

Budget

Maritime Academy of Toledo, The (000770) - Lucas County - 2015 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (20)

U.S.A.S. Fund #:

Plus/Minus Sheet ([opens new window](#))

Purpose Code	Object Code	Salaries 100	Retirement Fringe Benefits 200	Purchased Services 400	Supplies 500	Capital Outlay 600	Other 800	Total
Instruction		6,000.00	927.00	423,941.00	115,239.00	32,357.00	0.00	578,464.00
Support Services		70,000.00	10,815.00	97,424.00	0.00	0.00	0.00	178,239.00
Governance/Admin		10,000.00	1,545.00	0.00	0.00	0.00	0.00	11,545.00
Prof Development		0.00	0.00	95,572.00	0.00	0.00	0.00	95,572.00
Family/Community		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Safety		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Facilities		0.00	0.00	123,000.00	0.00	0.00	0.00	123,000.00
Transportation		0.00	0.00	13,180.00	0.00	0.00	0.00	13,180.00
Total		86,000.00	13,287.00	753,117.00	115,239.00	32,357.00	0.00	1,000,000.00
Adjusted Allocation								0.00
Remaining								-1,000,000.00

Application

Maritime Academy of Toledo, The (000770) - Lucas County - 2015 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (20)

Please respond to the prompts or questions in the areas listed below in a narrative form.

A) APPLICANT INFORMATION - General Information

1. Project Title:

Virtual World/Immersive Simulation Technology: Innovative School to Career Pathways

2. Executive summary: Please limit your responses to no more than three sentences.

The Maritime Academy of Toledo (TMAT) will develop a state of the art, Virtual Worlds and Immersion Simulation Technology (VWIST) Campus in order to enable middle and high school students to acquire the necessary core knowledge, job-ready skills (VWIST) and soft skills (employability character traits- problem solving, cooperation, initiative, self-motivation, technology, communication, responsibility, punctuality, flexibility, appropriate dress/grooming, integrity, able to work without supervision) they need to pursue and secure real world jobs and careers upon graduation. TMAT will add engine room, welding, crane operations, heavy equipment operations, electronic chart display, tugboat classroom, and tugboat bridge VWIST to its current Class A full mission navigation bridge and radar classroom simulators, reconfiguring its campus footprints to prepare graduates for the following careers: engineering (engine room, engines, hydraulics, heating, air-conditioning, electricity, electronics, mechanics, pipefitters), maritime-related industries (ships, tugs, oil rigs, radar, electronic chart display), skilled trades (heavy equipment, crane operations, liquid gas cargo, welding), marine biologists, deep sea divers, cruise ship, and technology. As a result of VWIST exercises imbedding Common Core State Standards (CCSS), students will increase academic proficiency, job-ready/college-ready knowledge and skills, soft skills, GPA's, internships and apprenticeships experiences and will decrease their absenteeism, dropout rates, suspensions, expulsions, and code of conduct violations, thereby ensuring that TMAT graduates are prepared to compete for the careers that the US Department of Labor reports will be the most difficult to fill over the next ten year.

This is an ultra-concise description of the overall project. It should not include anything other than a brief description of the project and the goals it hopes to achieve.

1500 3. Total Students Impacted:

This is the number of students that will be directly impacted by implementation of the project. This does not include students that may be impacted if the project is replicated or scaled up in the future.

4. Please indicate which of the following grade levels will be impacted:

- | | |
|--|--|
| <input type="checkbox"/> Pre-K Special Education | <input type="checkbox"/> Kindergarten |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 4 |
| <input checked="" type="checkbox"/> 5 | <input checked="" type="checkbox"/> 6 |
| <input checked="" type="checkbox"/> 7 | <input checked="" type="checkbox"/> 8 |
| <input checked="" type="checkbox"/> 9 | <input checked="" type="checkbox"/> 10 |
| <input checked="" type="checkbox"/> 11 | <input checked="" type="checkbox"/> 12 |

5. Lead applicant primary contact: - Provide the following information:

First Name, last Name of contact for lead applicant
Renee Marazon

Organizational name of lead applicant
The Maritime Academy of Toledo

Address of lead applicant
803 Water Street, Toledo, OH 43604

Phone Number of lead applicant
419-343-1604

Email Address of lead applicant
rmarazon@maritimeacademy.us

6. Are you submitting your application as a consortium? - Select one checkbox below

- Yes
 No

If you are applying as consortium, please list all consortium members by name on the "Consortium Member" page by clicking on the link below. If an educational service center is applying as the lead applicant for a consortium, the first consortium member entered must be a client district of the educational service center.

[Add Consortium Members](#)

7. Are you partnering with anyone to plan, implement, or evaluate your project? - Select one checkbox below

Yes

No

If you are partnering with anyone, please list all partners by name on the "Partnering Member" page by clicking on the link below.

[Add Partnering Members](#)

B) PROJECT DESCRIPTION - Overall description of project and alignment with goals

8. Describe the innovative project: - Provide the following information

The response should provide a clear and concise description of the project and its major components. Later questions will address specific outcomes and the measures of success.

The current state or problem to be solved; and

Student academic performance continues to decline across the US, especially among disadvantaged students and those with special needs. US News responded that high school graduates are not prepared for college or real world jobs. Most teachers continue to rely on textbooks and workbooks and most prefer paper assignments and paper/pencil tests, failing to use methods that support the ways students learn best and failing to align teaching content with the knowledge, skills, and dispositions colleges and employers value and want. The Maritime Academy of Toledo (TMAT) believes an advanced use of Virtual Worlds (VW) and Immersive Simulation (IS) technology is the answer. VW uses an avatar (a digitized image of oneself) to interact with digital agents, objects, and environments. IS mirrors real world experiences, giving the impression that one is participating in a comprehensive, realistic experience using sensory stimuli as students and teachers influence and/or control what happens in the environment. VW and IS has the potential to excite and engage TMAT students and introduce them to real world job skills, raise test scores, increase literacy and math proficiency, increase graduation rates and meet the needs of students who are disadvantaged and disabled. During his State of the State address on 2/14/14, Governor Kasich, shared his vision to educate middle school students at career and technical centers as a way to keep them in school, interested in learning and ready for real world jobs. "The renewed attention on career-tech education is driven mostly by a skills gap that has left many unfilled jobs in Ohio, in growing industries such as energy, technology and resources." (Columbus Dispatch, March 2, 2014). We must be ready to intentionally teach to the habits and skills that colleges and employers value and want in our graduates. TMAT is committed to teaching content relevant to real world jobs and careers right on our own campus.

The proposed innovation and how it relates to solving the problem or improving on the current state.

The proposed Project replaces textbooks, workbooks, and paper/pencil assignments with Virtual Worlds, Immersive Simulation Technology (VWIST) to increase student engagement and learning, increase test scores, graduation rates, GPA's, internships and apprenticeships, and ensure student readiness for college and the world of work. TMAT will expand its current use of navigation and radar immersive technology to also include Virtual Worlds technology across the curriculum and in alignment with Common Core State Standards. Since 2010, TMAT, a nautical/maritime-themed middle and high school, has prepared students for college and real world jobs in maritime-related industry careers, using an innovative technology known as Immersive Simulation. This technology gives students the impression of being in situations that evoke substantial aspects of the real world in a fully interactive, immersive fashion and requires students to perform tasks that replicate real world experiences. With its full-size ship navigation bridge and radar classroom, TMAT students are able to simulate navigating the high seas and learn what it is like to be the ship's captain or bridge officer, steering through all types of weather and into world ports. Teachers develop ship-handling exercises, engaging them in trip planning, maneuvering in confined waters/open seas, radar plotting and bridge team management. They learn to communicate and cooperate when encountering ships, landmarks and objects in the water that either aid or impede their navigation. Students execute exercises and share successes and failures in a feedback classroom, problem solving, thinking critically, and communicating effectively. Each exercise is supported with an assessment rubric for grading. Through this Project, TMAT will expand its current IS technology and add Virtual Worlds technology (simulation technology in which the student is represented by an avatar who interacts with digital agents, objects, and environments). Virtual Worlds and Immersion Simulation Technology (VWIST) will significantly improve students' academic performance, increase internships, graduation rates, apprenticeships and job placements and ensure that TMAT students graduate with transferable job-ready skills (skilled trades) and soft skills or employability traits (problem solving, cooperation, initiative, self-motivation, technology, communication, responsibility, punctuality, flexibility, appropriate dress/grooming, integrity, working without supervision). VWIST lesson plans and assessments will not only be focused on CCSS to advance student's core knowledge, but they will also focus on job-ready and soft skills. VWIST will capture and hold students' interest, promote cooperative learning and keep them actively engaged in exploring careers they may have never thought of before such as engineering (engine room, engines, hydraulics, heating, air-conditioning, electricity, electronics, mechanics, pipefitters), maritime industry (ships, tugs, oil rigs, radar, electronic chart display), skilled trades (heavy equipment, crane operations, liquid gas cargo), marine biologists, deep sea divers, carpenters, cruise industry, and technology. Teacher Trainers will be trained and will train other staff in how to plan exercises for core, elective and career tech education (CTE) courses, imbed VWIST across the curriculum, individualize exercises to meet the needs of all students, and learn how to develop data-generating scoring rubrics and feedback sessions. TMAT will serve as an "Innovative Technology Research and Demonstration Model" that intentionally promotes school-to-career pathways. TMAT will disseminate the Project's Annual Executive Summary Report and Project Binder to educators, community members, and related business and industry.

