

# **REGULAR MONTHLY BOARD MEETING**

# November 27, 2018

7:00 PM

Educational Support Center Board Meeting Room 3600-52<sup>nd</sup> Street Kenosha, Wisconsin This page intentionally left blank



Regular School Board Meeting November 27, 2018 Educational Support Center 7:00 PM

- I. Pledge of Allegiance
- II. Roll Call of Members
- III. Awards/Recognition
  - A. Tremper Girls Soccer Team recognized for Academic All-American Award from the United Soccer Coaches Association
- IV. Administrative and Supervisory Appointments
- V. Introduction and Welcome of Student Ambassador
- VI. Legislative Report
- VII. Views and Comments by the Public
- VIII. Response and Comments by Board Members (Three Minute Limit)
- IX. Remarks by the President
- X. Superintendent's Report
- XI. Consent Agenda

	Consent/Approve Recommendations Concerning Appointments, Leaves of Absence, Retirements, Resignations and Separations	4
	Consent/Approve Minutes of 10/23/18 and 11/13/18 Special Meetings and Executive Sessions, 10/23/18 Regular Meeting and 11/13/18 Special Meeting	5
	Consent/Approve Summary of Receipts, Wire Transfers and Check Registers	20
XII. Ol	d Business	
Α.	Discussion/Action Bradford Planetarium	28
	Discussion/Action Proposal to Restructure High School Social Studies Course Scope and Sequence	37

	C. Discussion/Action Proposal to Change to Fifth Grade Instrumental Start for Band and Orchestra	90
	D. Discussion/Action New Course and Course Drop Proposals: Science	121
	E. Discussion/Action Proposed Program Changes to the Certified Nursing Assistant Program	125
	F. Discussion/Action Course Change Proposals: Youth Apprenticeship	134
	G. Discussion/Action Course Change Proposals: Family and Consumer Science	294
	H. Discussion/Action Course Change Proposal: Indian Trail Business Academy	304
	I. Discussion/Action New Course Proposals: Career and Technical Education	306
XIII.	New Business	
	A. Discussion/Action Request to Submit the John J. and Ruth F. Kloss Charitable Trust to the U.S. Bank, Foundation Team	329
	B. Discussion/Action Donations to the District	333
XIV.	Other Business as Permitted by Law Tentative Schedule of Reports, Events and Legal Deadlines For School Board (November/December)	334
XV.	Predetermined Time and Date of Adjourned Meeting, If Necessary	
XVI.	Adjournment	

#### Kenosha Unified School District Kenosha, WI November 27, 2018

The Office of Human Resources recommends the following actions:

ACTION	LAST NAME	FIRST NAME	SCHOOL/DEPT	POSITION	STAFF	DATE	FTE	SALARY
Appointment	Anderson	Krystie	Jefferson Elementary School	Multi-Age K/1	Instructional	10/19/2018	1	\$41,517.00
Appointment	Anderson	Pamela	Wilson Elementary School	Intervention Specialist	Instructional	10/23/2018	0.5	\$22,824.20
Appointment	Augustus	Maxceen	Human Resources	Coordinator - Human Resources	AST	11/26/2018	1	\$90,128.00
Appointment	Bloedorn	Kathleen	Bose Elementary	Kindergarten	Instructional	10/22/2018	1	\$41,517.00
Appointment	Carey	Logan	Information Services	Technology Support Technician	AST	11/01/2018	1	\$43,162.00
Appointment	Coots	Cindy	McKinley Elementary School	Head Start	ESP	10/15/2018	1	\$16.20
Appointment	DeBoer	Jessica	Fine Arts	Elementary Orchestra	Instructional	10/29/2018	0.6	\$27,482.20
Appointment	Delgado	Arcelia	Tremper High School	Administrative Support (12 MO)	ASP	10/30/2018	1	\$20.33
Appointment	Duddridge	Kimberly	Vernon/Southport Elementary Schools	Night Custodian 2nd Shift	Facilities	10/29/2018	1	\$21.34
Appointment	Evans	Karen	Brass Community School	Grade 4	Instructional	10/24/2018	1	\$47,696.00
Appointment	Gonzalez	Mitzi	Brompton School	Intervention Specialist	Instructional	11/05/2018	0.7	\$32,606.00
Appointment	Griffiths	Sara	Nash Elementary	Multi-Age 1/2/3	Instructional	10/04/2018	1	\$41,517.00
Appointment	Hart	Jennifer	Human Resources	Coordinator - Human Resources	AST	11/26/2018	1	\$90,128.00
Appointment	Hunter	Ethan	Frank Elementary/Bradford High School	Night Custodian - 2nd Shift	Facilities	10/18/2018	1	\$21.34
Appointment	Lehmann	Lora	Indian Trail High School & Academy	Youth Apprentice (Marketing/Business)	Instructional	10/30/2018	0.3	\$12,151.25
Appointment	Neal	Rickeya	Vernon Elementary School	Special Education	ESP	11/12/2018	1	\$17.21
Appointment	Neir	Kevin	Human Resources	Coordinator - Human Resources	AST	11/19/2018	1	\$90,128.00
Appointment	Salani	Robert	Mahone Middle School	Special Education	ESP	10/22/2018	1	\$17.21
Appointment	Schneiberg	Christy	Food Service	Food Service Worker	Food Service	10/15/2018	1	\$18.24
Appointment	Wilde	Destiny	Reuther High School	Night Custodian - Second Shift	Facilities	10/03/2018	1	\$21.34
Appointment	Williamson	Paul	Facility Services	Grounds Crew Worker	Facilities	11/12/2018	1	\$24.91
Appointment	Young	Jon	Educational Accountability	Research Analyst	AST	11/12/2018	1	\$69,778.00
Resignation	Balaskas	Roxanne	Washington Middle School	Math Title I	Instructional	11/26/2018	1	\$41,517.00
Resignation	Cobley	Audra	Chavez Learning Station	Preschool Associate	ESP	10/26/2018	1	\$18.23
Resignation	Evans	Karen	EBSOLA CA	Elementary Principal	AST	10/23/2018	1	\$90,128.00
Resignation	Preuss	Denise	Bradford High School	L.D.	Instructional	01/25/2019	1	\$69,835.00
Resignation	Richmond	Vanessa	Chavez Learning Station	Preschool Associate	ESP	12/21/2018	1	\$18.23
Resignation	Roach	April	Bradford High School	Special Education	ESP	12/14/2018	1	\$17.21
Resignation	Smith	Carrie	Food Service	Food Service Worker	Food Service	10/05/2018	1	\$19.25
	Weyenberg	Shannon	Human Resources	Chief Human Resources Officer	AST	12/21/2018	1	\$119,356.00
		Christine	Roosevelt Elementary School	Special Education	ESP	10/24/2018	1	\$17.21
Retirement		Dale	Tremper High School	Head Custodian	Facilities	01/07/2019	1	\$26.66
Retirement		Michelle	Mahone Middle School	Administrative Support (10 MO)	ASP	11/02/2018	1	\$20.33

This page intentionally left blank

#### SPECIAL MEETING & EXECUTIVE SESSION OF THE KENOSHA UNIFIED SCHOOL BOARD HELD OCTOBER 23, 2018

A special meeting of the Kenosha Unified School Board was held on Tuesday, October 23, 2018, in the Small Board Room at the Educational Support Center. The purpose of this meeting was to vote on holding an executive session to follow immediately.

The meeting was called to order at 6:31 P.M. with the following members present: Ms. Stevens, Mr. Garcia, Mr. Battle, Mr. Duncan, Mrs. Modder, and Mr. Wade. Dr. Savaglio-Jarvis was also present. Mr. Kunich was excused.

Mr. Wade, President, opened the meeting by announcing that this was a special meeting of the School Board of the Kenosha Unified School District. Notice of this special meeting was given to the public by forwarding a copy of the notice to all requesting radio stations and newspapers.

Mr. Wade announced that an executive session had been scheduled to follow this special meeting for the purpose of Items Relating to Students Requiring Confidentiality by Law, Personnel: Position Assignments, and Personnel: Compensation and/or Contracts.

Mr. Battle moved that the executive session be held. Mrs. Modder seconded the motion.

Roll call vote. Ayes: Ms. Stevens, Mr. Garcia, Mr. Battle, Mr. Duncan, Mrs. Modder, and Mr. Wade. Noes: None. Unanimously approved.

1. <u>Personnel: Position Assignments and Personnel: Compensation and/or Contracts</u> Dr. Savaglio-Jarvis presented board members with a position assignment.

Mr. Steve Germain arrived at 6:37 P.M. and answered questions from Board members.

Mr. Germain was excused at 6:46 P.M.

#### 2. <u>Items Relating to Students Requiring Confidentiality by Law</u>

Mr. Daniel Tenuta, Principal at Kenosha eSchool, arrived at 6:47 P.M. and presented information on two out of district expulsions. Mr. Tenuta answered questions from Board members.

Mr. Tenuta and Dr. Savaglio-Jarvis departed the meeting at 6:57 P.M.

Mrs. Modder moved to approve Administration's recommendation with respect to the acceptance of the first out of district expulsion. Ms. Stevens seconded the motion. Unanimously approved.

Ms. Stevens moved to approve Administration's recommendation for conditional reinstatement with respect to the acceptance of the second out of district expulsion. Mrs. Modder seconded the motion. Unanimously approved.

Mr. Garcia moved to adjourn the meeting. Mrs. Modder seconded the motion. Unanimously approved.

Meeting adjourned at 7:00 P.M.

#### REGULAR MEETING OF THE KENOSHA UNIFIED SCHOOL BOARD HELD OCTOBER 23, 2018

A regular meeting of the Kenosha Unified School Board was held on Tuesday, October 23, 2018, at 7:00 P.M. in the Board Room of the Educational Support Center. Mr. Wade, President, presided.

The meeting was called to order at 7:03 P.M. with the following Board members present: Ms. Stevens, Mr. Garcia, Mr. Battle, Mr. Duncan, Mrs. Modder, and Mr. Wade. Dr. Savaglio-Jarvis was also present. Mr. Kunich was excused.

Mr. Wade, President, opened the meeting by announcing that this was a regular meeting of the School Board of Kenosha Unified School District. Notice of this regular meeting was given to the public by forwarding the complete agenda to all requesting radio stations and newspapers. Copies of the complete agenda are available for inspection at all public schools and at the Superintendent's office. Anyone desiring information as to forthcoming meetings should contact the Superintendent's office.

