

Adams, Sandra

Page: Basic Information

Nominator Information

Please provide your information as the nominator of this partnership.

Your Name

Adams, Sandra

Email Address

sandra.adams@fwcs.k12.in.us

Title

Building Instructional Coach

Employer

Career Academy--Fort Wayne Community Schools

Phone Number

(419) 605-2769

Your Relationship to the Partnership?

My capacity is the lead person for designing and sustaining the Capstone Programming Internship Model. We designed a learner-teacher-researcher model for Programming/Coding students where they spend one-two days each week interning for a regional business. The model is "industry-based" as a deliberate move to strengthen our school as a talent-pipeline.

The Partners: Business & Industry

Please provide basic information on the business and industry organizations involved in the partnership.

Business/Industry Partner 1

Business/Organization Name

Ash Brokerage Firm

Address

888 Harrison Street Suite #900
Fort Wayne, IN Indiana 46802 US

Website

<http://www.ashbrokerage.com/>

Main Career Clusters within Industry

Finance, Information Technology, Science, Technology, Engineering & Mathematics

Point of Contact

Brian Polk

Title

Data Base and Business Intelligence Team Lead

Email

brian.polk@ashbrokerage.com

Business/Industry Partner 2 (if applicable)**Business/Organization Name**

Aptera Software

Address

201 West Main Street
Fort Wayne 46802 US

Website

apterainc.com

Main Career Clusters within Industry

Information Technology, Science, Technology, Engineering & Mathematics

Point of Contact

Mark Petroff

Title

Director of Operations

Email

mpetroff@apterainc.com

Business/Industry Partner 3 (if applicable)**Business/Organization Name**

Sweetwater Sound

Address

5501 US-30
Fort Wayne New Hampshire 46818 US

Website

sweetwater.com

Main Career Clusters within Industry

Information Technology, Science, Technology, Engineering & Mathematics

Point of Contact

Jason Johnson

Title

IT Director

Email

jason_johnson@sweetwater.com

Provide information on any other additional business & industry partners not listed above. Also, please use this opportunity to briefly explain the unique roles of these businesses in the partnership (if there are more than one involved.)

Our other Business and Industry Partners are:

1. SDI--Steel Dynamics Incorporated
2. FWCS--For Wayne Community Schools Central Office
3. Region 8 Education Service Center
4. The Summit

There are 7 businesses who are currently providing an internship. Aptera allows 2 students to intern with them.

However, in creating the business and industry group that has driven this partnership, we have over 14 companies represented. These 14 companies range for regional economic development leaders to non-for-profits and entrepreneurs, like Start FW.

This model was designed with the intent to meet a great industry need for the Fort Wayne region for computer programmers/networkers. We created the class out of demand. We also were asked to design a class that was equitable in nature so that when these students worked in elementary and middle schools. Our eight students represent both genders and 3 ethnicities.

Our Capstone Programming Internship Course has been designed to engage students continually in 3 roles: learners, teachers, and researchers.

This is our first year and we began with 8 students.

Students worked through a rigorous first semester with Code.org curriculum and Python projects.

This involved genuine collaboration amongst students, collaborating on need as they researched and applied their learning to daily tasks and projects. The instructor was in a facilitator mode. Students also went into elementary and middle schools during first semester to demonstrate coding and assist teachers who were nervous and unfamiliar with coding and embedding computer science.

At the close of first semester, students used the Indian Intern website, where each of the businesses posted a position specifically for a HS student from the Career Academy. We then hosted an Interview Day at the school that was intensive for students. The next week we used lists from each business to cross-reference with students on their choices, matching business first and second choices as much as possible.

Second semester has involved students going into their business every Wednesday to work on industry-specific projects. Students are sometimes learning 4 different coding languages during the year. They are forced into genuine research learning mode to be successful as interns.

Each business is different in its own model for the program, ranging from aptera who is on the end of extreme learner model to SDI who is on the end of extreme worker model for the interns.

During our most recent "Programming Partnership" meeting, the 8 students addressed all of us to share what they have learned and where their greatest struggles were during the semester. Business leaders also shared their concerns and we were able to adjust the model to suit concerns. Students in many cases are now going out into the business twice per week.

The life lessons on Networking, Project Management, collaboration, and perseverance have been invaluable.

The Partners: Educational Institutions & Programs

Please provide basic information on the educational institutions and/or programs involved in the partnership.

Education Partner 1

Educational Institution/Program Name

Career Academy at Anthis, FWCS

Address

1200 S. Barr Street
Fort Wayne Indiana 46802 US

Website

https://www.fwcs.k12.in.us/schools/school_pages.php?school=0093

What type of institution is it? (If a program, where is it offered?)

High School

Point of Contact

Sandra Adams

Title

Buidling Instructional Coach

Email

sandra.adams@fwcs.k12.in.us

Education Partner 2 (if applicable)

Educational Institution/Program Name

FWCS Elementary Schools

Address

several locations
Fort Wayne Indiana 46802 UY

Website

fwcs.org

What type of institution is it? (If a program, where is it offered?)

Elementary School

Point of Contact

Jack Byrd

Title

FWCS Technology Director

Email

jack.byrd@fwcs.k12.in.us

Education Partner 3 (if applicable)

Educational Institution/Program Name

Address

Website

What type of institution is it? (If a program, where is it offered?)

Point of Contact

Title

Email

Provide information on any other education partners not listed above. Also, please use this opportunity to briefly explain the unique roles of these educational institutions/programs in the partnership (if there are more than one involved.)

