Sample Talent Agreement

Use this sample document as a point of reference for what details are needed for your Talent Agreement.

**Note:** This document was created by the Talent and Economic Development Department of Michigan as a sample response to the Talent Agreement. The document is not a product of the Microsoft TEALS program, and is a fictional example using some of the parameters of the Microsoft TEALS program.

The completed Talent Agreement and attachments must be submitted using the online MDE Grant Electronic Monitoring System. You can access the timeline and the online submission portal at [www.michigan.gov/MarshallPlan](http://www.michigan.gov/MarshallPlan).

If you have questions about the Talent Agreement, email us at MarshallPlan@Michigan.gov.

**Name of Talent Consortium:** SE MI Microsoft TEALS

**Talent Consortium Members:** Detroit Public Schools Community District, Henry Ford Academy, Advanced Technology Academy, City of Detroit, Wayne State University, Henry Ford College, Oakland Community College, Wayne County Community College, Quicken Loans, Grand Circus, General Motors, GE, Google, Fiat Chrysler, Ford, Meridian Health Plan, Microsoft Foundation, Focus: HOPE, Detroit Public Schools Community District Parent Teacher Association, and Detroit Employment Solutions Corporation.

**Name of proposed grant program:** SE MI Microsoft TEALS Computer Science for All Students

Respond to each of the questions with your grant application in mind. Please note: Each question is limited to 500 words, except for question 15, which may have up to 500 words for each post-secondary partner.

1. Provide a project summary.

   Learning computer science empowers young people to compete in the global economy and pursue careers across all sectors because it teaches students computational thinking and problem-solving skills applicable in any industry. Students want to learn computer science, yet most high schools are unable to offer rigorous computer science courses. TEALS (Technology Education and Literacy in Schools) helps high schools throughout the US build and grow sustainable computer science programs. In its proven program, TEALS pairs trained computer science professionals from across the technology industry with classroom teachers to team-
teach computer science. Industry volunteers and partner teachers create a ripple effect, impacting the students they teach, and the many students who will study computer science in the future. There are now 21 high schools in Michigan partnering with Microsoft TEALS.

The focus of the project will be to expand TEALS into an additional five (5) schools and impact 200 students for the first year in SE MI. Each year the goal will be to add additional five (5) schools in the region impacting at least 20 students per school.

2. Explain the need for the project.

The Marshall Plan for Talent is focused on career pathways development in high-demand fields all of which require computer literacy. According to the Marshall Plan for Talent data, there will be more than 270,000 positions for information technology and computer science by 2024. TEALS will assist in preparing students for those critical IT and computer science careers.

3. Identify and explain data used to determine which high-demand field and high-wage careers will be focused on by the Talent Consortium. It is suggested to consider Department of Talent and Economic Development and Department of Technology Management and Budget, Labor Market Information data – for the region or state – and to work with your local Michigan Works! agency on labor and wage data. Please note under PA 227 of 2018, a **high-demand field** is defined as Professional Trades, manufacturing, engineering, information technology and computer science, machine learning and artificial intelligence, mobility, health care, and business. For specific examples, please visit the [Marshall Plan for Talent website](https://www.marshallplanfortalent.org).

The Workforce Intelligence Network (WIN) has posted information from the fourth quarter 2017 for all of Region 10 (SE MI – Macomb, Oakland and Wayne counties) showing that IT and Computer Science are some of the highest number of posted positions for SE MI. For software developers, applications there were 3,906 postings for the last three months of 2017. Second only to registered nurses for the region. When adding in other IT positions, IT and computer science position postings far exceed any other category. Software developers’ average salary as identified on the Marshall Plan for Talent is $82,270 per year. TEALS has confirmed that 71 percent of all new STEM jobs are in computing yet of the STEM graduates only 7 percent are in computer science.

4. Identify methods used to survey or reach agreement from employers for the high-skill, stackable credentials or certificates to be used for the competency-based training.

Employer partners who are volunteering to instruct as mentors for the TEALS program include Quicken Loans, Grand Circus, General Motors, GE, Google, Fiat Chrysler, Ford, Meridian Health Plan, and Microsoft. All employer partners who provide IT mentors have agreed on the vetted TEALS curriculum. The TEALS Introduction to Computer Science course work is completely project-based learning.

5. Describe what third-party validation or organization will be used to measure and issue the stackable credentials or certificates. For example, if the Talent Consortium is focused on developing information technology skills for K-12 and adult learners, will CompTIA, Microsoft, Cisco or another organization be issuing the certificate or credential.
All students in participating schools will have access to the Introduction to Computer Science curriculum based on the University of California at Berkeley CS 10 course, “Beauty and Joy of Computing” (BJC). TEALS has worked closely with the UC Berkeley’s CS department to adapt BJC to be flexible and approachable for a wide range of high school students from diverse backgrounds. The course has been successfully implemented in hundreds of high schools nationwide.