Mrs. Tanya Ruder, Chief Communications Officer, presented the State Scholastic 3D Archery Championship (Brompton) Awards and the National Blue Ribbon School (Roosevelt) Award.

Dr. Savaglio-Jarvis presented an Administrative Appointment.

Mr. Battle moved to approve the appointment of Mr. Steve Germain as the Interim Principal at Edward Bain School of Language and Arts (EBSOLA) – Creative Arts. Mr. Garcia seconded the motion. Unanimously approved.

Mr. Battle introduced the student ambassador, Joel Hilstrom from Indian Trail High School and Academy, and he made his comments.

Mrs. Modder gave the legislative report.

Views and/or comments were made by the public.

There were no responses/comments by Board members.

There were no remarks by the Board President.

Dr. Savaglio-Jarvis gave the Superintendent's Report.

Board members considered the following Consent-Approve items:

Consent-Approve item XI-A – Recommendations Concerning Appointments, Leaves of Absence, Retirements, Resignations and Separations.

Consent-Approve item XI-B – Minutes of the 9/25/18 Special Meeting and Executive Session, 9/25/18 Regular Meeting, and 10/10/18 Special Meeting.

Consent-Approve item XI-C – Summary of Receipts, Wire Transfers, and Check Registers submitted by Mrs. Lisa Salo, Accounting Manager; Mr. Tarik Hamdan, Chief Financial Officer; and Dr. Sue Savaglio-Jarvis, excerpts follow:

"It is recommended that the September 2018 cash receipt deposits totaling \$200,709.97, and cash receipt wire transfers-in totaling \$25,169,414.10, be approved.

Check numbers 569572 through 570561 totaling \$7,931,624.58, and general operating wire transfers-out totaling \$456,833.67, are recommended for approval as the payments made are within budgeted allocations for the respective programs and projects.

It is recommended that the September 2018 net payroll and benefit EFT batches totaling \$11,311,495.70, and net payroll check batches totaling \$17,222.75, be approved."

Ms. Stevens moved to approve the consent agenda. Mrs. Modder seconded the motion. Unanimously approved.

Dr. Savaglio-Jarvis presented the Second Round School Safety Grant Application submitted by Mr. Patrick Finnemore, Director of Facilities; Mr. Hamdan; Ms. Susan Valeri, Chief of School Leadership; and Dr. Savaglio-Jarvis, excerpts follow:

"On March 26, 2018, Governor Walker signed the Wisconsin School Safety Bill which created a new Office of School Safety in the Department of Justice (DOJ), and provided \$100M in funding for school safety initiatives in Wisconsin schools amongst other things. An initial round of grant applications and funding was done in May/June, and KUSD was awarded \$888,788 on June 1, 2018. All of our projects associated with the first round of grant funding are underway, and some have already been completed. A sizable portion (approximately \$45M) of the State-allocated funds remained available after the initial round of grants were awarded; therefore, the DOJ opened a second round of grant applications in August.

We proposed the following projects or training as part of our second round safety grant application to the DOJ: 12-Hour adolescent mental health training, secure entrances, main office intruder pushbutton, classroom door locks, shatter resistant film, two-way radios, and cameras.

Administration recommends Board approval to accept the Second Round State of Wisconsin Department of Justice School Safety Grant in order to expend the funds as described in this report."

Ms. Stevens moved to approve the Second Round State of Wisconsin Department of Justice School Safety Grant in order to expend the funds as described in the report. Mr. Duncan seconded the motion. Unanimously approved. Dr. Savaglio-Jarvis presented Policy 7400 – Name or Renaming District-Owned Property submitted by Mr. Scott Plank, Coordinator of Fine Arts; Mrs. Julie Housaman, Chief Academic Officer; and Dr. Savaglio-Jarvis, excerpts follow:

"At the July 24, 2018, regular school board meeting, the board unanimously approved the following recommendations from administration:

1. The Board of Education approves the use of Policy 7400-Naming or Renaming District-Owned Property (Appendix A}-in appointing a committee as prescribed in Policy 8860-Citizen Advisory Committees (Appendix B).

2. The Board of Education approves the Citizen Advisory Committee to follow the guidelines outlined in Policy 7400 for dedicating other spaces.

3. The school board will consider all names submitted by the committee; and the board reserves the right to choose a name other than the first choice submitted by the committee for the space currently known as Reuther Central High School Auditorium.

On July 30, 2018, a press release was disseminated from the Kenosha Unified School District's Office of Communications to the Kenosha News, Facebook, and Twitter inviting the community to volunteer to participate on this committee. Thirteen individuals volunteered to participate on the committee (Appendix C), and five variations honoring Ralph Houghton were offered for consideration.

Two committee meetings were held. The dates were August 22, 2018 (Appendices D and E), and August 29, 2018 (Appendix F). Appendix C illustrates that the majority of committee members were present at both meetings. The process used to determine the committee name included the following:

1. Board Policy 7400 (Appendix A) was reviewed.

2. Factors were identified based on the board policy to guide the decision making including:

A. Historical significance,

- B. Exemplary service in the community or for humanity,
- C. Outstanding leadership, and/or
- D. Exemplary moral character.

3. Committee members researched the suggested name, and this information was compiled under the aforementioned factors for the suggested name.

4. The committee unanimously recommends to the school board for consideration that the auditorium located in Reuther Central High School be named the Ralph J. Houghton Performance Center.

Administration recommends that the school board consider the Naming Committee's recommendation that the auditorium located in Reuther Central High School be named the Ralph J. Houghton Performance Center." Ms. Stevens moved to approve the naming of the auditorium located in Reuther Central High School the Ralph J. Houghton Performance Center. Mrs. Modder seconded the motion. Unanimously approved.

Mr. Duncan presented Resolution No. 351 – American Education Week 2018, which read as follows:

"WHEREAS, American Education Week is designated to celebrate and honor the individuals who are dedicated to ensuring every child receives a quality education; and

WHEREAS, public schools are the backbone of our democracy, providing young people with the tools they need to maintain our nation's precious values of freedom, civility and equality; and

WHEREAS, by equipping Kenosha's youth with both practical skills and broader intellectual abilities, we give them hope for, and access to, a productive future; and

WHEREAS, all Kenosha Unified staff work tirelessly to serve our children and community with care and professionalism; and

WHEREAS, schools encourage the bringing together of children, families, educators, volunteers, business leaders and elected officials in a common enterprise that offers exceptional opportunities in academics, athletics, fine arts and extracurricular activities to provide students with the skills needed to grow and succeed in a global society.

NOW, THEREFORE, be it resolved that Kenosha Unified School District does hereby proclaim November 12-16, 2018, as the annual observance of American Education Week.

BE IT FURTHER RESOLVED, that a true copy of this resolution be spread upon the official minutes of the Board of Education."

Mr. Duncan moved to approve Resolution No. 351 – American Education Week 2018. Mr. Garcia seconded the motion. Unanimously approved.

Mr. Hamdan presented Policy 3420 – Purchasing submitted by Mrs. Salo; Mr. Robert Hofer, Purchasing Agent; Mr. Hamdan; and Dr. Savaglio-Jarvis, excerpts follow:

"The Kenosha Unified School District receives approximately \$24 million dollars in Federal grant reimbursements annually. As the recipient of significant Federal funds, we are required to follow the current Federal Uniform Grant Guidance (OMB CFR Section 200) which became effective during the 2016 fiscal year. The guidance includes changes to procurement (purchasing) requirements.

In a memorandum from the Deputy Controller of the Office of Federal Financial Management dated June 20, 2018, it states that recent statutory changes set forth in the National Defense Authorization Acts (NDAA) for Fiscal Years 2017 and 2018 raised the threshold for micro-purchases under Federal financial assistance awards to \$10,000 and raised the threshold for simplified acquisitions to \$250,000 for all recipients.

Non-Federal entities, such as the Kenosha Unified School District, may implement these changes in our internal controls, which include School Board Policies. Thresholds in our policies are required to be at least the minimum Federal thresholds, but they may be more stringent.

The recommended purchase thresholds contained in the revised draft reflect the needs of the district while maintaining Federal compliance.

The required Federal standards will be effective for the District's 2018-19 fiscal year and will require revisions to School Board Policy and Rule 3420 – Purchasing in order to reflect the new requirements and to ensure compliance.

With the proposed changes to purchasing thresholds, the Administration is also recommending a change to the purchasing and signing authority threshold from \$25,000 to \$50,000. This would include the contract amount that requires pre-approval by the Board of Education.

Administration recommends that the School Board approve the revised Policy and Rule 3420 "Purchasing" as presented this evening as a first reading on October 23, 2018 with a second reading on November 27, 2018."

Mr. Duncan moved to approve the revised Policy and Rule 3420 "Purchasing" as presented this evening as a first reading. Mr. Battle seconded the motion. Unanimously approved.

Mr. Hamdan presented the Change in the Fiscal Year 2017-18 Adopted Budget submitted by Mr. Hamdan and Dr. Savaglio-Jarvis, excerpts follow:

"The Board of Education adopted the 2017-2018 budget on October 24, 2017, as prescribed by Wisconsin State Statute 65.90. From time to time there is a need to modify or amend the adopted budget for a variety of reasons. State Statutes require that official modifications to the adopted budget be approved by two-thirds majority of the Board of Education and that there be a publication of a Class 1 notice within 10 days of approval. This document identifies budget modifications to the 2017-2018 budget delineated by fund and project.

The majority of these changes are the result of carryover notifications determined to be available for various grants after the budget was formally adopted. Other grant awards (e.g. Education Foundation, mini-grants) were also received after the adoption of the budget. These grant awards conform to existing board policy and have been previously shared with the Board of Education through the approval of the grant.

Since State Statutes authorize the budget to be adopted by function; administration also requests approval of additional budget modifications that did not add or subtract dollars to the overall budget, but may have changed the function or purpose of the funding. These budget modifications include:

• Transferred budgets and expenditures from one salary account to another salary account resulting from a review of position control. Reclassifying the salary and benefit dollars from one account to another does not change the overall amount of the budget.

• Transferred operational line item budget dollars from one budget account to another as a result of ongoing review and monitoring of budgets. Reclassifying budget dollars from one account to another account does not change the overall amount of the budget.