9. Which of the stated Straight A Fund goals does the proposal aim to achieve? - (Check all that apply)

Applicants should select any and all goals the proposal aims to achieve. The description of how the goals will be met should provide the reader with a clear understanding of what the project will look like when implemented, with a clear connection between the components of the project and the stated goals of the fund. If partnerships/consortia are part of the project, this section should describe briefly how the various entities will work together in the project. More detailed descriptions of the roles and activities will be addressed in Question 16.

Student achievement (Describe the specific changes in student achievement you anticipate as a result of this innovation (include grade levels, content areas as appropriate) in the box below.)

The following specific changes in student achievement in grades 5-12 are anticipated as a result of the Project: Students in grades 5-12 will increase proficiency in core subject (reading, writing, math, social studies and science) by 10% as documented through Study Island assessments as a result of core and elective teachers planning VWIST lessons focused focus on specific CCSS. For example, the following Grade 5 Informational Text standard, "Use concrete words and phrases and sensory details to convey experiences and events," could be achieved through VWIST engine room assignments that require students to write detailed explanations of their experiences. Students in grade 5-12 will increase proficiency in core subjects by 10% as documented by GPA, and course grades, as a result of both core and elective teachers planning VWIST lessons focused specific CCSS. For example, the following Geometric Construction standard: "Make formal geometric constructions with a variety of tools (compass and straightedge) and methods." could be achieved through navigation charting assignments using maps, GPS, Electronic Chart Display Information Systems (ECDIS simulator) and radar simulators and assessed by successfully following the charted courses through navigable waterways, locks, bridges and port cities. Students in grades 5-12 will increase transferable job-ready VWIST knowledge and skills related to real world careers by 10% as documented by pre/post surveys VWIST exercise assessments, pre/post surveys, and local assessments and as documented by the Marazon Analytical Planning and Assessment Database (MAPAD). This goal will be accomplished by all teachers planning for and assessing VWIST exercises that emphasize job-ready skills. Students in grades 5-12 will increase their knowledge and practice of soft skills (employability traits-, cooperation, initiative, self-motivation, technology, communication, responsibility, punctuality, flexibility, appropriate dress/grooming, integrity, working without supervision) by 10% as documented by the pre/post "Progressive Employability Assessment". This goal will be accomplished by all teachers planning for and assessing VWIST exercises that emphasize soft skills. TMAT will increase OAA/PARCC and OGT/ACT scores by 10% each year, across all groups (disadvantages, special education, and race) as a result of the Project. This goal will be realized by comparing ODE Report scores from prior years. TMAT will decrease dropout rates, suspensions, expulsions, absenteeism, and code of conduct violations and will increase the graduation rate, internships and apprentices by 10%, as evidenced by a comparison of code of conduct violations EMIS data from 2014 through to 2020. This goal will be accomplished through motivating students to stay in school by engaging them in real world, relevant learning experiences, developing employability character traits and increasing internship and apprenticeship opportunities.

Spending reductions in the five-year fiscal forecast or positive performance on other approved fiscal measures (Describe the specific reductions you anticipate in terms of dollars and spending categories over a five-year period in the box below or the positive performance you will achieve on other approved fiscal measures. Other approved fiscal measures include a reduction in spending over a five-year period in the operating budget approved by your organization's executive board or its equivalent.)

Specific reductions anticipated in terms of dollars and spending categories over a five year period are as follows: Annual textbook and workbook purchases will decrease by \$25,000 per year because teachers will learn to incorporate reading, writing, math, science, and social studies CCSS into VWIST exercises. In lieu of traditional teaching methods, VWIST will enable teachers to present students with individualized and challenging hands-on simulations, followed by feedback classroom discussions of exercise summaries. In lieu of traditional learning experiences, TMAT students will develop relevant listening, speaking, reading, and writing skills needed for real-life communications. They will learn to debate, use nonverbal communications, and speak with clarity, conciseness, and confidence as they engage in real life simulation exercise. This cost savings in Instruction-Support Supplies will result in a spending reduction of \$125,000, through to the end of the 2020 school year. In place of textbooks and workbooks, students will be able to explore, discover and enter into simulation scenarios that mimic real world, careers, job skills and employability character traits. Laptop purchases 5 years beyond the grant year will be replaced by one-time grant purchases of VWIST which includes incorporates over 100 desktop computers and three instructor stations creating two additional VWIST classrooms and a tugboat navigation bridge. The VWIST desktops will be high end cpu's and will be more durable, last longer and will be warranted with the purchase price of the equipment. The VWIST software will also all be covered under five plus one and even ten year warranties including initial training, on-going remote hardware/software support. This reduction in laptop computer purchases will result in a cost savings of \$45,000 per year with a total spending reduction of \$225,000 in Instruction-Capital through to 2020. Another facility-related area of spending reduction in the operating budget will be construction costs budgeted in the Project which intends to renew current unusable space, turning it into VWIST computer labs/classrooms. This represents over \$123,000 in cost reductions in the five year forecast, money TMAT will not need to spend for facility renovations. An added benefit to the footprint redesign is that TMAT will be able to enroll an additional 60 students increasing enrollment potential to 300 students. This was not factored into sustainability considerations.

Utilization of a greater share of resources in the classroom (Describe specific resources (Personnel, Time, Course offerings, etc.) that will be enhanced in the classroom as a result of this innovation in the box below.)

Personnel resources will impact TMAT's students in the classroom both directly and indirectly. While there will not be an expansion of course offerings per se, there will be an expansion of VWIST opportunities for all students enrolled in the academy during their regularly scheduled core and elective courses. VWIST will be planned for on a weekly basis by all staff. Staff will be taught how to integrate engineering (engine room, engines, hydraulics, heating, air-conditioning, electricity, electronics), maritime industry (ships, tugs, oil rigs, radar, electronic chart display), skilled trades (heavy equipment, crane operations, liquid gas cargo) and technology into lesson plans for all students including Nautical Traditions, Maritime Skills and individual Maritime Career Tech Education courses (Navigation I and II, Ships Systems I and II and Engineering, Deck and Culinary electives). By the time a fifth grade student graduates, he or she should have had approximately 150 hours of simulator time. CTE students would have had an additional 280 hours of VWIST for a total of 430 hours, 5th grade through to graduation. The Maritime Academy of Toledo Foundation, the Project partner, has two VWIST experts who will support the Project through to 2020 and beyond. The first is the Instructional Design Consultant (IDC) who will work with students to initially introduce them to VWIST. The IDC will indirectly benefit students by training trainers and teachers in VWIST practices including lesson planning, exercise design, individualizing exercises to meet students' emerging needs, creating scoring rubrics, and directing feedback classrooms. The IDC will be hired as a consultant to continue to support VWIST work with students and to continue training, coaching, and mentoring trainers and staff through to 2020 and beyond. The Technical Engineer (TE) will also benefit students in that this engineer. As a result of this Project, TMAT will be able to provide more time on VWIST but also a broader scope of experiences and exercises on the additional technology. TMAT will now be able to provide significantly more hands-on, simulation exercises for all students, across all core and elective courses including its current six courses:

Nautical Traditions, offered two days per week for 55 minutes and required for students in grades 5-8; Maritime Skills, offered five days each week for 55 minutes and required for 9th grade students, and Maritime CTE courses Navigation I and II and Ship Systems I and II, which meets five days a week for 110 minutes.

Implementing a shared services delivery model (Describe how your shared services delivery model will demonstrate increased efficiency and effectiveness, long-term sustainability, and scalability in the box below.)

10. Which of the following best describes the proposed project? - (Select one)

New - never before implemented

Existing: Never implemented in your community school or school district but proven successful in other educational environments

Mixed Concept: Incorporates new and existing elements

Established: Elevating or expanding an effective program that is already implemented in your district, school or consortia partnership

C) SUSTAINABILITY - Planning for ongoing funding of the project, cost breakdown

11. Financial Documentation: - All applicants must enter or upload the following supporting information. The information in these documents must correspond to your responses in questions 11-14.

* Enter a project budget in CCIP (by clicking the link below)

[Enter Budget](#)

* If applicable, upload the Consortium Budget Worksheet (by clicking the link below)

* Upload the Financial Impact Table (by clicking the link below)

* Upload the Supplemental Financial Reporting Metrics (by clicking the link below)

[Upload Documents](#)

For applicants without an ODE Report Card for 2012-2013, provide a brief narrative explanation of the impact of your grant project on per pupil expenditures or why this metric does not apply to your grant project instead of uploading the Supplemental Financial Reporting Metric.

The project budget is entered directly in CCIP. For consortia, this project budget must reflect the information provided by the applicant in the Consortium Budget Worksheet. Directions for the Financial Impact Table are located on the first tab. Applicants must submit one Financial Impact Table with each application. For consortium applications, each consortium member must add an additional tab on the Financial Impact Tables. Partners are not required to submit a Financial Impact Table.

Applicants with an "Ohio School Report Card" for the 2012-2013 school year must upload the Supplemental Financial Reporting Metrics to provide additional information about cost savings and sustainability. Directions for the Supplemental Financial Reporting Metrics are located on the first tab of the document. If your organization does not have an "Ohio School Report Card" for the 2012-2013 school year, please provide an explanation in the text box about how your grant project will impact expenditures per pupil or why expenditure per pupil data does not apply to your grant project.

Educational service center, county boards of developmental disabilities, and institutions of higher education seeking to achieve positive performance on other approved fiscal measures should submit the budget information approved by an executive board or its equivalent on the appropriate tabs of the Financial Impact Table. Educational service centers should use the "ESC" tab and county boards of developmental disabilities and institutions of higher education should use the "non-traditional" tab.

12. What is the total cost for implementing the innovative project?

Responses should provide rationale and evidence for each of the budget items and associated costs outlined in the project budget. In no case should the total projected expenses in the budget narrative exceed the total project costs in the budget grid.