Elementary school involvement included our 8 capstone students going into 5th & 7th grade classrooms to lead coding exercises--as a part of the teacher component of the capstone course.

Page: Support Information

1. What problem was this partnership developed to solve?

This Programming Partnership developed directly from an industry need. The IT Director from Sweetwater Sound noted that each month when they hire programmers, they have to cast their nets wider and wider to find applicants. In a city the size of Fort Wayne, this should never happen. Many businesses like Sweetwater Sound contacted our principal, Larry Gerardot, to begin the initiative to add programming. The addition was in direct line with the state's push for more high-demand, high-wage career pathways creation.

2. What steps were taken to get the partnership started?

January 2017, the first group meeting was held between the principal, the instructor, and interested business and industry participants.

March 2017, the principal worked directly with the FWCS district Technology Director to discuss the implementation of programming/coding as a K-12 Model. This was a key conversation because our model rested on students being teachers and learners. We connected with Nextech, from Indianapolis, as a key partner to develop our curriculum. Nextech has played a vital role in the development and success of our program. The code.org curriculum was the 1st semester curriculum for the independent study piece. Our instructor's summer training was through Nextech.

September 2017, we had another "Programming Partnership" meeting to establish all of the guidelines for the internship selection process and design.

We then met with the FW economic development team to learn how to use the Indiana Internship website to streamline the selection process.

3. Describe how the partnership was designed to support high-quality CTE.

By design, this capstone program course model is a continual outreach to business leaders and community groups because our interns are weekly in the field making those strong connections with 7 businesses in Fort Wayne. The Programming Partners meeting involves more than those 7 businesses, so we are demonstrating quarterly our willingness to meet business demands and become a talent pipeline for IT work.

The Programming Partnership meetings are held quarterly, involving several businesses and entrepreneurs, to help steer the direction of the course curriculum and work for interns. This group serves as our advisory board.

The stakeholders are presently focused on the IT industry, but we are already taking steps to expand this model into Culinary, Welding, and Graphic Design for next year--with their second year students.

As this is our first year for the Capstone Program Course, we are anxious to see how students will perform on the certification tests.

According to DWD data, the information technologies career pathways are among the 4 greatest in demand of NE Indiana between now and 2024.

Students who are involved in this model and gaining industry-relevant knowledge on a weekly basis. The work on Wednesdays (and some Thursdays) in the field and then share experiences and learning with classmates during subsequent classes.

The strongest aspect of the program lies in the dedication of our IT department and our business partners to meet and reevaluate our progress and the impact on students each quarter.

4. What were the results of the partnership? What was innovative about the partnership or its output? How did it benefit students and the community?

1. The success of the Programming Partnership--where we get genuine feedback on changes needed and how to best prepare students for real work in the IT industry--has inspired our administrative team to redesign our All-school advisory board. We have invited a new group, asked for a 3-year commitment, and have created real projects for them to guide and reevaluate along side our team.
2. The Programming Partnership and success of the student interns has created district wide interest in the programming course. We are looking to hire a new instructor as the number of students interested in taking this course next year has tripled.
3. The enrollment increase generates significantly greater funds for our school as this course is a high-wage, high-demand course.
4. We will be working over the next 6 months to expand the number of partner businesses and industries who will provide internship opportunities-which will create a much greater talent pipeline ultimately.
5. The success of our high school internship opportunity has inspired our Police Academy, Culinary, Welding, and Graphic Design courses to work on similar models for next year.

5. What were the lessons learned during the process of building the partnership? What would you have done differently?

During the internship phase, it is better to have interns going on-site twice a week, with the days being back-to-back. We originally designed this to be Wednesday on site, but by the third month, both students and their business mentors wanted the model to be 2 days each week.

We also failed to deeply analyze what type of experience the intern would have at each business. We assumed that for the most part the experiences would be similar. This is not the case at all. In our best learner-model, the student interns have created great Linked-in accounts and have read the business allegory, The Phoenix Project. On the opposite end of the spectrum, a student intern is paid \$12 per hour and is expected to research his own problems and work to solve them.

During the interviews next year, we want to be able to clearly explain the different possibilities.

6. Is this partnership sustainable? How do you anticipate it will change in the coming year(s)?

Our model is sustainable because we use my role as the coach to lead the interactions, conversations, and connections of all participants to each other.

This is crucial. We have learned that there needs to be one person who is the responsible person for the model itself. The teacher and principal are normally too busy for this.

We also wanted one specific mentor within each business that would be responsible for the student's experience. This has been successful with 6 of our 7 businesses. With one company, we do continually work to have a contact person. There has been some turnover issues which have made it confusing for the student.

There was one company that insisted on 2 student interns. We accommodated them with this request and have come to realize that this is better on all sides. Next year we will be placing 2 students at each business site.

7. How long did it take to create this partnership?

6 months - 1 year

8. How large of an investment did the businesses and other partner(s) involved make in this partnership (time and money)?

There was no upfront cost to either the businesses or the school. Our instructor accepted an additional workload with hopes of developing a fantastic program--which has paid off in the long run. Our enrollment has lead to the hire of another instructor this year.

The cost to businesses has been in lost production time, as they do spend time training students and working with them during the business day. Also, they lost revenue on the 1/2 day spent interviewing students and when they attend Programming Partnership meetings.

The time commitment for each business has been on the mentors. Quarterly advisory meetings, weekly emails, weekly days mentoring the students.

9. Would you or an associate be willing to present a session at an ACTE event about this partnership?

Yes