• Transferred grant budgets to the appropriate function or object based on formal DPI grant modifications. Since the budget was formally adopted, some grant managers have requested that expenditure budget dollars be reassigned to the function or object where the dollars were expended. The grant budgets have been revised and the resulting modifications may have changed the function or object of the expenditures, but they did not change the total amount of the grant.

Attachment A is a copy of the Notice of Change in Adopted Budget in the proper State approved format that will need to be published in the Kenosha News after the Board has approved these budget modifications.

Administration requests that the School Board approve this report and that the attached Class 1 notice be published within 10 days of the official Board adoption."

Mr. Battle moved to approve the Change in the Fiscal Year 2017-18 Adopted Budget and the publication of the Class 1 notice within 10 days of the official Board adoption. Mrs. Modder seconded the motion. Unanimously approved.

Mr. Hamdan presented the 2017-2018 Budget Carryovers to the 2018-2019 Budget submitted by Mr. Hamdan and Dr. Savaglio-Jarvis, excerpts follow:

"Historically, Kenosha Unified School District (KUSD) has prohibited the automatic carryover of unutilized budget authority from one fiscal year to the next. At the August 9, 2000, meeting of the School Board, it was unanimously approved to discontinue the practice of automatic site carryovers. Carryover authority is now only approved on an exception basis.

Purchases that were authorized, but not fully executed, by the close of the respective fiscal year may lead to a request to carry budget dollars over to the next year to cover those expenses.

In addition, there are several exceptional items that are potentially carried over from year to year. The administration is requesting to carryover the following amounts identified in Attachment A to the 2018-2019 fiscal year budget:

Site Requested Carryover	\$ 86,809
Donation and Mini-Grant Carryover	<u>\$188,540</u>
· · · · · · · · · · · · · · · · · · ·	\$275,349

Lance Middle School has requested to carryover \$46,031 of unspent budget authority from 2017-18 in order to help fund a new sound and video system for their auditorium. The principal has shared that the current system lacks video support and the audio components are outdated, piecemealed together, and unreliable. Due to other projects occurring at Lance that involved renovations in the auditorium and scaffolding, the timing of this project was delayed so that they could take place concurrently. The total cost of the new sound and video system is approximately \$53,000 and Lance will use additional funds from their 2018-19 budget to make up the difference.

Mahone Middle School has also requested to carryover \$7,233 of unspent budget authority from 2017-18 in order to fund updates to their sound system. The school had planned for the updates to occur within the 2017-18 school year; however, their project was delayed when the vendor informed them that they would not be able to perform the installation until they completed projects at Lance and Bullen Middle School.

The site carryover of \$7,562 from the Human Resources Department represents residual funds associated with the 25-year club and recognition dinner programs. These programs involve donations and ticket sales; therefore, carryover authority on residual balances is recommended.

The recommendation for carryover of \$25,982 from the Information Services Department is due to balances associated with the previously approved wireless upgrade project (\$21,009) and balances in the technology buyback program (\$4,973). Both of these balances include revenue sources from outside of the District; therefore, carryover authority is recommended.

During the 2017-2018 school year, several schools/departments received cash donations or mini-grants from outside organizations, most notably from the Education Foundation of Kenosha (EFK). Some of the 2017-2018 donated funds were not completely spent by the end of the school year; therefore, the schools have requested that these funds be carried over to the next year so that they can be used to complete the programs intended by the donors.

The Department of Community & Parent Relations also manages the Mary Frost Ashley grant. These funds are received upfront at the beginning of each school year. From the 2017-2018 fiscal year, the department is requesting to carryover the unspent balance of \$5,603 which is primarily made up of unspent Mary Frost Ashley grant funds.

These funds are recommended for carryover so that they can be used for their intended purpose.

The charter schools are allowed carryover of any unspent general fund dollars, as stipulated in their individual contracts with the district. This is necessitated due to the unique funding of the schools, the responsibility they have for their entire budget, and their responsibility for future major maintenance issues or technology replacement not funded by the district. Starting the fiscal year 2012-2013, charter school carryovers were accounted for as assigned portions of the general fund balance rather than be added as additional amounts in expense budgets as in the past.

This method provides for a more accurate year to year budgeting while preserving the charter school's access to their surplus funds. The schedule in Attachment B shows the total balance in the charter school fund balance reserve accounts as \$2,600,105 as of June 30, 2018.

Administration requests that the School Board approve this report so that these carryover funds can be incorporated into the adopted 2018-2019 budget."

Mr. Duncan moved to approve the 2017-2018 Budget Carryovers to the 2018-2019 Budget so that the carryover funds can be incorporated into the adopted 2018-2019 budget. Mr. Battle seconded the motion. Unanimously approved.

Mr. Hamdan presented Formal Adoption of the 2018-2019 Budget submitted by Mr. Hamdan and Dr. Savaglio-Jarvis, excerpts follow:

"The public hearing on the 2018-2019 budget and the annual meeting of district electors were held on September 13, 2018, in the auditorium of Indian Trail High School and Academy. At the annual meeting of district electors, our stakeholders voted to approve the tax levy at the maximum amount allowed by law. At the time of the annual meeting, it is important to note that key variables in the budgeting process were not finalized, therefore conservative estimates were included.

Since the public hearing and the annual meeting, the administration has updated the budget to reflect components such as staffing costs, student membership, equalized property valuations, certified state aid, and tax levies. In the official October general aid certification, our general state aid decreased by \$669,578 as compared to last year. However, our total state aid that impacts tax levy increased due to the addition of a new state aid for personal property that added \$1,650,042 of tax levy relief to our stakeholders. The 2017-2019 state budget (2017 Act 59) exempted certain machinery, tools, and patterns from property tax assessments and also created this new aid program designed to reimburse municipalities for the lost tax revenue. KUSD currently qualifies for high poverty aid since our free/reduced lunch population exceeds 50%. Our population is currently at approximately 52% and declining, so we could potentially lose this additional aid in the very near future. The loss of high poverty aid could be recovered by increasing tax levy.

The 2018-2019 general fund (10) is being presented as a balanced budget in which expenditures are projected to equal revenues. We are in a positive position where we can absorb the carryover spending authority request of \$275,349 within this balanced budget. Also incorporated into this budget are several new budget assumptions recommended by administration totaling \$274,430. These assumptions include:

- Wireless Access Point Replacements (one-time cost of \$100,000);
- International Thespian Festival Support (recurring cost of \$30,000);
- Theater Arts Funding for Indian Trail High School and Academy (recurring cost of \$15,000);
- Theater Arts Funding for Tremper High School (recurring cost of \$15,000); and
- Equipment for Industry 4.0 Courses (one-time cost of 114,430).

Final projections show approximately \$410K of available funds yet to be allocated. These funds are available for the Board of Education to allocate in the 2018-19 budget as they see fit.

Unassigned general fund balance reserves are currently greater than 10% of budgeted expenditures; therefore, the portion of school board policy 3323 that requires a one million dollar budgeted surplus (if the fund balance is below the 10% threshold) will not be applicable for 2018-19.

The total general fund (10) ending fund balance is projected to be \$55.32 MM at the end of 2018-2019 which represents 21.38% of the current year expenditures. Included in that number are components of the fund balance designated for specific purposes such as charter school reserves (\$2.6 MM), inventory and prepaid items (\$1.2 MM), and contractual obligations (\$192K). After adjusting for the designated balances, the fund is left with an unassigned projected balance of \$51.30 MM which represents 19.83% of the budgeted expenditures.

The 2018-19 budget will include the proposed tax levy of \$88,384,590.

The proposed tax levy for the general fund (10) is the maximum amount allowable within state law without going to referendum. The overall 2.6% decrease in total tax levy equates to \$2,357,258 less local property tax dollars needed for the Kenosha Unified School District as compared to the previous year. Most of this decrease can be directly attributed to the addition of the new state aid for personal property starting in 2018-2019. Since this new state aid amount falls with the revenue limit formula, it does not provide additional budget authority, but it does directly reduce the amount of tax levy needed.

The total mill rate per \$1,000 of equalized property valuation is \$9.40, an 8.13% decrease as compared to the prior year. This decrease is the result of changes in both tax levy and equalized property values in our district. Our equalized property value increased by 6.02% from last year which means the reduced tax levy is spread over a larger tax base which results in a significantly favorable change in the mill rate. Attachment A delineates this tax levy scenario in a historical view of the District's equalized property values, tax levies, and mill rates.

It is requested that the Board of Education accept the following recommendations:

1. Formally adopt the District's 2018-2019 budget using the accompanying budget adoption motion (Attachment B).

2. Direct the administration to prepare a class one legal notice to be published publicly within ten days of the adoption (Attachment C).

3. Approve the property tax levy to be collected from the municipalities within the school district in the amount of \$72,697,706 for the general fund, \$14,186,884 for the debt service fund, and \$1,500,000 for the community service fund. The Board must approve levy amounts on or before November 1st each year, per Wis. Stats. 120.12 (3)(a).

4. Direct the district clerk to certify and deliver the Board approved tax levy to the clerk of each municipality on or before November 10, 2018."

Mr. Battle moved to formally adopt the District's 2018-2019 budget using the accompanying budget adoption motion, direct the administration to prepare a class one legal notice to be published publicly within ten days of the adoption, approve the property tax levy to be collected from the municipalities within the school district in the amount of \$72,697,706 for the general fund, \$14,186,884 for the debt service fund, and \$1,500,000 for the community service fund, and direct the district clerk to certify and deliver the Board approved tax levy to the clerk of each municipality on or before November 10, 2018. Ms. Stevens seconded the motion. Unanimously approved.

Mr. Keckler presented the Official Third Friday Enrollment Report submitted by Ms. Laura Sawyer, Data Analyst; Mrs. Erin Roethe, Data Analyst; Mrs. Lorien Thomas, Research Coordinator; Mr. Keckler; and Dr. Savaglio-Jarvis, excerpts follow:

"Annually, Administration provides the Kenosha Unified School Board with the District's Official Third Friday Enrollment Report. The data contained in this report are also reported to the Wisconsin Department of Public Instruction (DPI) in its designated format. The School Board should note that this report contains only *enrollment* data and does not contain student membership data that are used to develop revenue projections and budgetary planning documents.