1,000,000.00 State the total project cost.

* Provide a brief narrative explanation of the overall budget.

Instruction Salaries and Fringes for Teacher Trainer Stipends-\$6,927. Instruction Purchase Service Heavy Equipment Simulator: Small Wheel Loader Simulator System, Track Type Tractor Simulator System, Motion Platform Package, 120V SimU Campus Training Records Management Software, Tech Support & Maintenance Updates-\$97,363. Instruction Purchase Service Welding Simulator: VRTEX 360, STANDARD FREQUENCY, Extensions Tm Upgrades, ExtensionsTM Upgrade 5, Demo Crate, Lessons In Arc Welding-SMAW, Project Based Lessons-\$71,182. Instruction Purchase Service Engine Room Simulator: Instructor control and monitoring station, eTutor Station, Communications, Server System, ERS Models-\$57,150. Instruction Purchase Service Crane Simulator: Crane Models, Console Tasks, 8 Crane Stations Crane \$126,840. Instruction Purchase Service Engine Room/Liquid Cargo Simulator Classroom: 8 Stations, Briefing / Debriefing Software, graphic feedback-\$24,260. Instruction Capital Tug Bridge PC Hardware Tug System, Display and Misc. Hardware, Ship control hardware, Consoles, PC hardware Instructor Station, Display and Misc. Hardware Instructor Station Instruction Capital Classrooms LCD Projectors, Smartboards-\$12,000. Instruction Purchase Service Liquid Cargo Handling System \$27,000. Instruction Purchase Service Tug Bridge Design drawings-\$8,050. Instruction Purchase Service ECDIS MARIS ECDIS 8 \$12,096. Support Purchase Service Engine

Room/Liquid Cargo Installation \$19,000. Instruction Supplies Tug Bridge Instructor Software, Instruction Supplies ECDIS WILCO Small Console Box 8, Miscellaneous Peripherals-\$32,357. Support Purchase Service ERS/LCHS/Crane Shipping, Freight, Tug Bridge Installation & Testing, Maintenance & Support /Six Years Warranty-\$67,148. Support Purchase Service ECDIS Standard Maintenance & Support (1613/yr for 6 yrs), ECDIS Installation with training services-\$11,276. Support Salaries Project Evaluator, Project Director/Instructional Design Consultant-\$70,000. Support Fringes Project Evaluator, Project Director/Instructional Design Consultant-\$10,815. Governance Salaries Grant Administrator-\$10,000. Governance Fringes Grant Administrator-\$1,545. Professional Development Purchase Service Crane Simulator Training- 3 days, Tug Bridge Training for instructors, Technology Engineer Consultant, Liquid Cargo Simulator Operational Training, Engine Room Simulator Operational Training-\$35,100. Professional Development Supplies Tug Bridge Trainee Software-\$60,472. Facilities Purchase Service Construction Tear Down, Build Out, Electrical, Trash Removal, Trash Recycle- \$123,000. Transportation Purchase Service to cover installation including Travel, Hotel, Care Rental, gov't PerDiem-\$13,180. Facility renovations will transform unusable campus space into VWIST classrooms as needed to accommodate the VWIST. The tugboat bridge, the engine room/crane/liquid gas simulator classroom, and the welding/heavy equipment simulator classrooms will be permanent venues for VWIST. Instruction Salaries will cover stipends for TMAT's trainers. All vendor contracts cover installation and most include computer hardware and software. Two vendors itemized computer hardware and as such these were coded as capital. In addition to the hardware, the vendor contracts also include software, hardware, peripherals, controls, and for the engine room, tugboat bridge, tugboat simulator classroom and crane simulator classroom, the contracts also include support, maintenance, training and warranties over the next six years. The welding and heavy equipment simulator classrooms will not require additional training, maintenance, warranties or support beyond year one because TMAT's current Tech Consultants will support these computers as part of their regular school contract. Transportation costs associated with VWIST installations are also itemized from the vendor contracts. PD costs are also itemized in vendor contracts.

13. Will there be any costs incurred as a result of maintaining and sustaining the project after June 30th of your grant year?

Sustainability costs include any ongoing spending related to the grant project after June 30th of your grant year. Examples of sustainability costs include annual professional development, equipment maintenance, and software license agreements. To every extent possible, rationale for the specific amounts given should be outlined. The costs outlined in the narrative section should be consistent and verified by the financial documentation submitted and explained in the Financial Impact Table. If the project does not have sustainability costs, applicants should explain why.

Yes - If yes, provide a narrative explanation of your sustainability costs as detailed in the Financial Impact Table in the box below.

In order to sustain the Project, \$333,635 in additional costs will be incurred between between July 1, 2015 and June 30, 2020. \$25,000 annual salary x 5 years = \$125,000 for the Project Evaluator who will manage the Project Evaluation Design including monitoring and directing implementation of all timeline activities related to all short-term, long-term assessments including but not limited to OpenProj, Study Island, Pre/Post Surveys (stakeholder, trainer, teacher, students, parent), VWIST frequency and duration statistics, Marazon Assessment and Planning Analytical Database summary reports of job-ready skills, and soft skills planned for assessed by teachers, student GPA's, course grades, and internship and apprenticeship contracts and placements. The Project Evaluator is also responsible for the Annual VWIST Executive Report including Project activities, progress towards goals and objectives, evaluation data, summaries, conclusions, and recommendations. At the end of Years 2 - 6, the following data will be added to the Annual VWIST Executive Report for analysis, comparison, and discussion: ODE Report Card Data, EMIS data (attendance, suspensions, expulsions, withdrawals), and TMAT code of conduct violations. The Project Evaluator is also responsible for reporting short-term and long-term progress towards Project goals to all stakeholders as each assessment activity data is collected, summarized with conclusions and recommendations communicated to stakeholders for their discernment and action. \$30,000 annual salary x 5 years = \$150,000 for the Technology Engineer Consultant (TEC), a part time consultant who will have overall responsibility for keeping all of the VWIST operational, communicating VWIST vendors via conference call, email, and Skype in order to facilitate remote maintenance support. The TEC will also troubleshoot power, equipment and visual display failures; determine causes of malfunctioning and communicate the same to VWIST vendors, working with them to incorporate engineering changes as needed. The TEC will also manage the interrelationships of circuits, apply knowledge and skills to restore equipment operation, and consult with VWIST staff and administration on any other issues as needed. \$4000 annual salary x 5 years = \$20,000 for the Photo/Video Portfolio Consultant: \$4000 annually consultant @ \$400.00 x 10 months: On-going photo/video documentation of Year I Project implementation including but not limited to classroom footprint redesigns, student engagement in VWIST, teachers at work in the classroom, internship students at work, apprenticeship students at work, graduates on the job, stakeholder, parent, and staff meetings, visitors to campus including other schools, community and business leaders, and politicians. Years 2-5, the video consultant will engage students in developing Photo/video Portfolio Documentation of VWIST and related activities as long term projects for students in Journalism and Graphic Art classes. \$800 annually x 5 years = \$4000 in VWIST Insurance as quoted by TMAT's current insurance carrier, Hylant Insurance. Expenses associate with student internship placements and college applications will be integrated into the job description of TMAT's career and college counselor. \$6927 annually x 5 years = \$34,635 in expenses associated with the three Teacher Trainer stipends of \$2000 + \$309 for fringes each for a total of \$6927 will be incurred every year through to 2020.

No - If no, please explain why (i.e. maintenance plan included in purchase price of equipment) in the box below.

14. Will there be any expected savings as a result of implementing the project?

Yes

No

Applicants with sustainability costs in question 13 or seeking to achieve significant advancement in spending reductions in the five-year forecast must address this response. Expected savings should match the information provided by the applicant in the Financial Impact Table. All spending reductions must be verifiable, permanent, and credible. Applicants may only respond "No" if the project will not incur any increased costs as a result of maintaining and sustaining the project after June 30th of your grant year. The Governing Board will use the cost savings as a tiebreaker between applications with similar scores during its final selection process. Cost savings will be calculated as the amount of expected cost savings less sustainability costs relative to the project budget.

60,000.00 If yes, specify the amount of annual expected savings. If no, enter 0.

If yes, provide details on the expected savings (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc.). If no, please explain

The Project will result in spending reductions totaling \$473,000 between July 1, 2015 and June 30, 2020. These reductions form the basis for Project sustainability even beyond 2020. Budget reductions in the five-year fiscal forecast are planned for Instruction Supplies and Instruction Capital. TMAT has allocated \$212,000 for textbook, workbook, and paper/pencil supplies each forecasted year. This totals \$1,060,000.00 through to 2020. The Project will result in textbook, workbook, and paper/pencil spending reductions totaling \$25,000 each year for five years for a total of \$125,000.00 from July 1, 2015 to June 30, 2020 as teachers replace textbooks, workbooks, and paper/pencil supplies with the hands-on, interactive, experientially-based exercises and feedback classroom experiences of VWIST. TMAT has forecasted \$230,000 each year for five years for new equipment/technology which totals more than \$1,150,000.00 through to 2020. The Project will result in a total reduction of \$150,000 As a result of this Project, spending for new technology will be reduced by a minimum of \$45,000 each year for five years for a total of \$225,000 between July 1, 2015 and June 30, 2020. As a result of this Project, TMAT will replace student laptop computer purchases with more durable, longer-lasting desktop computer stations. TMAT will purchase the following VWIST: One Tugboat Navigation Bridge, One Engine Room Classroom, One Crane, Liquid Gas, Heavy Equipment Classroom, One Welding Classroom, and the upgrade of the current radar classroom to accommodate Electronic Chart Display and Tugboat navigation. The classrooms accommodate a minimum of 16-24 students each. The Project will require one additional employee and one additional consultant to be under contract through to 2020 and beyond-the TEC and the Project Evaluator. 4 The \$70,000 total cost reductions will be used to cover \$66,727 in the additional costs of VWIST vendor contracts and teacher trainer stipends. The TEC will receive \$30,000 each year from 2015-2020. The Project Evaluator (PE) will receive a salary of 25,000. Three Teacher Trainers will receive stipends of \$2000 + fringes of 309 each for a total of \$6927 through to 2020. The Video consultant will receive a contract for \$4000 per year for a total of \$20,000 and the additional insurance coverage costs over five years will total \$4000. TMAT will use Project funds to design and renovate two classroom spaces and a tug bridge, saving TMAT the costs of renovating these spaces by 2020 representing a cost reduction of \$123,000 through to 2020.