Each participating school will select the courses for students. TEALS offers curricula for the following computer science courses:

- **Introduction to Computer Science:** This survey course offers students a hands-on introduction to computer science. Schools can decide to offer a semester-long course offered twice in a single school year or a year-long course with an expanded curriculum. The year-long class transitions to text-based programming using the beginner-friendly Python language in the second semester.

- **AP Computer Science A (AP CS A):** This College Board course is an introduction to computer programming using the Java programming language, with an emphasis on object-oriented programming, problem solving and algorithm development.

- **AP Computer Science Principles:** The College Board’s AP CS Principles is a complement to AP CS A. While students can take the courses in any order, TEALS advises students to take AP CS P first, if available.

- **Advanced Topics and Projects in Computer Science:** TEALS offers support for select post-AP CS advanced topics and projects courses, for schools that have completed implementation of AP CS A.

Students will be able to increase their knowledge by participating in the TEALS classes and gain the Microsoft Technology Associate Certification using the Block Based or Java Exams.

6. Describe how/if the Talent Consortium will work to expand or create new competency-based education models.

The SE MI TEALS Talent Consortium supports the competency based TEALS developed curriculum and will work to expand this model in other SE MI schools.

The daily student-centered lesson plans emphasize practice through working on problems, group activities, labs, and projects that help integrate the learning objectives.

The Talent Consortium will be able to access Microsoft TEALS national curriculum models. Regular meetings occur with all the company mentors to discuss the curriculum and ways to improve teaching this model to high school students. The curriculum will also be shared with the Talent Consortium partners to use for Adult Education and other workforce development programs.

7. Describe how/if the Talent Consortium will increase career awareness, exploration and opportunities for students and adult learners.
TEALS is dedicated to empowering students to use computer science to impact the world. In TEALS classes students are introduced to computational thinking, problem solving, and programming skills that are important to every industry. To help students take the next step, TEALS has developed a variety of resources that provide insight on college and career pathways in computer science fields, support a community of learning by connecting current and former TEALS students, build awareness and excitement around computer science, and promote opportunities for students to apply their computational skills and gain professional experience.

To take the next step, TEALS has developed a Student Opportunities web page where students can use a variety of filters to identify regional and national competitions, workshops, Hackathons, Gam Jams, scholarships, and internships. https://www.tealsk12.org/students

8. Describe how/if the Talent Consortium will support professional development for educators and how the Talent Consortium will assist with providing subject-matter experts to provide the critical training in high-demand fields.

TEALS helps high schools build and grow sustainable computer science (CS) programs by pairing trained CS industry professionals with a classroom teacher to team-teach CS. For schools building a CS program, over two years, the classroom teacher gradually takes over the responsibilities of teaching the course, eventually without volunteer support. Schools building a CS program, TEALS offers two levels of support depending on the classroom teacher’s level of CS content mastery:

- Co-Teaching Model
- Lab Support Model

For schools growing an existing CS program, TEALS offers the following level of support:

- Classroom Enrichment Model

Teachers in the Co-Teaching Model must participate in an appropriate PD program over the summer before their first year with TEALS.

9. Describe how/if the Talent Consortium will address assisting existing school counselors with reaching students as they explore career path options.

TEALS and the employer partners will provide school counselors opportunities to meet with employers and observe the TEALS program.

TEALS has developed a variety of resources that provide insight on college and career pathways in computer science fields, support a community of learning by connecting current and former TEALS students, build awareness and excitement around computer science, and promote opportunities for students to apply their computational skills and gain professional experience.

10. Describe how/if the Talent Consortium will develop or expand curriculum that assists pupils to achieve 21st century skills, such as leadership, teamwork, problem solving, work readiness and various methods of communication focused on student-driven projects. Note: This is required under PA 227 under Section 297h(a).
TEALS is dedicated to empowering students to use computer science to impact the world. In TEALS classes students are introduced to computational thinking, problem solving, and programming skills that are important to every industry.

The Talent Consortium will also explore and work with existing Skills USA programs in the participating schools to enroll TEALS students in Information Technology Services. Skills USA provides additional leadership training for students.

11. Describe how/if the Talent Consortium will periodically review and update employer needs and which skills and credentials or certificates are in-demand, including, but not limited to, a 2-, 5- and 20-year talent skills projection as required by PA 227. For example, will annual employer surveys be conducted; will the Talent Consortium host employer events to review goals, credential or certificate attainment and talent needs?

TEALS prides itself on offering a high quality program. In order to measure the impact of the program, TEALS requires schools that participate in an AP curriculum to allow TEALS to collect AP scores automatically from the College Board. This data will be collected for the duration of partnership, and for up to 5 years after the partnership ends.

Surveys: To ensure that the program continues to maintain excellence, understand the impact, and support program goals and partner schools, teachers are required to distribute TEALS anonymous program surveys to students at the beginning and end of each school year. Teachers are also required to complete TEALS surveys at the beginning and end of the school year.

TEALS will also at least annually survey all participating employer partners on the quality of the program. Additionally, regular meeting with the employer volunteer/mentors occurs to improve the curriculum.

12. Describe how the project will ensure equity for students to participate? Please include how students will be selected to participate in programs offered by the Talent Consortium.