District-wide, enrollment decreased 283 students, from 21,655 students in 2017-18 to 21,372 students in 2018-19. Beginning in 2009-10, Kenosha started to experience a decline in community birth rates, with the related effect of declines in enrollments five years later. Since 2010, KUSD boundary areas have averaged approximately 250 less births compared to previous years. This trend has now impacted grades pre-kindergarten through grade 3.

The 2018-19 Official Third Friday Enrollment Report is an informational item."

Mr. Keckler gave a PowerPoint presentation entitled Official Student Enrollment Trend Report which covered the following topics: overall enrollment trends, number of births and KUSD kindergarten enrollment (5 years later), Wisconsin births, national trend, KUSD exits to area private schools, KUSD open enrollment (transfer in/out), student race/ethnicity, 8 year trend (grades K-5), 8 year trend (grades 6-8), 8 year trend (grades 9-12), cohort average, change in enrollments and teacher (filled) FTE, % change in enrollments and teacher (filled) FTE, and class size average.

Mr. Keckler answered questions from Board members. There was no action taken on this item as it was presented for informational purposes only.

Mrs. Modder presented the Donations to the District.

Mrs. Modder moved to approve the Donations to the District. Mr. Garcia seconded the motion. Unanimously approved.

Mr. Duncan moved to adjourn the meeting. Mr. Garcia seconded the motion. Unanimously approved.

Meeting adjourned at 8:11 P.M.

#### SPECIAL MEETING & EXECUTIVE SESSION OF THE KENOSHA UNIFIED SCHOOL BOARD HELD NOVEMBER 13, 2018

A special meeting of the Kenosha Unified School Board was held on Tuesday, November 13, 2018, in the Small Board Room at the Educational Support Center. The purpose of this meeting was to vote on holding an executive session to follow immediately.

The meeting was called to order at 5:30 P.M. with the following members present: Ms. Stevens, Mr. Duncan, Mr. Kunich, Mrs. Modder, and Mr. Wade. Dr. Savaglio-Jarvis was also present. Mr. Garcia was excused. Mr. Battle arrived later.

Mr. Wade, President, opened the meeting by announcing that this was a special meeting of the School Board of the Kenosha Unified School District. Notice of this special meeting was given to the public by forwarding a copy of the notice to all requesting radio stations and newspapers.

Mr. Wade announced that an executive session had been scheduled to follow this special meeting for the purpose of Personnel: Position Assignments and Personnel: Compensation and/or Contracts.

Mrs. Modder moved that the executive session be held. Mr. Duncan seconded the motion.

Roll call vote. Ayes: Ms. Stevens, Mr. Duncan, Mr. Kunich, Mrs. Modder, and Mr. Wade. Noes: None. Unanimously approved.

1. <u>Personnel: Position Assignments and Personnel: Compensation and/or Contracts</u> Mr. Battle arrived at 5:32 P.M.

Dr. Savaglio-Jarvis presented board members with three position assignments.

Ms. Maxceen Augustus arrived at 5:35 P.M. and answered questions from Board members. Ms. Augustus was excused at 5:40 P.M.

Ms. Jennifer Hart arrived at 5:41 P.M. and answered questions from Board members. Ms. Hart was excused at 5:47 P.M.

Mr. Kevin Neir arrived at 5:47 P.M. and answered questions from Board members. Mr. Neir was excused at 5:53 P.M.

Mr. Kunich moved to adjourn the meeting. Ms. Stevens seconded the motion. Unanimously approved.

Meeting adjourned at 5:54 P.M.

#### A SPECIAL MEETING OF THE KENOSHA UNIFIED SCHOOL BOARD HELD NOVEMBER 13, 2018

A special meeting of the Kenosha Unified School Board was held on Tuesday, November 13, 2018, at 6:00 P.M. in the Board Meeting Room at the Educational Support Center. The purpose of this meeting was for Views and Comments by the Public and Discussion/Action on Administrative Appointments.

The meeting was called to order at 6:00 P.M. with the following members present: Ms. Stevens, Mr. Battle, Mr. Duncan, Mr. Kunich, Mrs. Modder, and Mr. Wade. Dr. Savaglio-Jarvis was also present. Mr. Garcia was excused.

Mr. Wade, President, opened the meeting by announcing that this was a special meeting of the School Board of the Kenosha Unified School District No. 1. Notice of this special meeting was given to the public by forwarding a copy of the notice to all requesting radio stations and newspapers.

There were no views and/or comments by the public.

Dr. Savaglio-Jarvis presented three Administrative Appointments.

Ms. Stevens moved to approve Ms. Maxceen Augustus as the Human Resources Coordinator of Employee Relations. Mr. Kunich seconded the motion. Unanimously approved.

Ms. Stevens moved to approve Ms. Jennifer Hart as the Human Resources of Recruitment and Retention. Mrs. Modder seconded the motion. Unanimously approved.

Ms. Stevens moved to approve Mr. Kevin Neir as the Human Resources Coordinator of Compensation, Benefits and HRIS. Mr. Kunich seconded the motion. Unanimously approved.

Mr. Duncan moved to adjourn the meeting. Mr. Battle seconded the motion. Unanimously approved.

Meeting adjourned at 6:07 P.M.

This page intentionally left blank

#### Kenosha Unified School District Kenosha, Wisconsin Summary of Cash Receipts and Disbursements November 27, 2018

		totol
CASH RECEIPTS October 2018 Wire Transfers-In, to Johnson Bank	reference	total
	state aids register receipts	\$ 675,510.56
WI Department of Public Instruction WI Department of Justice - Office of School Safety	School Safety Grant	319,253.00
Johnson Bank	account interest	1,183.56
	food services credit card receipts	165,632.57
Bankcard Services (MyLunchMoney.com)	(net of fees) fine arts ticket sales receipts	
Bankcard Services (Purple Pass)	(net of fees)	1,210.93
Bank (RevTrak)	district web store receipts (net of fees)	19,106.67
Retired & Active Leave Benefit Participants	premium reimbursements	45,361.33
HHS	head start grant	217,872.79
Various Sources	small miscellaneous grants / refunds / rebates	280,464.64
Total Incoming Wire Transfers		1,725,596.05
October 2018 Deposits to Johnson Bank - All Fun General operating and food services receipts	ds: (excluding credit cards)	383,901.47
TOTAL OCTOBER CASH RECEIPTS		\$ 2,109,497.52
CASH DISBURSEMENTS October 2018 Wire Transfers-Out, from Johnson I	reference	total
Payroll & Benefit wires	Ballk IO.	
Individual Employee Bank Accounts	net payrolls by EFT	\$ 7,451,098.72
	(net of reversals)	762,145.35
WI Department of Revenue	state payroll taxes	
WI Department of Revenue	state wage attachments	3,472.23
IRS Data Data	federal payroll taxes	2,536,085.87
Delta Dental	dental insurance premiums	249,228.70
Diversified Benefits Services	flexible spending account claims	25,779.71
Employee Trust Funds	wisconsin retirement system	1,500,624.47
NVA	vision insurance premiums	16,481.26
Various	TSA payments	315,383.08
Subtotal		12,860,299.39
General Operating Wires		
US Bank	purchasing card payment-individuals	210,746.39
Kenosha Area Business Alliance	LakeView lease payment	16,666.67
Various	returned checks	1,081.54
Subtotal		228,494.60
Total Outgoing Wire Transfers		\$ 13,088,793.99
October 2018 Check Registers - All Funds:		
Net payrolls by paper check	Register# 01021DP, 01022DP	\$ 13,318.43
	Check# 570562 thru Check# 571627	
General operating and food services	(net of void batches)	15,009,144.76
Total Check Registers		\$ 15,022,463.19
TOTAL OCTOBER CASH DISBURSEMENTS		\$ 28,111,257.18

\*See attached supplemental report for purchasing card transaction information

### KUSD Purchasing Card Program - Individual Cardholders

Transaction Summary by Merchant Billing Cycle Ending October 15, 2018

Merchant Name	Total	
3654 INTERSTATE	\$	11,860.17
AIRLINE	\$	10,416.75
HOTEL	\$	10,139.37
IDENTICARD	\$	9,524.27
KITCHEN CUBES LLC	\$	9,081.00
RESTAURANTS & CATERING	\$	7,843.66
MENARDS KENOSHA WI	\$	6,071.86
HAJOCA KENOSHA PC354	\$	5,637.22
MARK S PLUMBING PARTS	\$	5,006.22
SCRIPPS SPELLING BEE	\$	4,480.00
NATL CNCL COMM BHVRL HTH	\$	4,000.00
LITTLE FLOWER YOGA	\$	3,370.00
PROVANTAGE	\$	3,340.28
INDUSTRIAL CONTROLS	\$	3,320.26
KIMBALL MIDWEST	\$	3,313.15
PENSKE TRK LSG 767210	\$	3,034.00
SPRUCE LAKE SAND & GRAVE	\$	3,010.96
NATL CCL TEACHERS OF MATH	\$	2,745.68
GRAINGER	\$	2,728.34
FIRST SUPPLY LLC #2033	\$	2,290.03
LAKESIDE INTERNATIONAL	\$	2,220.74
COLUMBIA PIPE & SUPPLY	\$	2,129.93
VEHICLE MAINT. & FUEL	\$	2,103.20
BUILDERS AREA	\$	2,013.44
FILTRATION CONCEPTS INC	\$	1,898.41
HALLMAN LINDSAY PAINTS -	\$	1,786.82
DAKTRONICS	\$	1,757.37
CYT CHICAGO	\$	1,670.00
IN *A BEEP, LLC	\$	1,645.28
JOHNSON CONTROLS SS	\$	1,600.00
BEST BUY 00000299	\$	1,572.89
EB WICUG 2018 FALL CO	\$	1,440.00
COLLEGEBOARD WORKSHOPS	\$	1,440.00
CONNEY SAFETY	\$	1,416.87
RAGAN COMMUNICATIONS	\$	1,398.00
HOMEDEPOT.COM	\$	1,376.69
DICKOW CYZAK TILE CARP	\$	1,352.00
TRUGREEN *LOCKBOX	\$	1,315.00
ULINE *SHIP SUPPLIES	\$	1,288.36
NATL ASSN GIFTED CHILDRE	\$	1,217.00
HIGHWAY C SVC	\$	1,182.07
SAMSCLUB.COM	\$	1,181.26
SHERWIN WILLIAMS 703180	\$	1,146.08
CDW GOVT #PLL7066	\$	1,144.53
MILWAUKEE COUNTY ZOO	\$	1,105.00
STERICYCLE	\$	1,103.34
OFFICEMAX/DEPOT 6358	\$	1,062.87
	•	•