15. Provide a brief explanation of how the project is self-sustaining.

All Straight A Fund grant projects must be expenditure neutral. For applications with increased ongoing spending as documented in question 11-14, this spending must be offset by expected savings or reallocation of existing resources. These spending reductions must be verifiable, permanent, and credible. This information must match the information provided in your Financial Impact Table. Projected additional income may not be used to offset increased ongoing spending because additional income is not allowed by statute. Please consider inflationary costs like salaries and maintenance fees when considering whether increased ongoing spending has been offset for at least five years after June 30th of your grant year. For applications without increased ongoing spending as documented in questions 11-14, please demonstrate how you can sustain the project without incurring any increased ongoing costs.

For educational service centers and county boards of developmental disabilities that are members of a consortium, any increased ongoing spending at the educational service center or county board of developmental disabilities may also be offset with the verifiable, permanent, and credible spending reductions of other members of the consortium. This increased ongoing spending must be less than or equal to the sum of the spending reductions for the entire consortium.

Explain in detail how this project will sustain itself for at least five years after June 30th of your grant year.

The Virtual Worlds and Immersive Simulation Technology Project is self-sustaining for a minimum of five years and beyond, after the Project Year in the following ways: Expected savings in supplies total \$125,000 as a result of replacing costs associated with textbooks and workbooks with hands-on interactive, experientially-based, and individualized VWIST exercises. These savings extend for five years and beyond since this innovative technology will remain an integral part of TMAT's mission and best practice philosophy of education. There will also be expected savings of \$225,000 in future technology purchases over the next five years as a result of the Project. Yearly laptop purchases will be replaced by more durable, longer lasting desktop computers during the Project Year resulting in upgrades to the current radar classroom which includes the addition of two VWIST programs (tugboat and electronic charting). Additionally, two 16-station VWIST computer classrooms with instructors will provide additional desktop computers for an additional four VWIST programs (crane, heavy equipment, liquid gas, and engine room). There is no concern with replacement costs for VWIST the purchase contracts all include the Project Year plus 5-years of equipment warranty including computers and monitors, peripherals, controls, control boxes and joy sticks. VWIST software is also self-sustaining because licenses for the VWIST include on-site training upon installation (Project Year) and then an additional five-years of software upgrades, remote technical support, and off-site training support. VWIST coverage is considered industry standard as evidenced by TMAT's current licensing and hardware contract for its Class A full mission bridge navigation and radar simulators which includes software upgrade, technical support, off-site training, and equipment warranty includes all computer and monitor hardware, peripherals, controls, control boxes and joy sticks. If any additional parts need to be purchased, for any unforeseen reason there is sufficient savings contained the 5-Year Budget Forecast cost reductions. Additionally, the TEC is fully capable of making any changes to the systems to ensure on-going functionality. This consultant's contract is offset by the above noted Five-Year Budget Forecast reductions as a result of The Project. TMAT will need to purchase additional purchases additional insurance annually to cover possible damage to the VWIST at an annual cost of \$800.00. These costs are offset by the above noted expected savings in the Five-Year Budget Forecast as a result of the Project.

D) IMPLEMENTATION - Timeline, scope of work and contingency planning

16. Please provide a brief description of the team or individuals responsible for the implementation of this project, including other consortium members and/or partners.

This response should include a list of qualifications for the applicant and others associated with the grant. If the application is for a consortium or a partnership, the lead should provide information on its ability to manage the grant in an effective and efficient manner. Include the partner/consortium members' qualifications, skills and experience with innovative project implementation and projects of similar scope.

Enter Implementation Team information by clicking the link below:

[Add Implementation Team](#)

For Questions 17-19 please describe each phase of your project, including its timeline, scope of work, and anticipated barriers to success.

A complete response to these questions will demonstrate specific awareness of the context in which the project will be implemented, the major barriers that need to be overcome and the time it will take to implement the project with fidelity. A strong plan for implementing, communicating and coordinating the project should be outlined, including coordination and communication in and amongst members of the consortium or partnership (if applicable). It is recognized that specific action steps may not be included, but the outline of the major implementation steps should demonstrate a thoughtful plan for achieving the goals of the project. The time line should reflect significant and important milestones in an appropriate and reasonable time frame.

17. Planning - Activities prior to the grant implementation

* Date Range 10/25/13 to 8/30/14

* List of scope of work (activities and/or events including project evaluation discussions, communication and coordination among entities).

10/25/13-form stakeholder team (admin, teachers, parent, school board president, and Foundation Director, carpenters' union; 12/12/13-2/25/14-Plan and Project Evaluation Design and draft of Project Timeline; 3/5/14 to 3/30/14- Submit Intent to Apply; stakeholders meet weekly; consult with industry partners; research VWIST; US Dept Labor job projections, develop plan to expand TMAT's simulation technology, determine Project goals; contact VWIST vendors for quotes, prioritize VWIST; determine job descriptions; conduct interviews with potential Project consultants; 3/15/14 to 4/6/14-finalize implementation timeline (Year I through Year 2020), set Project goals, engaged stakeholders in review of application; select VWIST vendors, finalize consultants, review and evaluate timeline activities, complete CCIP application; finalize Project budget (object and fund codes); determine electrical, construction, and cabling needs and get quotes from contractors; 4/8/2014-submit grant application; 7/28/14-communicate award to stakeholders and community; hold weekly stakeholder meetings/conference calls and regular email/phone communications; 7/29/14-finalize job descriptions; determine furniture needs for 3 classrooms, determine VWIST to purchase, finalize Project Timeline; hire Project personnel and consultants to serve as the VWIST Project Team (Team); 8/29/14 to 8/31/14-order supplies and support equipment; order VWIST simulators with penalty for later delivery and installation (no later than September 30, 2014); inventory receivables (barcode and catalog); 8/1/2014-hire construction, electrical, and cabling contractors per quotes with completion by 9/1/2014; 8/10/14-8/30/14-disseminate Project details to parents; staff, board members; 8/10/14-contract with teacher trainers to be trained by IDC; 8/13/14-8/15/14-Conduct VWIST staff meetings and disseminate Evaluation Research Design; 8/15/14-finalize Evaluation Research Design (data collection and reporting).

* Anticipated barriers to successful completion of the planning phase

Scope of Work Activities/Events-weekly stakeholder meetings/communications face-to-face, email, phone to discuss, determine and disseminate Project goals, activities, and timeline; conducted internet research re: VWIST for middle and high school students and best practices; negotiated and secured VWIST vendor quotes; built consensus among stakeholder for Project activities. Solution-final Project scope and timeline disseminated to stakeholders with a request for reply with questions, suggestions, or comments; drafted Project surveys. Barrier: Difficulty meeting weekly with stakeholders due to schedules; Solution: hold conference call meetings. Barrier: documenting planning phase activities. Solution: use OpenProj to record and report timeline progress and maintain a Project Binder for timeline documentation of construction, personnel, communications, vendor quotes, supplies, and equipment, budgets, lesson plans, VWIST exercises and scoring rubrics, internships, apprenticeships college applications. Stakeholder meetings were held to discuss the Project Evaluation Design was drafted by stakeholders in March, evaluated monthly and will be finalized 8/10/14 and disseminated during staff meetings. The intensive pre-grant submission planning that was completed by stakeholders has left this project a shovel-ready - TMAT is indeed ready to hit the ground running as soon as word of the grant award is given with all of the vendors on call and with quotes in hand, with all of the personnel already approached and waiting in the wings, and with all of TMAT's staff, administrators, and board members as well as partners and the community already excited at the idea of a VWIST campus.

18. Implementation - Process to achieve project goals

* Date Range 8/12/14 to 6/30/15

* List of scope of work (activities and/or events, including deliverables, project milestones, interim measurements, communication, and coordination).

