Application Score Sheet

Proposed Project: Okaloosa County School District, Artificial Intelligence Learning Institutes

(243)

Proposed Project/Program County: Okaloosa

Board of County Commission Support:

Total Projected Project Cost: \$5,700,000

Match Provided: \$2,860,000

Triumph Funds Requested: \$2,840,000 (49%)

Triumph Funds Recommended by Staff: \$2,840,000

Score: A

ROI: Increase in household incomes expected from the program would be \$32.3 per dollar of

Triumph cost

Economic Analysis and Impact

This application seeks funding for artificial intelligence learning institutes that will provide industry-recognized credentials in Artificial Intelligence (AI), Machine Learning (ML), and in drones. It will become self-sustaining over time via Florida Education Finance Program (FEFP) funding, Florida Career and Professional Education (CAPE) bonus funding, and Carl Perkins grant funding. The six-year program envisions up to 1,100 FL DOE-approved CAPE certs over a six-year period at a cost of up to \$2,582 per cert.

The program is proposed to be funded at up to \$2,840,000 in Triumph funding which would complement envisioned funding of up to \$2,860,000 from the Okaloosa County School District. The TGC share will thus be 49.8 percent of the total project costs of up to \$5,700,000. A more specific breakout of costs has several elements that are not yet known with certainty. These include the contracted services with UF currently budgeted at \$450,000, the installation of the AI innovation labs currently budgeted at \$2,880,000, and the purchase of equipment and computers currently budgeted at \$1,000,000. Each of these items will be negotiated with the intent of achieving lower costs, with any savings split equally between the District and TGC, thus preserving the funding ratio.

While there are several types of certs identified, including Microsoft Tools, OCSD and TGC agree that the only certs to be counted towards attainment of the 1,100 are the non-Microsoft Tools certs. Page 20 of the application notes that certs will be selected from the CAPE funding list "as appropriate." Planned certs include: USINS001 Small UAS Safety Cert: Level 1; USINS002 Visual Line of Sight System Operator (VSO) Ground; ADESK011 Autodest Certified User – Inventor; MICRO112 Microsoft Technology Associate (MTA) – Introduction of Programming Using Python; CERTI803 IC3 – Computing Fundamentals Digital Tools; CERTI802 IC3 Spark. The application further notes that new certs will be developed and recommended for funding. While annual cert attainment numbers are suggested, TGC staff find

that the least burdensome administrative path will be to assess progress towards total cert attainment throughout the project and require that the 1,100 be attained before final payment is made.

The OCSD team commits that students will earn 1,100 of the proposed certificates that are on the CAPE list and serve Triumph target market sectors. They will be delivered to students at a cost to Triumph of \$2,582 each for a total award of \$2,840,000. At a cost of \$2,582 per attained certification, the discounted total increase in household incomes expected from the program would be \$32.3 per dollar of Triumph cost. For these reasons, staff would rate this program "A" in terms of economic impact.

Project Summary (based on information provided by the applicant)

Okaloosa County School District (OCSD) is requesting a Triumph grant of \$2,840,000 for the Artificial Intelligence Learning Institutes. Recognizing the intensity and pace at which the field of artificial intelligence(AI) is advancing OCSD proposed to develop and implement a model industry certification program in Artificial Intelligence/Machine Learning for K-12 students. The proposed program will result in students earning industry-recognized credentials in AI and related fields, that can be replicated across Northwest Florida, building a long-term talent supply in the region.

School districts are most successful when they provide opportunities for students to gain skills and credentials that meet the demands of the workforce they will be entering after graduation from high school or after postsecondary education. The Artificial Intelligence Learning Institutes Program will ensure students are well-prepared to enter the work force with identifiable, industry-focused skills. Students in the region will have an advantage when entering a career or continuing to postsecondary education in cutting edge fields.

OCSD's emphasis on Artificial Intelligence curriculum will result in students leaving K-12 with opportunities to further their studies toward careers as Data Scientists, Machine Learning Engineers, AI Architects, Big Data Engineers and Business Intelligence Developers among others.

For the purpose of this program, Artificial Intelligence is defined as the use of computers for decision making. This can include computer programming, no-code, simulations, or instructional activities which do not involve computers to demonstrate how AI works for students at all levels. Machine learning (ML) is the ability of computers to learn from data sets provided to them to inform decision making.