CHESTER ELECTRONIC SUPPLY	¢	1 050 12
DISCOVERY WORLD, LTD	\$ \$	1,050.13 1,043.00
LINCOLN CONTRACTORS SUPPL	ֆ \$	1,043.00
APPLE HOLLER	\$	1,039.95
AMERICAN ASSOC OF SCHOOL	Ψ \$	980.00
FARM & FLEET STURTEVANT	\$	978.48
HOTELS.COM152023614751	↓ \$	970.40
GFS STORE #1919	\$	937.91
SQ *THE LETTERING M	↓ \$	900.75
MICROSOFT - 31 SAN FRANC	\$	900.00
GOLF TEAM PRODUCTS	\$	895.00
RSCHOOLTODAY	\$	880.00
EUROFINS SF ANALYTICAL LA	\$	819.80
HEMISPHERE ED TRVL	\$	817.50
SAN-A-CARE	\$	811.86
EB COMPREHENSIBLE MID	\$	807.44
NO TEARS LEARNING INC	\$	800.00
MENARDS RACINE WI	\$	768.45
MILWAUKEE PUBLIC MUSEUM	φ \$	752.00
FESTIVAL FOODS	\$	737.42
KENOSHA AREA BUSINESS	↓ \$	715.00
HYDRO-FLO PRODUCTS INC	\$	713.00
NELSON ELECTRIC SUPPLY	φ \$	695.90
FASTENAL COMPANY01	\$	669.90
JON DON ECOMM #999	φ \$	669.09
EVERWHITE/GLENROY, INC.	ֆ \$	662.99
VIKING ELECTRIC-CREDIT DE	ֆ \$	659.45
USPS.COM POSTAL STORE	ֆ \$	654.75
OMNI CHEER	ֆ \$	638.73
BUILDERS HARDWARE	ֆ \$	620.00
AMZN MKTP US*MT0UN7II2	ֆ \$	614.43
JOHNSTONE SUPPLY	э \$	613.70
WI SCIENCE OLYMPIAD	э \$	600.00
BETTY BRINN CHILDREN'S M	э \$	597.50
IN *IMAGINE U, LLC	э \$	
AED SUPERSTORE	ծ \$	587.30
	<b>T</b>	577.99
	\$	555.00
VIKING ELECTRIC-MILWAUKEE	\$	524.35
	\$	517.00
AMAZON.COM*MT9E74GF0	\$	501.48
	\$	495.93
LINKEDIN-413*3096204	\$	489.90
BATTERIES PLUS #0561	\$	467.80
OFFICEMAX/DEPOT 6869	\$	459.41
BUS MGMT DAILY	\$	459.00
ZORO TOOLS INC	\$	452.62
E-CONOLIGHT	\$	431.51
TREETOP PUBLISHING INC	\$	431.20
	\$	423.12
WM SUPERCENTER #1167	\$	422.79
AMZN MKTP US*MT01W2Q40	\$	421.90
WAL-MART #1167	\$	418.63
WISCONSIN MUSIC EDUCATORS	\$	410.00
PIGGLY WIGGLY #004	\$	409.00
SAMSCLUB #6331	\$	399.50

	¢	204.00
USPS PO 5666100158 EVOQUA WATER TECHNOLOGY	\$ \$	384.00 383.11
TRANE SUPPLY-116407	Ф \$	382.00
SAMS CLUB #6331	ъ \$	381.68
WASC	Ф \$	380.00
CONSERV FS INC	\$	379.60
IKEA CLICK & COLLECT 3136	\$	379.00
AT&T FW76 15439	ъ \$	369.99
PAYPAL *COPE24	Ф \$	365.95
TME*TIME EDUCATION	ъ \$	305.95
ENTRUST DATACARD	\$	325.16
CESA 6	\$	325.00
WISCONSIN EVANGELICAL LS	\$	325.00
MENARDS E-COMMERCE	\$	325.00
WISMATH	э \$	310.00
AMZN MKTP US*MT3H58530	\$ \$	
	ъ \$	308.99
AMZN MKTP US*MT99H1HN1		308.99
	\$	303.74
SQ *NATIONAL VETERA	\$	300.00
NETBRANDS MEDIA CORP.	\$	295.50
SASED MIDWEST PBIS	\$	295.00
AMAZON.COM*MT2W07Z51	\$	283.27
HOLLAND SUPPLY INC	\$	282.98
	\$	269.99
WISCONSIN SCHOOL MUSIC AS	\$	261.00
	\$	252.00
	\$	251.35
AMZN MKTP US*MT7MY22M2	\$	247.92
SHIFFLER EQUIPMENT	\$	246.06
	\$	243.28
VIKING ELECTRIC - KENOSHA	\$	236.86
HOTELS.COM152336589809	\$	228.53
MEIJER STORE #284	\$	222.50
OTC BRANDS, INC.	\$	218.90
BESTBUYCOM805568143711	\$	215.84
	\$	215.04
AAA CLUB/INSUR 0470590R	\$	211.00
ACT*ASSOCIATION OF WIS	\$	210.00
EB WHY STUDENTS FAIL	\$	209.00
HOTELS.COM152336747603	\$	206.66
COSTCO WHSE #1198	\$	203.86
MINITOOL SOLUTION	\$	199.00
MOBYMAX	\$	199.00
AMZN MKTP US*MT0KE18B1	\$	198.60
K-5MATHTEACHINGRESOURC	\$	189.80
AMERICAN LIBRARY ASSN	\$	188.20
AMAZON.COM*MT7M81KN2	\$	187.06
EPIC SPORTS, INC.	\$	186.59
SMUGMUG*ONLINE PHOTOS	\$	179.88
PAYPAL *WEBIT	\$	175.00
WI DHFS LEAD AND ASBESTOS	\$	175.00
DANCEWEAR SOLUTIONS	\$	173.65
AMZN MKTP US*MT53I2BJ0	\$	171.63
MAGNATAGVISIBLESYSTEMS	\$	165.64
ARC*SERVICES/TRAINING	\$	165.00

AMAZON.COM*MT7FF4ZC0	¢	161 76
AMZN MKTP US*MT3KR08N0	\$ \$	161.76 155.96
PARTS TOWN	\$	155.85
AMZN MKTP US*MT6495D61	\$	149.99
AMZN MKTP US*MT7SY2QJ2	\$	149.98
AMZN MKTP US*MT2S13ZK1	\$	148.80
EVERYDAY SPEECH	\$	147.91
AMZN MKTP US*MT73X1KB2	\$	146.25
HOTELS.COM152336698405	\$	141.06
MAKEMUSIC, INC.	\$	140.00
SQ *SCOTT'S SCREEN	\$	138.00
FREDPRYOR CAREERTRACK	\$	136.10
OTHERWORLDCOMACSALES	\$	134.75
AMAZON.COM*MT2V83ZO2	\$	133.98
AMZN MKTP US*MT8MG6B20	\$	133.90
YAHOO SMALL BUSINESS	\$	131.28
FEED & SEED STATION	\$	125.00
NAFME	\$	123.00
AMZN MKTP US*MT5QV1851	\$	123.00
TOWN & COUNTRY GLASS INC	\$	122.97
AMZN MKTP US*MT8WE5MM2	\$	120.00
ENCRYPTOMATIC LLC	\$	114.98
AMAZON.COM*MT1QZ8SU2	\$	110.05
OFFICEMAX/DEPOT 6358	\$	108.71
EB 2018 WITESOL FALL	\$	107.62
ROBERT BROOKE & ASSOCIAT	\$	107.52
AMZN MKTP US*MT0RD6WA2	\$ \$	107.53
TRIBUTE STORE	\$	105.98
AMTRAK .COM 2740752094887	\$ \$	105.39
SUB*WASHPOST*006166566	\$	102.00
IVES GROVE GOLF LINKS	\$ \$	
GREEN RIDE BOULDER	\$ \$	100.00 100.00
ID WHOLESALER	\$ \$	
CENTURYLINK SIMPLE	\$ \$	94.63 90.80
AMZN MKTP US*MT91S1I81	\$ \$	90.80 89.98
ASSOC SUPERV AND CURR	ծ \$	
LUTEYS FLOWER SHOP	•	89.00
	\$	88.00
SCREENCAST-O-MATIC.COM GOOGLE *ADS3520437870	\$	87.00
HOBBY LOBBY #350	\$ \$	86.23 80.79
MENARDS OAK CREEK WI		
	\$	80.73
JUNIOR LIBRARY GUI AMZN MKTP US*MT3DP0VB2	\$	80.00
	\$	79.95
AMZN MKTP US*MT8V80ZX2	\$	77.95
	\$ \$	77.89
CABLE TIES PLUS	\$ \$	77.50
ENTERPRISE RENT-A-CAR PAYPAL *CESA 4	\$ \$	76.62
AMZN MKTP US*MT4ZI3XC0	<u>ቅ</u>	75.00
	\$	74.75
FACEBK M86W2JJ882	\$ ¢	72.52
	\$	72.35
AMZN MKTP US*MT1AN2931	\$ ¢	71.50
	\$	70.33
V BELT GLOBAL SUPPLY AMZN MKTP US*MT60R4YF2	\$	68.98
	\$	67.65