8/12/14-8/15/14=train teachers and admin on full mission bridge (FMBS) and radar simulator with pre/post surveys; trainers re-train teachers in best practices, review MAPAD, enter employability character trait goal/objectives into the MAPAAD for intentional planning, assessment and reporting; 8/18/14-8/20/14- teachers trained on FMBS (planning, exercises, and scoring rubrics) with trainer support and pre/post surveys; 8/18/14-pre/post surveys (VWIST, job-ready skills and soft skills) given to stakeholders, teachers, students, parents; 8/28/14=begin work with employers to establish internships and apprenticeships; 9/1/14=purchase VWIST insurance; 9/5/14 conduct parent meetings to distribute VWIST pre/post surveys and parent/student VWIST workshop schedules; 9/1/14=9/15/14-open FMB and radar simulators to all students in all classes for exercises, conduct student baseline assessment (Study Island, pre/post job surveys, pre/post employability and MAPAD employability character traits); 10/1/14=demonstrate VWIST simulators to all staff and students; 10/2/14=trainers trained on new simulators with pre/post surveys; 10/3/14=teachers trained on new simulators with pre/post surveys; 10/12/14=teachers begin teaching all VWIST exercises; 11/1/14-5/1/15=monthly reporting and stakeholder discussion meetings of VWIST (frequency and duration) usage reports and MAPAD (CCSS, job-ready and soft skills) planning and assessments; 12/1/14-5/1/15=Internship and apprenticeship contracts and placements finalized; 1/15/15-1/30/15-mid-year assessments completed including (Study Island, VWIST exercise data, MAPAD, Progressive Employability Assessments, GPA's, EMIS data (suspensions, expulsion, conduct violations, and trainer, teacher, parent, stakeholder, board pre/post surveys); 5/20/15-5/30/15=end of school year assessments (same as 1/15/15-1/30/15); 6/1/15 to 6/30/15=collect all data, write and disseminate Project Executive Summary Report to all stakeholders, staff, admin, and board.

* Anticipated barriers to successful completion of the implementation phase.

Deliverables include: Project Binder, installation of Virtual Worlds Technology (crane, liquid gas cargo, heavy equipment) and Immersive Simulation Technology (ECDIS and tugboat stations, welding stations, engine room classroom, and tugboat bridge) including all software, hardware, support, software upgrades, maintenance and equipment warranties; classroom furniture, smart boards; projectors; office supplies; trainers, teachers, and informed parents with pre/post surveys. Project milestones: award announcement; completions of classroom footprints, installation of simulators; beginning, mid-year and end-of-year data collection and reporting, internships and apprenticeships contracts, Project Executive Report and dissemination of Project outcomes to stakeholders, educators, ODE, community, industry. Interim Measures include September and January pre/post surveys, Sept, January Study Island, MAPAD, GPA's, timeline monitoring. On-going Communications during Project Year and through to end of Year 6, weekly Project Binder updates with stakeholders, bi-weekly

meetings and weekly email tips from Instructional Design Consultant and trainers/teachers, assessment data updates, student newspaper, website, and Facebook updates with annotated photo/videos, Project Executive Summary disseminated at conferences, workshop, demonstrations. Barrier: VWIST may not arrive on time; As such, TMAT will incorporate penalty clauses in contracts with vendors. Barrier: keeping to Project Implementation timelines. Solution: Use OpenProj to monitor and reschedule activities in timely manner to ensure the integrity of the evaluation design.

19. Summative Evaluation - Plans to analyze the results of the project

* Date Range 9/1/14-5/30/15

* List of scope of work (activities and/or events, including quantitative and qualitative benchmarks and other project milestones).

The plan to evaluate long term goals inc includes the following benchmarks and project milestones to document progress towards long term goals includes the following formative evaluation activities and measures: 8/1/14-6/1/15: OpenProj, monthly reports generated; 8/1/14-8/15/14: Teacher Trainers, teachers, administration, and stakeholders given pre/post VWIST Best Practice Surveys to measure knowledge and skills related to integrating CCSS into VWIST exercises (plan and assessment practices), implemented across the curriculum. 9/1/14: Study Island baseline proficiency assessments given to grades 5-12; VWIST and Progressive Employability Assessment pre-tests given to grade 5-12 students and stakeholders, administration, teacher trainers, teachers and parents; 9/15/14-5/30/15: monthly Study Island, VWIST, MAPAD progress and usage reports generated; 1/15/15: semester mid-term Study Island assessments given to all students; VWIST and Progressive Employability Assessments given to all students, stakeholders, administrators, teacher trainers, teachers, and parents. All September and January assessments will be compared with the following end-of-year assessments: 5/15/15-5/30/15: Study Island baseline assessments given to grades 5-12; VWIST and Progressive Employability Assessment pre-tests given to grade 5-12 students and stakeholders, administration, teacher trainers, teachers and parents; including final summary of Study Island, VWIST, and MAPAD usage reports. VWIST knowledge and skill assessments and Progressive Employability Assessments post tests will be given to all students, stakeholders, administrators, teacher trainers, and parents. GPA's, internship placements and contracts will also be generated. All data generated will be charted, graphed, analyzed and compared to prior data collected. 2014 and 2015 EMIS data as well as budget revenue and expenditures illustrating the impact of the Project will also be generated charted, graphed, analyzed and reported.

* Anticipated barriers to successful completion of the summative evaluation phase.

The primary anticipated barrier is meeting all of the Project evaluation deadlines. Solution: TMAT will use OpenProj (project management software to communicate progress monthly to stakeholders, track timeline activities, and send reminders, warnings, progress reports, charts and graphs). Another anticipated barrier might be formative data results indicating that student achievement is lagging behind expected outcomes. Additional staff training related to use of VWIST and its integration with CCSS and developmentally appropriate practices.

20. Describe the expected changes to the instructional and/or organizational practices in your institution.

The response should illustrate the critical instructional and/or organizational changes that will result from implementation of the grant and the impact of these changes. These changes can include permanent changes to current district processes, new processes that will be incorporated or the removal of redundant or duplicative processes. The response may also outline the expected change in behaviors of individuals (changes to classroom practice, collaboration across district boundaries, changes to a typical work day for specific staff members, etc.). The expected changes should be realistic and significant in moving the institution forward.

Please enter your response below:

Instructional changes Expected changes to instructional practices are permanent and include the following: All staff will become skilled in implementing Developmentally Appropriate Practices (DAP) and in integrating CCSS into VWIST exercises as a result of ongoing staff and teacher-trainer professional development workshops throughout Project Year I and through to 2020. The VWIST Trainers, under the guidance of the TMAT Foundation Director, who will continue to serve as an Instructional Design Consultant, will offer staff on-going coaching and mentoring support through to 2020 and beyond. Over the six year period, the educational culture of TMAT will change significantly from students learning passively by listening, reading and writing, to students learning by doing and being actively engaged in virtual worlds and immersive simulation technologies. Teachers will become skilled in integrating CCSS goals into VWIST planning, creating exercises, and directing feedback activities. TMAT will continue to promote staff research of additional VWIST and gaming software that will best support students' academic, job-ready/college-ready, and soft skill proficiency (chemistry, physics, zoology, marine biology, botany, math, history, geography, etc.). Changes to the Classroom Expected changes to classroom practices will be realized as every students becomes familiar with and skilled in using VWIST as realistic tools for improving their reading, writing, math, science, and social studies knowledge and skills. Students will learn to evaluate their own learning through exercise feedback classroom experiences. They will become critical, on-the-spot thinkers and problem solvers as they work through the dynamic and individualized VWIST exercises. Students will be able to make connections on their own, between VWIST and real world job possibilities and career pathways. Students will be motivated to decrease code of conduct violations, absenteeism, suspensions, expulsions, and withdrawals as they see the relationship between these dispositions and success in life. As a result of VWIST experiences, students will be motivated to compete for internships and apprenticeships, college placements and skilled-trade jobs. One important organizational change is TMAT's permanent school-to-work program, which will provide students internships and apprenticeships. TMAT plans to continue to develop additional school-to-work partnerships with local, state, and national employers well beyond 2020. Another important organizational change is that TMAT will continually seek to enhance its VWIS technologies beyond the six year scope of the Project. VWIST best practices as well as lessons learned are just the beginning of TMAT's vision that TMAT not only be a VWIST campus but also a family-engagement campus with parents and students working together in exciting ways to ensure that students' proficiency in academic, job-ready skills and soft skills leads to college, the world of work and life successes. TMAT's commitment to a permanent emphasis on innovative technologies, will make graduates not only ready for college and careers but also makes them some of the most desired and employable high school graduates in Ohio. As a result of this Project, TMAT will become a "The Virtual Worlds and Immersive Simulation Technology Campus: A School- to-Career Pathway. With a foundational six years of student and staff VWIST experiences, the Project will be expanded to include new technologies as they evolve so that TMAT will become an innovative Virtual World and Immersive Simulation Technology model campus for all of Ohio.

E) SUBSTANTIAL IMPACT AND LASTING VALUE - Impact, evaluation and replication

The responses in this section are focused on the ability to design a method for evaluating the project's capacity for long-term sustainable results. Therefore, the questions focus on the method of defining the problem(s) the project hopes to solve and the measures that will determine if the problem(s) have been solved.

21. Describe the rationale, research or past success that supports the innovative project and its impact on student achievement, spending reduction in the five-year fiscal forecast or utilization of a greater share of resources in the classroom.

The response should provide a concise explanation of items which provide rationale that will support the probability of successfully achieving the goals of the project. Answers may differ based on the various levels of development that are possible. If the proposal is for a new, never before implemented project, the response should provide logical, coherent explanations of the anticipated results based on some past experience or rationale. For projects that have been implemented on a smaller scale or successfully in other organizations, the response should provide the quantifiable results of the other projects. If available, relevant research in support of this particular proposal should also be included.

Please enter your response below.

