</td>
<td>SN;</td>
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<td></td>
<td>x</td>
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<tr>
<td>Generate SAMI Report I</td>
<td>SN; SCCSD</td>
<td></td>
<td>x</td>
<td>x</td>
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<tr>
<td>Produce Video &amp; Promote Program for Cohort II</td>
<td>SCCSD;</td>
<td>SBU; SN</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Meet with Principals/Guidance for Cohort II</td>
<td>SCCSD; SN</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Register Participants for Cohort II</td>
<td>SCCSD</td>
<td></td>
<td>SCCSD</td>
<td>x</td>
</tr>
<tr>
<td>Order SAMI Equipment: Year II</td>
<td>SCCSD</td>
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</table>
### Quality of Evaluation

An independent evaluator will conduct a program evaluation. The evaluation will be appropriate for the project and be both formative and summative in nature. SCCSD will also implement student evaluations throughout the project period.

Learning Management Software (LMS) Tracking: Student progression and mastery of Project SAMI content will be tracked via SCCSD’s robust LMS reporting system. The LMS can pull up student program metrics such as assessment performance, speed, engagement, and accuracy statistics. Assessment scores, logged in the LMS, will be reviewed to gauge progression and achievement. Regional Teachers and the Program Coordinator will monitor progress, as well as assist with student coaching and program success.

Survey Data will be used to evaluate the program and progress of students. A student, parent, and teacher cohort questionnaire will measure perceptions and program success before,
during, and after the program. The SCCSD will collect post program data through a performance-based assessment through capstone projects, and industry tests will validate student learning and skill. Post-program employment of student participants will be monitored and logged. The 2018 Association for Career & Technical Education (ACTE) quality framework will evaluate Project SAMI’s results against 12 elements and 92 criteria rubrics for program success and validity (https://www.acteonline.org/high-quality-cte-evaluation/).

In the near term, this distance-learning program will support national ESSA Standards for Career and Technical Educational Programs: “modernize high schools with work-based learning opportunities and designate [relevant] CTE training as a part of a well-rounded education along with traditional subjects including English, Math and Science.” In terms of broader impacts, SCCSD believes this project will help to inspire and prepare a new generation of distance learning STEM/CTE programs through the SAMI distance-learning platform. Funding this program will challenge the dichotomy that graduates must sacrifice rural living to succeed professionally and break the cycle of poverty. It will initiate a systemic and cultural shift toward empowering students with the skills and credentials necessary to thrive professionally in rural economies, while also ensuring that they can use their learning in ways that benefit their direct communities.

**Response to Application and Program Requirements**

*Requirement 1 – Authorized Programs* The Seneca Nation ensures that all activities funded under NACTEP “will improve career and technical education programs” through increasing access to STEM coursework, including computer science, and hands-on learning opportunities, through expanded course offerings, dual-enrollment, and high-quality online coursework. The Seneca Nation has attached an MOU with SCCSD to provide the course work and certification programs.
Requirement 2 – Evaluation (See above section “Quality of Evaluation”)

Requirement 3 – Student Stipends Students enrolled in CTE programs and who have acute economic needs that cannot be met through work-study programs. The proposed project will be provided to students regardless of their economic situation. This program is being provided during the school day and the students are not participating in work-study. Schools participating in the program will receive a stipend for participation and to offset any costs incurred because of providing the program to their students.

Requirement 4 – Direct Assistance to Students Direct Assistance to Students will not be provided through grant funds. The program is provided to all students regardless of income or ability to pay. The student will not be subject to any debt or costs as a result of their participation in the program. The degree and/or certification will be provided without costs to the student.

Requirement 5 – Integration of Services The Seneca Nation is a 638 Native Nation and does have a 477 plan. This project will NOT be integrated into our current 477 Plan if awarded.