	ሱ	07.40
AMZN MKTP US*MT9AW1SD0 AM	\$	67.43
AMZN MKTP US	\$	63.75
DOLLAR TREE ECOMM	\$	63.30
	\$	62.26
HARBOR FREIGHT TOOLS 358	\$	59.98
AMZN MKTP US*MT86S2A40	\$	55.98
SAMS CLUB #8167	\$	52.06
AMZN MKTP US*MT1WY4Q91	\$	51.40
FIRST STAGE CHILDRENS THE	\$	50.00
NATIONAL ENGLISH HONOR SO	\$	50.00
PAYPAL *CESA 5	\$	50.00
MAILCHIMP *MONTHLY	\$	50.00
PRESENTERMEDIA	\$	49.95
PIGGLY WIGGLY #344	\$	48.95
WM SUPERCENTER #2668	\$	48.04
SOI*SNAP-ONEQUIPMENT	\$	47.85
SOUTHPORT VACUUM	\$	41.25
WALGREENS #12413	\$	41.16
SQ *WEBER ASSOCIATE	\$	40.00
FRANKLINCOVEYPRODUCTS	\$	38.91
EXPEDIA 7385386784283	\$	38.00
AMZN MKTP US*MT7A30KU2	\$	37.99
FEDEX 773420778276	\$	37.36
AMAZON.COM*MT62C9HV1	\$	36.49
IKEA OAK CREEK	\$	35.94
AMZN MKTP US*MT2D91X42	\$	35.57
PAYPAL *ASOPE INC	\$	35.00
AMZN MKTP US*MT5KO9870	\$	34.99
ACTFL	\$	34.17
SMK*WUFOO.COM CHARGE	\$	34.00
PARTY CITY 5174	\$	33.66
AMAZON.COM	\$	32.21
AMZN MKTP US*MT9JV2750	\$	30.90
AMAZON.COM*MT6XD8YS2	\$	30.14
JOHN POWLESS TENNIS CENTE	\$	30.00
PICK N SAVE #871	\$	28.97
AMAZON.COM*MT21N9ZT0	\$	28.50
AMZN MKTP US*MT81V9991	\$	28.46
WALGREENS #9605	\$	28.39
AMAZON.COM*MT6ED1H81	\$	28.36
AMAZON.COM*MT5EM6A21	\$	27.97
LOWES #02560*	\$	27.96
MARTINOS-BETTER CLEANE	\$	27.64
TRAVEL INSURANCE POLICY	\$	26.88
AMZN MKTP US*MT5Q21872	\$	26.53
RTIC NF7M	\$	25.98
STAMP CONNECTION	\$	25.85
PAYPAL	\$	25.00
ERGOTRON INC	\$	25.00
AMZN MKTP US*MT4QV0QD1	\$	23.96
MENARDS BURLINGTON WI	\$	23.92
AMZN MKTP US*MT75E97C0	\$	22.25
AMZN MKTP US*MT0P10UI2	\$	21.99
PRAIRIE SIDE TRUE VALUE	\$	21.98
AMZN MKTP US*MT9WI0Z20	\$	21.95

AMAZON.COM*MT2IR41V0	\$ 21.09
AMZN MKTP US*MT17U87L1	\$ 19.44
USPS PO 5642800260	\$ 19.20
AMZN MKTP US*MT84G6Z00	\$ 18.99
KMART 3088	\$ 16.87
ENVIRONMENTAL EDUCATION A	\$ 15.00
AMZN MKTP US*MT8B16W32	\$ 14.98
WALGREENS #6132	\$ 14.14
AMZN MKTP US*MT9B24XY2	\$ 13.99
EREPLACEMENTPARTS.COM	\$ 13.87
AMZN MKTP US*MT2GS1U92	\$ 13.19
AMAZON PRIME	\$ 13.10
CESA 6 GMS SERV FEE	\$ 12.97
WALGREENS #3153	\$ 12.97
EASYKEYSCOM INC	\$ 12.00
METCALFE MARKET HIL	\$ 10.56
AMAZON.COM*MT2DM8BJ2	\$ 10.52
SUBURBAN GARDEN PET CENTE	\$ 9.78
AMZN MKTP US*MT6SX31A0	\$ 8.29
AMZN MKTP US*MT3LO08P0	\$ 7.85
APL* ITUNES.COM/BILL	\$ 4.20
AMAZON DIGITAL SVCS	\$ (8.99)
PRIME VIDEO	\$ (8.99)
ASCD STREAMING VIDEO	\$ (24.95)
PEARDECK.COM PRO YEARL	\$ (99.99)
TTAS WEB	\$ (425.00)
US Bank Purchasing Card Payment - Individuals	\$ 210,746.39

## KENOSHA UNIFIED SCHOOL DISTRICT Kenosha, Wisconsin

## November 27, 2018

# Administrative Recommendation

It is recommended that the October 2018 cash receipt deposits totaling \$383,901.47, and cash receipt wire transfers-in totaling \$1,725,596.05, be approved.

Check numbers 570562 through 571627 totaling \$15,009,144.76, and general operating wire transfers-out totaling \$228,494.60, are recommended for approval as the payments made are within budgeted allocations for the respective programs and projects.

It is recommended that the October 2018 net payroll and benefit EFT batches totaling \$12,860,299.39, and net payroll check batches totaling \$13,318.43, be approved.

Dr. Sue Savaglio-Jarvis Superintendent of Schools

Tarik Hamdan Chief Financial Officer

Lisa M. Salo, CPA Accounting Manager

#### KENOSHA UNIFIED SCHOOL DISTRICT Kenosha, Wisconsin

#### November 27, 2018

### BRADFORD PLANETARIUM

#### Background:

At the April 25, 2016, School Board meeting, the Board approved a proposal to implement a Phase 2 series of energy efficiency projects using the energy revenue limit exemption based on the provisions in 2011 Wisconsin Act 32 and subsequent legislation. Furthermore, the Board approved an Initial Resolution on May 10, held a Public Hearing on the projects on May 24, and formally approved the selection of the performance contractors on June 28, 2016. The last of the three projects in Phase 2 is at Bradford High School. Design work for Bradford began during the winter break and we had the 50% design review effort the week of May 21<sup>st</sup>. We are planning on bidding the construction work out in late fall-early winter similar to the timeframe we bid out the Tremper project this past year.

Normally design details are not brought before the Planning, Facilities, Equipment (PFE) Committee or the School Board; however we felt that there was an item that we should notify the Board of in advance in case there were any concerns related to our plans. This item is whether to demolish the old planetarium or spend the funds necessary to refurbish the space. Our current plans are to demolish the planetarium as part of the project based on the cost to renovate and the lack of use of the space; however, we have held off on developing detailed plans until we could provide Board members this update. The design details for demolition and refurbishment are very different, so this is something that we need to provide direction to the architects and engineers as soon as possible, preferably before the end of June.

The planetarium (Picture 1) was something constructed by the State when the building was part of the UW system in the 1960's. It is not a space that KUSD would ever include in a building design. Over the years the planetarium has been used in different ways, from part of the high school curriculum at Bradford to a field trip destination as part of elementary school science. From 1999-2011, the planetarium was visited by 4<sup>th</sup> grade classrooms and there was a part-time instructional position assigned to the planetarium to support this use. In the spring of 2011, a \$167,000 upgrade was performed by the science department to purchase a new projection system, computer hardware and software, and training. That following year the planetarium was not used at all by the district. During the 2012-13 school year an effort was made to increase the use of the space; however only 2 open houses and 9 presentations were made in the space. Here is a summary on the number of uses annually since the part-time position was eliminated in 2011:

- 2011-12 0
- 2012-13 11

- 2013-14 0
- 2014-15 0
- 2015-16 16
- 2016-17 8
- 2017-18 School estimates that it is under 10

As the design team started developing the scope for the energy project, our assumption was that we would refurbish the space, not unlike we are doing on the rest of the school. As part of the 50% design review, we included a budget evaluation component to see how the design efforts were tracking versus the original cost estimate for the project. One line item that jumped at us was the planetarium refurbishment estimate of \$92,500. In addition, the roof of the planetarium was not included in the scope because it is leak-tight. The roof; however is a brown aluminized metal and if left untouched would be the only brown metal left on the exterior of the west, north and south sides of the school. Painting the aluminized roof would create either a regular maintenance issue or a potential peeling eyesore, so the most likely solution would be to clad the roof in a metal that would match the metal planned for the upper gymnasium. This would add \$37,500 to the cost for refurbishment bringing the total to approximately \$130,000. The refurbishment scope of work includes the following:

- Metal flashing replacement and tuck-pointing of the masonry exterior (Picture 2)
- Window replacement (Picture 3)
- Ceiling and lighting replacement (Picture 4)
- HVAC replacement (Picture 5)
- Carpet replacement (Picture 6)

Spending a \$130,000 to refurbish a space that is minimally used is not something to be taken lightly; therefore, we asked the engineers to look at what the cost would be to demolish the space in lieu of renovation. The cost for demolition and restoration of the grounds would be \$60,000. In addition, we would save anywhere between \$500 and \$1,100 in annual operating costs related to the planetarium. Based on the cost savings (summarized in the table below) to demolish the space versus renovation, and the lack of use of the space the past seven years, our plans are to demolish the planetarium unless otherwise directed by the School Board.

	<b>Renovation Option</b>	<b>Demolition Option</b>
Construction Cost	\$130,000	\$60,000
Annual Operating Cost	\$500 - \$1,100	\$0

With the concurrence of the School Board during agenda review meetings in June 2018 (see Attachment A), we moved forward with the design of the Bradford energy efficiency project

including the demolition of the planetarium. As of late October, the project design was approximately 90-95% complete, and is slated for final completion in mid-November. A play was held inside the Bradford planetarium in October and that spurred a group of people to urge KUSD to not demolish the planetarium. It was decided to reopen this issue and bring it to a formal vote by the School Board at the November 27, 2018 meeting.

In light of the fact that the project schedule and even more so the project budget hinges strongly to having the competitive bid process take place in 2018 and not early 2019, and that the design of the west side of the school was complete, we were forced to design a full alternate that included keeping and restoring the planetarium. That additional design effort came at a cost of \$22,000 which will have to be absorbed by the project budget at the expense of something else. The bid package that is being issued in late November will include two alternatives for the planetarium: demolition and refurbishment with bidders required to provide separate costs for the two alternatives for KUSD to select based on the final decision of the School Board.

The cost estimates provided in June and summarized above remain valid today according to our architectural and engineering design team.

#### **Recommendation:**

At its November 13, 2018, meeting, the Planning, Facilities & Equipment Committee voted to forward this report to the school board for consideration of demolition or renovation of the Bradford planetarium at its November 27 meeting.

Dr. Sue Savaglio-Jarvis Superintendent of Schools Mr. Patrick Finnemore, PE Director of Facilities



Picture 1



Picture 2



Picture 3



Picture 4



Picture 5



Picture 6
# KENOSHA UNIFIED SCHOOL DISTRICT Kenosha, Wisconsin

# June 11, 2018

# BRADFORD PROJECT UPDATE - PLANETARIUM

# Background:

At the April 25, 2016, School Board meeting, the Board approved a proposal to implement a Phase 2 series of energy efficiency projects using the energy revenue limit exemption based on the provisions in 2011 Wisconsin Act 32 and subsequent legislation. Furthermore, the Board approved an Initial Resolution on May 10, held a Public Hearing on the projects on May 24, and formally approved the selection of the performance contractors on June 28, 2016. The last of the three projects in Phase 2 is at Bradford High School. Design work for Bradford began during the winter break and we had the 50% design review effort the week of May 21<sup>st</sup>. We are planning on bidding the construction work out in late fall-early winter similar to the timeframe we bid out the Tremper project this past year.