In 2010, TMAT staff and students first began their experiences with Immersive Simulation (IS) technology when the American Maritime Officers' Union donated a bridge and a four-radar station classroom. They also donated "nonworking" engine room and tugboat simulators. In October, 2012, the bridge and radar simulators were damaged due to an electrical power failure and they were not repairable due to the unavailability of outdated parts and monitors. In July, 2013, a partnership was formed with VSTEP of The Netherlands, to secure a replacement full mission bridge and an eight-station, 16-student, radar simulator classroom. In January, 2014, the new simulators were installed. TMAT's CTE students use the simulators for their Navigation I and II and Ship Systems I and II courses. All grade 5-8 students use the simulators when available, in their weekly maritime course title "Nautical Traditions" and all ninth grade students use the simulators, in their course titled "Introduction to Maritime Skills". When TMAT students are engaged in simulation exercises they are animated, responsible and excited about learning and what they learn impacts their understanding of real world jobs and job skills. One of the side benefits of introducing our CTE students to real world jobs using simulators is that realize first-hand that they must be "drug free" in order to perform "simulator" maneuvers. Immersive Simulation has laid the foundation for TMAT's vision to create a VWIST campus. This vision has excited the entire school the community and beyond. TMAT's past successes with IS technology form a strong rationale for expanding the limited work we do with simulation technology to include virtual worlds and the most need skills for the real world jobs that the U.S. Dept of Labor reports will have a 20% growth in job openings over the next ten years. Anticipated Project results are based upon TMAT's past successes of the CTE graduates who had slightly more than one year of hands-on, real life exercises on the simulators before they became nonoperational. Even with this limited time, CTE graduates had a 90% graduation rate (12 graduates in the past three years). Of what is known about them, one is an Ordinary Seaman on a freighter, one has graduated from college, four are attending college, two are in automotive careers, one in welding, and three in related careers. Expanding core academic knowledge and skills, job-ready/college-ready knowledge and skills, and soft skills to the entire school will definitely impact career choices as well as college and job placement opportunities. CTE students maintained a 2.5 GPA in their core, elective and CTE courses and had fewer or no code-of-conduct violations. They also had a 95% attendance rate. It is anticipated that this Project will impact every 5th-12th grade student, in the same way, advancing academic, job-ready/college-ready, and soft skills. Research shows that simulation technology increases academic proficiency and inquiry skills. The research study titled "Games and simulations: A new approach in education" (GK Akilli, 2007) and "Simulations, Games and Experience-Based Learning: The Quest for a New Paradigm for Teaching and Learning" (Brent D. Ruben, 1999) noted that computer games and simulations are powerful tools for learning, with an untapped potential for formal educational use. Honey & Hilton, 2011 noted that VWIST has the power to improve science learning, matching the pace, interests and capabilities of each student and making learning "real and authentic". Past success supporting VWIST was reported by Catalina Foothills School District. They noted that as a result of VWIST, their students are actively engage in more problem solving; reflecting, processing information, communicating, increasing their knowledge and interest in real world jobs, engaging in creative, divergent thinking, have less absenteeism, and become educational ambassadors sharing their experience with peers and family.

22. Describe the overall plan to evaluate the impact of the concept, strategy or approaches used in the project.

This plan should include the methodology for measuring all of the project outcomes. Applicants should make sure to outline quantitative approaches to assess progress and measure the overall impact of the project proposal. The response should provide a clear outline of the methods, process, timelines and data requirements for the final analysis of the project's progress, success or failure. The applicant should provide information on how the lessons learned from the project can and will be shared with other education providers in Ohio.

* Include the name and contact information of the person who will be responsible for conducting the evaluation and whether this will be an internal or external evaluation.

The following is the person responsible for evaluating the impact of the strategies used in this Project The evaluation is Internal and will be conducted by the Renee Marazon, President, The Maritime Academy of Toledo 803 Water Street, Toledo, OH 43604 Toledo, OH 43604 419-343-1604 rmarazon@maritimeacademy.us The Evaluation Research design and implementation is the direct responsibility of the Evaluation Director who will be employed for the duration of the grant and a minimum of five years through to 2020.

* Include the method by which progress toward short- and long-term objectives will be measured. (This section should include the types of data to be collected, the formative outputs and outcomes and the systems in place to track the project's progress).

The Evaluation Research design and implementation is the direct responsibility of the Evaluation Director who will be employed for the duration of the grant and a minimum of five years through to 2020. Summative evaluations to monitor progress towards Project goals include the following Years 1-6 monthly reports: 1. OpenProj will generate weekly Project reports to ensure on-time implementation of timeline activities; 2. Study Island baseline assessments reports summarizing student usage and progress towards achieving core subject proficiency. Summative evaluations to monitor progress towards Project goals include the following Years 1-6 mid-year reports: 1. Study Island assessments will be given every January; 2 Pre/post Stakeholder, Teacher Trainer, Teacher, Student and Parent, Surveys (VWIST, job-ready skills and soft skills) 3. VWIST frequency and duration usage reports mid-year; 4. GPA's; 5. MAPAD summary reports (CCSS, job-ready skills and soft skills planned for and assessed). 6. Internship and apprenticeship contracts; Formative evaluations to demonstrate Project goal achievement at the end of Years 1-6 will be given every May: 1. Study Island assessments; 2. Post Surveys (stakeholder, trainer, teacher, student and parent) related to VWIST, real world job-ready skills and soft skills; 3. VWIST frequency and duration usage reports. Formative evaluations to demonstrate Project goal achievement at the end of Years 2-6 will be reported from the following every June. 1. EMIS data (attendance, suspensions, withdrawals to another school, drop out; 2. ODE Report Card data (OAA/PARCC and OGT/ACT scores); 3 Internship and Apprenticeship contracts and actual placements; 4. Cumulative student GPA's. Qualitative data includes photo/video

documentation of footprint construction, VWIST installation, VWIST classes with student and/or parents and the Project Binder. Qualitative data will be collected through years 1-6.

* Include the method, process and/or procedure by which the project will modify or change the project plan if measured progress is insufficient to meet project objectives.

Short- and long-term progress reports will be presented at monthly stakeholder meetings as evidenced by meeting agendas and minutes. Failure to make adequate progress toward Project goals will result in design changes including but not limited to additional training of trainers and teachers to strengthen their skills in integrating CCSS with VWIST experiences. OpenProj (project management software), will be used to monitor Project activities including monthly stakeholder meetings, weekly stakeholder communications via email, footprint redesigns, installation of VWIST, staff trainings, staff meetings, training trainers, parent meetings, pre/post surveys, local assessments, assessments completed including (Study Island, VWIST exercise data, Study Island, GPA's, MAPAD, OAA/PARCC and OGT/ACT dates, Executive Report due date, etc. The software includes start date, completion date, progress notes, reports on demand, charts and graphs. Project timeline activities will be adjusted as in order to achieve Project outcomes. Baseline and mid-term as well as formative/ short-cycle assessments are designed to monitor students' CCSS academic progress as well as their knowledge of VWIST (job-ready skills) and employability character traits (soft skills). This assessment data will be generated monthly and closely studied by stakeholders and staff during their monthly meetings. Careful analysis of the data will provide the rationale for either continuing the Project as planned or adjusting Project activities to increase student proficiency in common core subjects, elective subjects, and VWIST lessons. Failure of any grade/group to make adequate progress will result in design changes (additional teacher training, revision of interventions, etc. OpenProj software), will be used to monitor Project activities including monthly stakeholder meetings, weekly stakeholder communications via email, footprint redesigns, installation of VWIST, staff trainings, staff meetings, training trainers, parent meetings,

23. Describe the substantial value and lasting impact which the project hopes to achieve.

The response should provide specific quantifiable measures of the grant outcomes and how the project will lead to successful attainment of the project goals. Applicants should describe how the program or project will continue after the grant period has expired.

Please enter your response below.

The specific quantifiable measures of the Project outcomes include the following: Study Island assessment tool (a Scientifically-based Research tool aligned with CCSS) Pre/Post Surveys quantifying knowledge and self-reporting of skills related to VWIST, employability character traits and career pathways to jobs that are in-demand (Parent, Teacher, Teacher Trainer. Students); EMIS data related to absenteeism, suspensions, expulsions, code of conduct violations, withdrawals and graduates, # of internship and apprenticeship placements; VWIST quantitative reports included with the simulation software. The Project will continue after the grant period has ended because the simulators will have from five to nine additional years of maintenance, training/support and computer equipment/software warranties. The staff will be trained each year and refreshed throughout the year. Trainers will also continue to be trained and will coach and mentor staff. Parents will continue to be involved in VWIST experiences with their students. There will be a small stipend contract for each of the three trainers @ \$2000 each. This is aligned with the stipends given for the RtT, Marazon, and DAP teacher trainers and these costs are sustainable as noted in the Project budget forms. Once the internships and apprenticeships are set up, they will continue from year to year at no cost to TMAT as these types of responsibilities are part of the school counselor's job description. There are no costs associated with Study Island, as it has been part of TMAT's budget for the past three years and is expensed through TMAT's general operating funds. The substantial value of the Project is the permanent establishment of a VWIST campus with the assurance that it will continue into the future far beyond 2020. The interest and support from business and industry will only grow stronger over the years as TMAT's graduates prove to be valuable employees whose academic, job-ready/college-ready, and soft skills make them top candidates for the most needed job. TMAT's successful past experience with simulation technology and the current staff's comfort level with using the technology forms a strong basis for the longevity of the Project. The fact that TMAT is already considered a national leader among Maritime Primary and Secondary schools and the fact that TMAT is the only maritime school in the US with simulation technology, gives assurances that a Virtual Worlds and Immersion Simulation Technology Campus will be one of the most innovative educational programs and environments that will prepare graduates for the most. With five years of VWIST exercises developing their communication skills, critical thinking, problem solving, teamwork and employability character traits, TMAT graduates will represent the solution to the skills gap and present themselves ready to fill the most needed jobs today: engine room (engines, hydraulics, heating, air-conditioning, electricity, electronics), maritime industry (maritime=ships, tug, oil rig, radar, electronic chart display), skilled trades (heavy equipment, crane operations, liquid gas cargo) and technology. The continuity of the Project through 2020 and beyond is further assured by the fact that there is only minimal need for additional personnel, namely the technology engineer, project evaluator, and stipends for the teacher trainers. The current principal, curriculum coordinator, dean of students, CTE director, career counselors are already contracted for positions that incorporate all other activities associated with the grant include internship and apprenticeship contract and placements and all of the evaluation activities that are a part of the school's responsibilities.