AI/ML impacts every industry in Northwest Florida including drone technology. Land and air drones can be operated through controllers or autonomously. Small drones contain sensors, probes and cameras that students will use to map and record and analyze data. Several Middle and High schools in Okaloosa County are currently using drones as part of their curriculum. AI/ML will be built into drone curriculum through the UF curriculum development process.

OCSD will engage the University of Florida for curriculum development and teacher training. The University of Florida 's Herbert Wertheim College of Engineering is expanding its EQuIPD grant (Engaging Quality Instruction through Professional Development) to work directly with OCSD on this AI initiative and will seek additional partnerships with military and local industry for additional expertise, mentoring, and apprenticeship and employment opportunities.

The University of Florida's Research & Engineering Education Facility (REEF) is located in Okaloosa County and will work with OCSD to provide facility space for summer programs or classroom space during the year as appropriate. OCSD also has existing articulation agreements with local postsecondary institutions for traditional dual enrollment and career technical dual enrollment with Northwest Florida State College and Okaloosa Technical College and is positioned to expand with postsecondary partners to expand upon our model.

Program development, teacher training and student recruitment will occur in the 2021-2022 school year. AI coursework and certification opportunities will begin in the 2022-2023 school year at 4th, 7th and 11-12th grades in a minimum of one pilot school for each level. The program will be expanded to additional grade levels and locations to be determined in the following year.

A critical factor that businesses consider when relocating is the quality of public education. Initiatives such as the Artificial Intelligence Learning Institutes provide direct evidence to industry that Okaloosa schools can serve as national models for Career Technical Education.

OCSD has a documented history of establishing successful CTE programs that produce industry certifications and students who are ready to enter the workforce or postsecondary training. As with other Career Technical Education programs in Okaloosa County, the Artificial Intelligence program will be self-sustaining through the Florida Education Finance Program (FEFP) funding for students, CAPE funding for earned industry certifications and Carl Perkins Grant funding. OCSD will seek additional grant funding from a variety of sources as needed.

OCSD is a High Performing School District as determined by the Florida Department of Education. Over the last eleven years, only one school district in the state has earned this distinction more times than Okaloosa. To earn High Performing status, a school district must earn an "A" for two consecutive years, have no district-operated schools earning an "F", maintain all class size requirements, and have no instances of material weakness or noncompliance noted in their annual financial audit.

The District has and will continue to develop relationships with area military (Eglin AFB, Hurlburt Field) and industry to serve on advisory boards to ensure that the outcomes associated with this program are credential-based, forward-thinking, and place Okaloosa County students in the best position to succeed and support the overall economic development of the region.

Letters of Support

96th Test Wing, Eglin Air Force Base University of Florida, Herbert Wertheim College of Engineering **Budget and Funding (See attached provided by the Applicant)**

ATTACHMENT C

Okaloosa County School District Artificial Intelligence Learning Institutes Proposed Budget

Description	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	TOTAL
USES OF FUNDS							
Contracted Services - University of Florida to develop comprehensive curriculum and teacher training model for elementary, middle and high school (over several years)	\$ 450,000	-	-	-	-	-	\$ 450,000
AI Innovation Labs - 3 schools/year	750,000	750,000	630,000	250,000	250,000	250,000	2,880,000
Equipment/Computers	200,000	200,000	100,000	100,000	200,000	200,000	1,000,000
Recruiter	92,500	92,500					185,000
Liaison w/UF for program startup	92,500	92,500			-	-	185,000
Industry Certification Prep and Exams	-	25,000	25,000	25,000	25,000	25,000	125,000
Teachers - Planning Year (3 positions)	260,000	-	-	-	-	-	260,000
Teacher Training	50,000	50,000	50,000	25,000	20,000	20,000	215,000
AI Summer Institutes	50,000	75,000	50,000	75,000	75,000	75,000	400,000
TOTAL USES OF FUNDS	\$ 1,945,000	\$ 1,285,000	\$ 855,000	\$ 475,000	\$ 570,000	\$ 570,000	\$ 5,700,000
SOURCES OF FUNDS							
Requested Triumph Funding	\$ 445,000	\$ 400,000	\$ 380,000	\$ 475,000	\$ 570,000	\$ 570,000	\$ 2,840,000
District Funding	1,500,000	885,000	475,000	-			2,860,000
TOTAL SOURCES OF FUNDS	\$ 1,945,000	\$ 1,285,000	\$ 855,000	\$ 475,000	\$ 570,000	\$ 570,000	\$ 5,700,000