Normally design details are not brought before the Planning, Facilities, Equipment (PFE) Committee or the School Board; however we felt that there was an item that we should notify the Board of in advance in case there were any concerns related to our plans. This item is whether to demolish the old planetarium or spend the funds necessary to refurbish the space. Our current plans are to demolish the planetarium as part of the project based on the cost to renovate and the lack of use of the space; however, we have held off on developing detailed plans until we could provide Board members this update. The design details for demolition and refurbishment are very different, so this is something that we need to provide direction to the architects and engineers as soon as possible, preferably before the end of June.

The planetarium (Picture 1) was something constructed by the State when the building was part of the UW system in the 1960's. It is not a space that KUSD would ever include in a building design. Over the years the planetarium has been used in different ways, from part of the high school curriculum at Bradford to a field trip destination as part of elementary school science. From 1999-2011, the planetarium was visited by 4<sup>th</sup> grade classrooms and there was a part-time instructional position assigned to the planetarium to support this use. In the spring of 2011, a \$167,000 upgrade was performed by the science department to purchase a new projection system, computer hardware and software, and training. That following year the planetarium was not used at all by the district. During the 2012-13 school year an effort was made to increase the use of the space; however only 2 open houses and 9 presentations were made in the space.

summary on the number of uses annually since the part-time position was eliminated in 2011:

- 2011-12 0
- 2012-13 11
- 2013-14 0
- 2014-15 0
- 2015-16 16
- 2016-17 8
- 2017-18 Not final, but school estimates that it is under 10

As the design team started developing the scope for the energy project, our assumption was that we would refurbish the space, not unlike we are doing on the rest of the school. As part of the 50% design review, we included a budget evaluation component to see how the design efforts were tracking versus the original cost estimate for the project. One line item that jumped at us was the planetarium refurbishment estimate of \$92,500. In addition, the roof of the planetarium was not included in the scope because it is leak-tight. The roof; however is a brown aluminized metal and if left untouched would be the only brown metal left on the exterior of the west, north and south sides of the school. Painting the aluminized roof would create either a regular maintenance issue or a potential peeling eyesore, so the most likely solution would be to clad the roof in a metal that would match the metal planned for the upper gymnasium. This would add \$37,500 to the cost for refurbishment bringing the total to approximately \$130,000. The refurbishment scope of work includes the following:

- Metal flashing replacement and tuck-pointing of the masonry exterior (Picture 2)
- Window replacement (Picture 3)
- Ceiling and lighting replacement (Picture 4)
- HVAC replacement (Picture 5)
- Carpet replacement (Picture 6)

Spending a \$130,000 to refurbish a space that is minimally used is not something to be taken lightly; therefore, we asked the engineers to look at what the cost would be to demolish the space in lieu of renovation. The cost for demolition and

restoration of the grounds would be \$60,000. In addition, we would save anywhere between \$500 and \$1,100 in annual operating costs related to the planetarium. Based on the cost savings to demolish the space versus renovation, and the lack of use of the space the past seven years, our plans are to demolish the planetarium unless we hear differently today. Once the decision is finalized, we will update the PFE Committee as part of the monthly construction informational report.

This is an informational report.

Dr. Sue Savaglio-Jarvis Superintendent of Schools Mr. Patrick Finnemore, PE Director of Facilities This page intentionally left blank

## KENOSHA UNIFIED SCHOOL DISTRICT Kenosha, Wisconsin

## November 27, 2018

## Proposal to Restructure High School Social Studies Course Scope and Sequence

## **Background**

Beginning in 2016, the social studies department began evaluating the scope and sequence of the high school courses to determine if the current placement of courses is most effective in preparing students for college and career success as well as readiness for the rigor of honors and advanced placement courses. Central to this discussion is the current placement of United States History at the ninth grade level. Prior to 2009, the district offered United States History at different grade levels at different high schools. The department's review of the existing course structure has led to a recommendation to shift the placement of United States History from ninth to eleventh grade. This report will highlight the advantages to all students of this recommended change in placement.

## **Proposal**

The social studies department is proposing to move the placement of the United States history course from the ninth grade to eleventh grade. The content covered in middle school and high school will shift to address the new state standards while better preparing the students for college and career. The eighth grade curriculum will include events from the American Revolution through World War I and the high school curriculum focus will be World War I to the present. The current ninth grade required United States history course will be replaced with two social studies course options for freshman with curriculum aimed at preparing students for more rigorous learning and success on the state assessment and ACT:

- Ethnic Studies (elective course option)
- AP Human Geography

## **Rationale**

The following chart highlights the numerous benefits for students in making this change as compared to very few potential challenges.

PROS	CHALLENGES
The proposed updates to course offerings is	Assignment of courses to high school social
aligned to new Wisconsin social studies	studies teachers will shift throughout the
standards released in July 2018 and approved	transition process.
by the board at the July 24, 2018 meeting.	L
	This shift may result in concerns from the
The updates to content covered will provide	current social studies teachers that fewer FTE
more time for deeper investigation of events	will be needed. The detailed transition plan
that will result in deeper student engagement	below depicts that a reduction in FTE due to
and understanding of the current reality.	this change is very unlikely. Rather it is more
	likely to increase student participation in
The ethnic studies curriculum will be	social studies AP Human Geography and
rewritten to focus on cultural awareness and	APU US History when compared to the
ethnic identity based on the successful work	existing social studies course pathway.
done in San Francisco Public Schools as	
described in the study completed by Stanford	
in January 2016 (Appendix A). This course	
will support a diverse high school culture	
while preparing students for future courses	
and assessments.	
Included in the 2017 passing of ACT 59 is a	
requirement to include college and career	
ready (CCR) data. One component of this	
readiness data is the number of Advanced	
Placement Courses offered to, and AP credits	
earned by students. By replacing Honors	
United States History at the freshman level	
with Advanced Placement Geography	
students may begin their work in AP as	
freshman and then have a second opportunity	
for an AP course in Social Studies as juniors	
by taking AP United States History. AP	
Geography is designed as an introductory	
level AP course; and as such, it will be a	
positive experience for freshman seeking a	
higher level of rigor. It is anticipated that the	
students enrolled in AP Geography will also	
select AP United States History and this will	
positively impact the district's CCR data.	
Fewer than 75 of approximately 1500 juniors	
in the district elect to enroll in AP US	
History, although across the country this is	
one of the most popular AP exams in the	
state. With the current placement of US	
History or US History Honors being offered	

in ninth grade, few students elect to re-enroll	
in the AP version of this course in 11 <sup>th</sup> grade.	
With the movement of this course to junior	
year it is likely many more students will	
enroll in the more rigorous AP course.	

(Figure 1)

# **Consideration**

As depicted in the Course Sequencing chart below the proposed transition will be complete in the 2023-24 school year with all students completing the United States History graduation requirement in their junior year of high school. In an effort to minimize the impact on teacher FTE, it is recommended that high schools offer an AP Human Geography beginning in the fall of 2019-2020 to establish a pathway for all students to maximize participation in AP courses. In 2019-20 and 2020-21, US History will continue to be offered to freshman electing not to participate in the AP pathway. Students who enrolled in AP Human Geography will enroll in either AP US History or US History Honors in their junior year. This proposed transitional structure will maintain the current number of social studies courses taught each year and likely negate the potential for reduced FTE in social studies.

Course Sequence				
Year	9th Grade Offerings	11th Grade Offerings		
2019-20	US History AP Human Geography	AP US History		
2020-21	US History AP Human Geography	AP US History		
2021-22	AP Human Geography Ethnic Studies	AP US History US History Honors		
2022-23	AP Human Geography Ethnic Studies	AP US History US History Honors		
2023-24	AP Human Geography Ethnic Studies	AP US History US History Honors US History		

(Figure 2)

		Number o	of Sections Per	Course	
			Bradford		
	2018-19	2019-20	2020-21	21-22	22-23
U.S. History	10	10	10	0	0
U.S. History Honors (9th)	4	0	0	0	0
AP U.S. History	0	0	0	2	2
AP Human Geography	0	4	4	4	4
SS Elective	0	0	0	5	5
U.S History Honors (11th)	0	0	0	2	2
Total Sections	14	14	14	13	13
			Tremper		
	2018-19	2019-20	2020-21	21-22	22-23
U.S. History	10	10	10	0	0
U.S. History Honors (9th)	5	0	0	0	0
AP U.S. History	1	1	1	3	3
AP Human Geography	3	8	8	7	7
SS Elective	0	0	0	5	5
U.S History Honors (11th)	0	0	0	3	3
Total Sections	19	19	19	18	18
	·	ITHSA	A - Comprehen	sive	
	2018-19	2019-20	2020-21	21-22	22-23
U.S. History	8	8	8	0	0
U.S. History Honors (9th)	4	0	0	0	0
AP U.S. History	1	1	1	3	3
AP Human Geography	0	4	4	4	4

SS Elective	0	0		0	4		4	
U.S History Honors (11th)	0	0	(	0	2		2	
Total Sections	13	13	1	3	13		13	
		IT	HSA - A	Academy				
U.S. History	10	5		5	0		0	
U.S. History Honors (9th)	0	0		0	0		0	
AP U.S. History	0	0	(	0	5		5	
AP Human Geography	0	5		5	5		5	
SS Elective	0	0	0 0		0		0	
U.S History Honors (11th)	0	0	(	0	0		0	
Total Sections	10	10	1	0	10		10	
			Lake	view				
	2018-1	9 2019	9-20	2020-2	21	21-22	22-23	
U.S. History	0	0		0		0	0	
U.S. History Honors (9th)	4	0		0		2	2	
AP U.S. History	0	0		0		2	2	
AP Human Geography	0	4		4		4	4	
SS Elective	0	0		0		0	0	
U.S History Honors (11th)		0	,	0		0	0	
Total Sections	4	4		4		8	8	

(Figure 3)

Timeline		
Date	Activity	
August 2017	Proposal reviewed with high school content teachers	
September 2018	RFP opened for new US History and Government resources	

October 2018	Course sequence change is reviewed with
	high school principals including impact on
	staffing and scheduling
Date	Activity
November 2018	Communicate decision to the guidance
	counselors and review course request forms
December 2018	Communicate decisions to the parents and
	incoming ninth grade students
January 2019	Present resource request to board members
	for new resources as aligned with the
	curriculum cycle
February 2019	Design teams will form to prepare the
	curriculum changes for 2019-20 courses
April 2019	Scheduling principals will assign sections to
	teachers for the 2019-20 school year
May 2019	Teachers will receive professional learning to
	prepare for the changes in courses and
	sequencing

(Figure 4)

# **Recommendation**

At its November 17, 2018, meeting, the Curriculum/Program Standing Committee voted to forward this report to the Board of Education of Consideration. It is recommended that the Board of Education approve the request to restructure the high school social studies course scope and sequence as presented in Figure 2 of this report beginning in the 2019-20 school year.