24. Describe the specific benchmarks, by goal as answered in question 9, which the project aims to achieve in five years. Include any other anticipated outcomes of the project that you hope to achieve that may not be easily benchmarked.

The applicant should provide details on the quantifiable measures of short- and long- term objectives that will be tracked and the source of benchmark comparative data points. Responses should include specified measurement periods and preliminary success points that will be used to validate successful implementation of the project. If a similar project has been successfully implemented in other districts or schools, identification of these comparable benchmarks should be included.

* Student Achievement

Benchmarks: 1. The Project Year I Evaluation/Research Design will be replicated each year through to Year 2020; 2. Baseline assessments related to student academic achievement (Study Island), job-ready skills (VWIST) pre-test and soft skills (Progressive Employability Survey) pre-test will be given every September to stakeholders, administrators, teacher trainers, teachers, students, and parents; 3. The same assessments will be given mid-year and end of year; 4. GPA's/course grades will be analyzed each semester; 5. Code of conduct, suspensions, expulsions, attendance, withdrawals, internships and apprenticeships will be generated and compared to prior year data; 6. Graduate surveys will be generated each year (college/career). Data will be summarized and reported with conclusions and recommendations and reported in an Annual VWIST Executive Report. By 2020 grade 5-8 students will have increased proficiency in CCSS by 10% each year as assessed by Study Island & OAA/PARCC as a result of both core and elective teachers planning VWIST lessons aligned with CCSS; students in grade 9 will increase CCSS by 10% each year as assessed by Study Island and grades 10-12, by OGT/ACT as a

result of both core and elective teachers planning VWIST lessons focused on specific CCSS; students in grades 5-12 will have increased their knowledge, skills and dispositions related to job-ready and soft skills (Progressive Employability Survey) by 10% each year as assessed through pre/post surveys and as documented by MAPAD analytical reports; TMAT will decrease drop out, suspensions, expulsions, absenteeism, code of conduct violations, and increase graduation rate, internships and apprentices by 10% each year, as evidenced by EMIS data and TMAT data collection; TMAT will increase knowledge about VWIST and greater parent involvement in their student's education by 10% as documented by pre/post VWIST surveys and attendance at parent/student joint VWIST trainings, after school and on Saturday

*** Spending Reduction in the five-year fiscal forecast**

Goal: TMAT will reduce textbook and workbook purchases by \$25,000 2020. VWIST will provide alternative teaching and learning experiences for staff and students. In lieu of work book and text book, students will explore hands-on math through chart reading, navigation, engineering, cranes, heavy equipment - weight, volume, etc. related to real life knowledge and skills. Goal: TMAT will reduce laptop purchases by 45,000 through to 2020. TMAT students will learn through the advance technology of not simply a computer but computers that simulate real jobs and real life challenges. These computers are more durable and will reduce the costs associated with purchasing new laptops each year. Goal: TMAT will renew currently unusable space and transform it into permanent VWIST classroom space. The cost associated with renewing this space is a one-time cost that enables TMAT to transform its school from a traditional campus to a VWIST campus. All of the construction costs will be budgeted for in the Project. This represents \$123,000 in cost reductions in the five year forecast, money TMAT will not need to spend to transform unusable space into classrooms. An added benefit to the footprint redesign is that TMAT will be able to enroll an additional 60 students. This is important because classroom space currently limits TMAT to 240 students. Finally, it must be stated that the reductions in the five-year fiscal forecast will be permanent reductions as a result of textbook, workbook, and paper/pencil savings and computer/technology savings. This means that TMAT will have the funds necessary to continue to expand its VWIST campus and add such simulations as chemistry, biology, marine biology, botony, music, geography, culinary, autobody painting and repair, drivers' education, truck driving, and more.

*** Utilization of a greater share of resources in the classroom**

Personnel resources will impact TMAT's students in the classroom both directly and indirectly. While there will not be an expansion of course offerings per se, Goal: To expand TMAT's current navigation and radar immersive simulation technology to include Virtual Worlds and many more simulation programs and for all students enrolled in the academy, not only CTE students as it has been in the past. The expansion of VWIST opportunities for all students enrolled in the academy during their regularly scheduled core and elective courses will include weekly experiences on simulators. Goal: To provide students with expert teachers and trainers for quality experiences with VWIST and for longer, more quality experiences with VWIST. Goal: To indirectly benefit students by training trainers and teachers in VWIST practices including lesson planning, exercise design, individualizing exercises to meet students' emerging needs, creating scoring rubrics, and directing feedback classrooms.

*** Implementation of a shared services delivery model**

*** Other Anticipated Outcomes**

TMAT is currently the only Maritime Career Tech Education Program in the State of Ohio and in the country. Our graduates are qualified to move directly into entry level jobs on freighters, tugboats, ferries, and in shipyards. With VWIST expansion, TMAT's graduates will have a broad range of job possibilities in skilled trades and as apprentices. For these reasons, has set a lofty goal to serve as a viable model of best practices in implementing Virtual Worlds and Immersive Simulation Technologies, across the curriculum and aligned to Common Core State Standards, Ohio standards, CTE standards and elective subject standards. Again, it is important to note that the reductions in the five-year fiscal forecast will be permanent reductions as a result of textbook, workbook, and paper/pencil savings and computer/technology savings. This means that TMAT will have the funds necessary to continue to expand its VWIST campus and add such simulations as chemistry, biology, marine biology, botony, music, geography, culinary, autobody painting and repair, drivers' education, truck driving, and more.

25. Is this project able to be replicated in other districts in Ohio?

Yes

No

If the applicant selects "Yes" to the first part of the question, the response should provide an explanation of the time and effort it would take to implement the project in another district, as well as any plans to share lessons learned with other districts. To every extent possible, applicants should outline how this project can become part of a model so that other districts across the state can take advantage of the learnings from the proposed innovative project. If there is a plan to increase the scale and scope of the project within the district or consortium, it should be included here.

*** Explain your response**

Through additional grant writing, TMAT plans to expand the Project's VWIST to include geography, history, sciences, nursing, fire rescue, emergency management, auto, truck, air, and rail. and more in order to continually advance students' core knowledge and skills and also advance their job-ready/college-ready knowledge and skills and soft skills, continuing to intentionally develop pathways for our students to move from graduation to college and/or the careers that the US Department of Labor reports to be the most difficult to fill. Regarding research, the trend towards increasing use of games and simulations for teaching has important implication for understanding how informal and formal learning supports and reinforces to accelerated learning, higher-order cognitive development and strengthens motivation in skills-based learning (de Freitas, 2004; de Freitas & Levene, 2004; Delanghe, 2001; Klabbers, 2003; Shawn Green & Bavelier, 2003). While there is clearly a need for baseline research into how games and simulations are currently being used...for learning, general trends in the research indicate the increasing popularity among learners for using 'serious games' and simulations to support curricula objectives (Aldrich, 2004; Amory, Naicker, Vincent, & Adams, 1998; Spectrum Strategy Consultants, 2002). In addition to increasing demand for interactive games- and simulation-based content and tools amongst learners, employers and training providers are (rightly or wrongly) beginning to regard games- and simulation-based learning as a way of making cost savings in training budgets as well as providing new ways for communicating with potential new recruits (Wardynski, 2004), particularly amongst the 'net generation' who have grown up with computer games (Oblinger & Oblinger, 2005). TMAT proposes that the "Virtual Worlds/Immersive Simulation Technology: A School- to-Career Pathway Project" is indeed

worthy of replication. TMAT is eager to become a demonstration and training center for other districts who may wish to add VWIST to their campus. The Academy uses the Marazon Analytical Planning and Assessment Database to report lesson plans, job-ready goals/objectives, and employability goals/objectives. These and VWIST exercises and scoring rubrics will be compiled into a VWIST Resource Binder to be shared with other districts upon request. The OpenProj documents (timeline, budgets, tasks and related charts, graphs) will be included in the Resource Binder, as will the Video Portfolio and Annual Project Executive Summaries practitioners. In order to replicate this project, district personnel would need to commit to the following: gather stakeholders-1 month; develop timeline-2 months; research and determine VWIS technologies to purchase; visit schools that have VWIST-3 to 6 months; purchase VWIST, develop VWIST budget; hire project manager and technicians; hire VWIST training consultants, hire project evaluator-2 months. Implement VWIST. Perhaps one of the most important contributions of the Project is the research data including teaching and learning strategies that will be generated from the Project and evaluation design. TMAT's contribution to VWIST research will lay the foundation for other school districts to follow in its footsteps. The Project will serve not only as a penned model but also as a visual hands-on model, a field trip location for other districts to visit. As a bonus, TMAT has 27 overnight guest rooms where potential replicators can visit and observe students and teachers in action with VWIS technology. Finally, the typical cost associate with the schools' purchase of textbooks, workbooks and replacement of technology from year to year makes VWIST feasible for every district. VWIST is a one-time, up-front technology/software investment that is easily justifiable as a means of providing our students with the necessary academic knowledge, job-ready skills and soft skills they need for success in life.

By virtue of applying for the Straight A Fund, all applicants agree to participate in the overall evaluation of the Straight A Fund for the duration of the evaluation time frame. The Governing Board of the Straight A Fund reserves the right to conduct an evaluation of the project and request additional information in the form of data, surveys, interviews, focus groups and other related data on behalf of the General Assembly, Governor and other interested parties for an overall evaluation of the Straight A Fund.