These funds will allow more schools to participate to reach new students. As Detroit Public Schools already has existing TEALS programs, the goal is to expand to additional schools under the DPS System. Both Henry Ford Academy and Advanced Technology Academy have current TEALS programs. The goal for both academies is to double the number of students completing Microsoft certifications within the three years of the grant program.

Each school participating will provide students, parents, counselors and teachers with information on open enrollment in the TEALS program. The goal will be to have nearly 100 percent of the students participate in an introductory computer science course.

Students and parents select if the student will participate in the TEALS program.

Under the current TEALS programs nationwide, 33% of students are female, 34% are underrepresented minorities, and nearly 10% of classes are in rural communities. This program has documented history of increasing computer science and IT skills for all students. For Detroit
Public Schools currently participating in the TEALS program, Detroit Area Participation - 48% female and 99% underrepresented populations.

13. What is proposed to modify curriculum and instruction to address your identified talent gap?

TEALS is a growing community of educators and volunteers across the country. Teachers are invited to attend meetups and events throughout the summer and school year for additional PD and to network with members of the TEALS community and share best practices.

TEALS maintains an online community through the TEALS Dashboard. TEALS strongly encourages teachers to engage in the online community to learn more about teaching CS and share successes and challenges.

TEALS will also at least annually survey all participating employer partners on the quality of the program. Additionally, regular meeting with the employer volunteer/mentors occurs to improve the curriculum.

14. Have employers confirmed commitment to hire students who complete high-demand, stackable credentials, certificates and other training? Attach employer commitment agreements/documents.

Grand Circus, one of the employer partners, has agreed to pilot an IT TEALS apprenticeship program and to hold the standards. They plan to hire 15 students for the first cohort pilot. They have also agreed to partner with other employers as a mentor to those employers on hiring students for the IT TEALS apprenticeship program. In addition to the certificates that students will have earned under the TEALS course work in high school, apprentices will be earning an associate of science degree in information technology and application development. Employer partners have agreed to pay for additional certifications for testing so that apprentices have the opportunity to earn certificates in networking, applications development, cyber security, and additional software language as determined by the employer.

15. For each postsecondary institution that is a member of the Talent Consortium, please provide a brief summary of how the postsecondary institution will reduce barriers as pupils transition through phases of their education, from K-12 education to postsecondary education and into the workforce. These efforts may include, but are not limited to the following:
(a) Dual enrollment practices.
(b) The acceptance of talent portfolios for college admissions.
(c) Work-based learning and internships.
(d) The creation of career pathways beginning in middle school or high school.
(e) In-classroom mentoring or career counseling.
(f) Pre-hiring agreements in which employers promise to hire graduates of a program.

Wayne State University, Henry Ford College, Oakland Community College and Wayne County Community College will accept the TEALS AP courses students earn as college credit. Grand Circus has agreed to hire high school students who successfully complete the TEALS course work into an apprenticeship program. Once the IT TEALS apprenticeship standards have been approved, other employer partners will be required to review the standards and strongly
encouraged to sign on for hiring apprentices. Apprentices will be provided a stipend by the
sponsoring employer while the apprentice is in school to assist with transportation costs and
other cost of living expenditures. Students will be paid a wage while receiving on the job
training as an apprentice.

Each postsecondary partner will provide students access to financial aid and career counseling
services. Postsecondary partners will report monthly to both the student and the employer
regular progress in the course work. Each employer must assign a mentor to the student in
order to ensure the student can be successful at both the college course work and the work
based learning with the employer. The mentor will be required to have regular interaction with
the postsecondary partner as well. Students will be required to complete regular work journals
to share with instructors and the employer mentor.

Once the apprentice completes the associate degree, Wayne State University will accept the
apprentice into a computer science program at junior level status.

16. How will grant dollars received further the goals of the Talent Consortium?

The grant funding will be used to cover each school’s cost of $5,000 per class to cover mentor
and other expenses, and $5,000 per teacher, and additional funding requests to upgrade
computers and servers for the participating schools. These funds will allow more schools to
participate to reach new students. This program has documented history of increasing computer
science and IT skills for all students.

17. What in-kind and cash donations have been confirmed for a grant application? Please note: PA
227 of 2018 requires a 25 percent match for equipment grant requests.

The employer sponsors will be covering the wages of the industry mentors; the participating
schools will cover the costs of the teachers’ wages. The Talent Consortium will be covering the
costs for the field trips and some of materials and supplies necessary for events and classes. The
25 percent match for equipment will be met from general funds for the participating schools or
by donations from employer partners.

18. How will members continue to collaborate after a grant is awarded?

The members of the Talent Consortium will continue to meet on a quarterly basis. Employer
members will be providing mentors for the instructional assistance. All partners will continue to
engage in activities to expand career exploration and educator professional development.
Members have agreed to complete surveys on the program and on the hiring of program
participants. Postsecondary partners have agreed to track TEALS program graduates for
outcomes in their programs. All partners will participate in and promote TEALS outreach events.