PROGRAM ASSURANCES: I agree, on behalf of this applicant, and any or all identified consortium members or partners, that all supporting documents contain information approved by a relevant executive board or its equivalent and to abide by all assurances outlined in the Straight A Assurances (available in the document library section of the CCIP).

I agree, on behalf of this applicant and any or all identified consortium members or partners, that all supporting documents contain information approved by a relevant executive board or its equivalent and to abide by all assurances outlined in the Straight A Assurances (available in the document library section of the CCIP). I further agree to participate in the overall evaluation of the Straight A Fund for the duration of the evaluation time frame.

Consortium Contacts

No consortium contacts added yet. Please add a new consortium contact using the form below.

Partnerships

Maritime Academy of Toledo, The (000770) - Lucas County - 2015 - Straight A Fund - Rev 0 - Straight A Fund

Sections 

Partnerships

First Name	Last Name	Telephone Number	Email Address	Organization Name	IRN	Address	Delete Contact
Barb	Pinter	419-350-6661	bpinter@sbcglobal.net	The Maritime Academy of Toledo Foundation		One Maritime Plaza, 2nd Floor, , Toledo, OH, 43604	

Implementation Team

Maritime Academy of Toledo, The (000770) - Lucas County - 2015 - Straight A Fund - Rev 0 - Straight A Fund

Sections 

Implementation Team

First Name	Last Name	Title	Responsibilities	Qualifications	Prior Relevant Experience	Delete Contact
Barb	Pinter	Project Director (Implementation Director)	<p>Barb Pinter: The Maritime Academy of Toledo Foundation Director, will serve as the Project Implementation Director and will have responsibility for the following: * budget oversight * administrative and fiscal advising * approval of all contracts, supplies, capital expenditures * oversight of teacher training including professional development workshops, coaching, and mentoring, training trainers * oversight of teachers' implementation of VWIST as evidenced by lesson plans and assessments * oversight of contractors, vendors, volunteers, and any others associated with project development, implementation, and monitoring * oversight over Project Evaluator * inventory control * serve as the VWIST master scheduler * preparation of project approval documents * signature approval of all requisitions and invoices * oversight of monthly financial reports * oversight of all grant activities * developing guidelines for trainers, teachers, coaches, and mentors, * providing oversight of all training (trainers, teachers, coaches, mentors) * monitoring data, data collection, and data reports * writing monthly project summaries * writing an annual project report * serve as the Instructional Design Consultant - responsible for on-going training of Project administrators, teachers and teacher trainers, parents and oversight of VWIST</p>	<p>Barb Pinter has served as a "Simulator Teacher/Trainer" for The Maritime Academy of Toledo, for past three years. She has set up exercises for students and trainer the Career Tech Education teacher in how to teach simulation software exercises. Prior to these three years, Ms. Pinter served as the head of operations for the Simulation Training and Reseach Center here in Toledo until the company moved their operations to Florida. While serving as the head of operations, Ms. Pinter was responsible for simulator exercises, training exercises, feedback classroom activities. She has oversight responsibility for the finances and the educational programming of the STAR Center including but not limited to staff training, course scheduling, classroom observations, inventory control, record keeping, program evaluation, and overall program management.</p>	<p>10/1984-12/2008 Maritime Training & Research Center (MTRC), Simulation Training, Assessment & Research (STAR) Center Toledo, OH Head of Operations * Responsible for the facility-wide, interdepartmental budget. * Sold course time to companies domestically and internationally. * Set annual course schedules and supervised all personnel. * Recruited and assigned instructors for all courses. * Supervised technical operations of all facility simulators. * Developed Simulator Databases and Visual Bridge Software. 05/1984 - 10/1984 Owens Technical College, Perrysburg, OH Computer Operator: Assisted computer programming students in the school's computer laboratory. Ran weekly payroll for local school systems. 1980 - 1982, Van Dyne Crotty, Toledo, OH Sales Representative: Closed major accounts with Detroit Metropolitan Airport, Toledo Edison 1977 - 1980, Seaway Foodtown, Rockwood, MI: Head Bookkeeper-Balanced daily and weekly books. Performed all bank deposits and balanced accounts to bank records monthly.</p>	

			<p>exercise data (frequency and duration) lesson plans, local assessments, teaching practices, rubric development and scoring and feedback classroom practices. *</p> <p>Communicating End of Year I, II, III, IV, V, VI Grant Project Executive Summary</p>		
Renee	Mararazon	Project Evaluator	<p>The Project Evaluator is responsible for all Project evaluation activities (formative and summative data collection, summaries, conclusions, recommendations for practitioners, and executive reporting through 2020); monthly data monitoring , end-of-year outcome reporting, presentations at conferences, posting executive reports and photo/video portfolios on TMAT and Foundation websites and Facebook.</p>	<p>Qualifications: BA Education, MEd Career Technical Education, private and public school administrator, college professor, author, trainer, consultant., researcher. 7 Years Experience Training and Evaluating U.S. Air Force Child Development teachers, and developing teacher training programs for USAF.</p>	<p>Prior Relevant Experience: negotiated and purchased TMAT's new navigation and radar simulators, secured and managed state and federal grants: CCIP Ohio Charter School Start-Up, Public Charter School Program, and Consolidated, 21st Century. EXPERIENCE THE MARITIME ACADEMY OF TOLEDO, Toledo, OH (2004 - 2013) Founder and Superintendent: responsible for development, start up and oversight of day to day operations of Grades 5-12 public charter school. Sponsored by Franklin County Educational Service Center, servicing 130 students; www.maritimeacademy.us. VICTORY ACADEMY OF TOLEDO, Toledo, OH (2004 -2009) Founder and principal: responsible for development, start up and oversight of day to day operations of K-8 public elementary charter school. Sponsored by Lucas County Educational Service Center, servicing 120 students. www.victoryacademyoftoledo.us. MAPS for life, Perrysburg, OH (1997-present) President/CEO Consultant: Charter School Developer including school board formation, State and Federal incorporation, bylaws, preliminary and final sponsor applications/contracts, state and federal grant writing, school policies and procedures (student and faculty), budgeting/finance, environments, equipment, materials, inventory control, Author/Trainer/Consultant: Writing, publishing, marketing, training, research, design, and development of educational products (Birth to Adulthood) for public schools (traditional and charter), private schools, childcare programs, home visitor programs, and family childcare programs and related professionals. LOURDESCOLLEGE, Sylvania, Ohio(1983 - 1997) Chairperson: Department of Early Childhood (1989 - 1997) Planning,organizing, marketing, and directing the Early Childhood Department includingresponsibility for program development: designing Birth-to-Grade-Threeassociate and baccalaureate degree programs and Prekindergarten Associate andPrekindergarten/Kindergarten-Primary Teacher Education.</p>
Michael	Troper	Treasurer	<p>The Treasurer is responsible for</p>	<p>Mlichae Troper is an ODE licensed</p>	<p>Prior Relevant Experience: 8 years of CCIP federal and state grants management</p>

			determination of available funds prior to approval of invoices, determination that purchase orders align with USAS rules and allowable grant expenditures. managing distribution of funds, TMAP has received Ohio Auditors Award for 5 years of perfect audits and has received special recognition by the Ohio House of Representatives for its years accurate records and clean audits.	school treasurer, MBA in finance, 8 years experience as a school treasurer; Currently serves as The Maritime Academy of Toledo's licensed school treasurer.	experience.	
Victor	Tufts	Specification and Installation Consultant	VWIST Specification and Installation consultant is responsible for Project Year I review of all purchases including detailed specification recommendations, site design, site preparation, scheduling of technology and footprint contractors, oversight of installation (hardware and software) including interfacing of multiple simulators configurations and dual final approval/sign off on all vendor contract fulfillment. is responsible and accountable for the coordinated management of multiple related simulator installation projects directed toward the installation and operations of the VWIS Technology Campus Project. These projects contain complex activities that may span across functions and organizations. The Sr. Project Manager builds credibility, establishes rapport and maintains communication with stakeholders at multiple levels, including those external to the organization.	Minimum 6 years of VR/AR simulation systems operation, project management, simulator installation and simulator vendor interaction. Strong interpersonal, negotiation, change management and communication skills. Excellent skills in oral and written communications. Effectively leads team and manages interpersonal relationships and team dynamics. Attention to detail, the ability to organize and delegate tasks and the ability to coordinate projects. Proficiency with Microsoft? Office?, MS Project?, PowerPoint?, and Excel?. Recent experience with Transas?, VSTEP? and Caterpillar? simulation operating systems preferable. Ensures adherence to project budgets, project deadlines and overall goals by prioritizing project and technology initiatives.	Experience working with MS Windows based Operating systems with Maritime and other types of Simulation and training environments and interfacing with Academic division of schools; such as Simulation Department, Education, Operations, Technology Department, Marine Sciences Department, Building Maintenance and Engineering Departments.	
Jerry	Bauman	Technology Engineer Consultant (TEC)	The Technology Engineer Consultant is responsible for all communications with VWIST vendors for	Qualifications: Associate Applied Business, Computer Programming, Associate Applied	Experience: 16 years Technical Services Manager, STAR Center, simulator and subsystems maintenance, repair, upgrading and operations, visual database construction (ship models,	

		remote maintenance support; troubleshooting power and equipment failures; determining malfunctioning and incorporating engineering changes; ensuring the interrelationships of circuits; consulting with TMAT staff and administration as needed and restoring all equipment functionality.	Science, Biomedical Electronics. Prior Relevant	ports), Installation Engineer, TMAT's navigation and radar simulators including determination of simulator specifications and footprint design and oversight of construction and installation.	
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