Dr. Sue Savaglio-Jarvis Superintendent of Schools

Mrs. Julie Housaman Chief Academic Officer

Mr. Che Kearby Coordinator of Social Studies

# The Causal Effects of Cultural Relevance: Evidence from an Ethnic Studies Curriculum

#### AUTHORS

#### ABSTRACT

Thomas Dee Stanford University

Emily Penner University of California, Irvine An extensive theoretical and qualitative literature stresses the promise of instructional practices and content aligned with the cultural experiences of minority students. Ethnic studies courses provide a growing but controversial example of such "culturally relevant pedagogy." However, the empirical evidence on the effectiveness of these courses is limited. In this study, we estimate the causal effects of an ethnic studies curriculum piloted in several San Francisco high schools. We rely on a "fuzzy" regression discontinuity design based on the fact that several schools assigned students with eighth-grade GPAs below a threshold to take the course in ninth grade. Our results indicate that assignment to this course increased ninth-grade student attendance by 21 percentage points, GPA by 1.4 grade points, and credits earned by 23. These surprisingly large effects are consistent with the hypothesis that the course reduced dropout rates and suggest that culturally relevant teaching, when implemented in a supportive, high-fidelity context, can provide effective support to at-risk students.

Acknowledgements: The authors would like to thank Laura Wentworth, Bill W. Sanderson, and other members of the San Francisco Unified School District High School leadership team for supporting this research as well as Jim Shen and Mari Muraki for their invaluable assistance with data management. Financial support for this research came from the Stanford GSE Incentive Fund for Projects in SFUSD and from the Institute of Education Sciences Postdoctoral Training Fellowship under award number R305B130017. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

#### VERSION

January 2016

Suggested citation: Dee, T., & Penner, E. (2016). The Causal Effects of Cultural Relevance: Evidence from an Ethnic Studies Curriculum (CEPA Working Paper No.16-01). Retrieved from Stanford Center for Education Policy Analysis: http://cepa.stanford.edu/wp16-01

## Introduction

The racial and ethnic gaps that exist across a variety of important student outcomes in the United States are both disturbingly large and stubbornly persistent. For example, data from the recently released 2015 National Assessment of Educational Progress (NAEP) indicate that, on average, the mathematics knowledge of eighth-grade black and Hispanic students in public schools lags behind their white peers by an amount equivalent to roughly two to three full years of learning (i.e., 0.84 and 0.59 standard deviations, respectively).<sup>1</sup> Black and Hispanic students are also substantially overrepresented among students diagnosed with specific learning disabilities relative to their white peers (Aud, Fox, & KewalRamani, 2010). Furthermore, while roughly 14 percent of white students in public high schools fail to graduate on time, the corresponding dropout rates for black and Hispanic students are roughly *twice* as large (Stetser & Stillwell, 2014). These striking patterns have motivated a broad array of aggressive federal, state, and local policies that have shaped the governance and operations of public schools over the last several decades. These contentious reforms have included different forms of school accountability and choice (e.g., No Child Left Behind, vouchers, and charters) as well as initiatives to promote effective teaching through performance-based compensation systems.

Over the same period, a fast-growing (and largely qualitative) research literature in education has instead focused on classroom pedagogy and stressed the importance of "culturally relevant pedagogy" (CRP) as a compelling way to unlock the educational potential of historically marginalized students (e.g., Ladson-Billings, 1992b, 1994, 1995; Ladson-Billings & Tate, 1995). The fundamental theoretical argument for CRP is that instructional practices are substantially more effective when differentiated to align with the distinctive cultural priors that individual students experience outside of school and when they also affirm both cultural identity and critical social engagement (e.g., Gay, 2010). The "ethnic studies" courses that expanded in the wake of the U.S. Civil Rights Movement

<sup>&</sup>lt;sup>1</sup> See http://nces.ed.gov/nationsreportcard/naepdata/ for data on the main NAEP scale scores and standard deviations. Bloom et al. (2008) provide guidance on interpreting effect sizes as years of learning.

provide a particularly prominent example of culturally relevant pedagogy. In general, ethnic studies (hereafter, ES) refer to interdisciplinary programs of study that focus on the experiences of racial and ethnic minorities with a particular emphasis on historical struggles and social movements. Apart from the subject's relevance for students who are racial and ethnic minorities, ES courses often incorporate other elements of CRP through their emphasis on cultural identities and conscious engagement with social and political issues (Banks, 1997, 2012; Cammarota & Romero, 2009; Sleeter, 2014; Yosso, 2002, 2005).<sup>2</sup> While some school districts are currently experiencing sustained political controversy over their use of ES curricula (e.g., Tucson), other major urban school districts (e.g., Los Angeles and San Francisco) have begun implementing new ES courses in hopes of supporting the academic achievement of their diverse student populations.

2

However, the available quantitative evidence on the *causal* effects of ES courses (and, culturally relevant pedagogy, in general) on student outcomes is limited, particularly for larger-scale field settings. This study provides such evidence through examining the effects of a ninth-grade ES course piloted over several years in the San Francisco Unified School District (SFUSD). Specifically, using data on 1,405 students from five school-by-year cohorts, we examine the effects of ES participation on several proximate academic outcomes (i.e., attendance, grade point average, and credits earned) that are highly relevant for high school persistence. Our research design identifies the *causal* effects of taking the ES course by leveraging an institutional feature that was unique to SFUSD. High school students in our study cohorts were assigned to take the ES course if they were identified as at-risk of dropping out (i.e., an eighth-grade GPA below 2.0). We estimate the effects of ES participation through a "regression discontinuity" (RD) design that effectively compares outcomes among students whose eighth-grade GPA placed them just below versus just above this threshold condition. RD designs such as this can credibly support causal inferences because they are based on

<sup>&</sup>lt;sup>2</sup> In fact, some partially attribute the development of CRP to the academic discipline of ethnic studies (Yosso, Parker, Solorzano, & Lynn, 2004).

the "as good as randomized" assignment to treatment that exists for students proximate to this threshold (D. S. Lee & Lemieux, 2010).

We find that ES participation had large, positive effects on each of our student outcomes. Specifically, ES participation increased student attendance (i.e., reduced unexcused absences) by 21 percentage points, cumulative ninth-grade GPA by 1.4 grade points, and credits earned by 23 credits.<sup>3</sup> These GPA gains were larger for boys than for girls as well as higher in math and science than in ELA. We find that these surprisingly large effects are robust to a variety of model specifications as well as checks for possible confounds related to the treatment contrast we study (e.g., unobserved teacher effects, the possibly independent effects of an at-risk designation, "heaping" of the assignment variable). We also argue that these large effects are consistent with the hypothesis that participation in the course reduced the probability of dropping out in addition to possibly improving the performance of enrolled students. Overall, our findings indicate that a culturally relevant curriculum implemented in a strongly supportive context can be highly effective at improving outcomes among a diverse group of academically at-risk students. However, we also note that the effectiveness of this ES course may reflect other theoretical mechanisms (e.g., buffering students against "stereotype threat") and that there are potentially serious challenges of successfully replicating and scaling up this curriculum.

## **Cultural Relevance and Ethnic Studies in Theory and Practice**

Both academic and popular discussions have long emphasized the role that a community's culture may play in amplifying or ameliorating achievement gaps. For example, an older and largely discredited literature from the 1960s (e.g., Bereiter & Engelmann, 1966; Deutsch, 1967; Hess & Shipman, 1965) suggested that achievement gaps reproduce themselves, in part, because racial and ethnic minorities enter school with a deficit of "cultural capital" (e.g., skills and dispositions related to the dominant culture) that could otherwise support student success. A more contemporary literature

<sup>&</sup>lt;sup>3</sup> In our main results, we define GPA and credits earned excluding the ES course and *all* other social studies courses (and physical education) to avoid possible confounds related to differences in assessment norms across different courses. We also show results specific to mathematics, science, and English/Language Arts courses.

based on an influential article by Fordham and Ogbu (1986) has advanced the related argument that, in response to discrimination, minority communities develop an "oppositional peer culture" that effectively devalues educational effort and success as "acting white." Several qualitative studies have strongly disputed this cultural characterization (e.g., Horvat & Lewis, 2003; O'Connor, 1997). Moreover, quantitative studies (e.g., Ainsworth-Darnell & Downey, 1998; Akerlof & Kranton, 2002; Cook & Ludwig, 1997; Downey & Ainsworth-Darnell, 2002; Tyson, Darity, & Castellino, 2005) have found little evidence to support the conjectured existence of an "oppositional" culture that contributes to achievement gaps.

Another body of qualitative studies has shifted the focus to evidence that school and classroom practices are frequently misaligned with the cultural priors and out-of-school experiences of minority students (Banks, 1991; Gay, 1988; Ladson-Billings, 1992a; Valenzuela, 1999). Specifically, several anthropological and sociolinguistic studies (e.g., Au & Jordan, 1981; Mohatt & Erickson, 1981) have provided evidence that teachers who are highly effective with minority students adopt culturally "appropriate" or "congruent" methods to engage their students (e.g., through their use of language and the design of classroom activities). In an influential body of work that drew, in part, on this earlier tradition, Ladson-Billings (1992b, 1994, 1995) examined and advocated for the practical and theoretical relevance of "culturally *relevant* pedagogy" (CRP).<sup>4</sup> One key element of CRP is the use of valid cultural referents in teacher practice. However, Ladson-Billings (1992b) argues that CRP does more than "fit" school culture to student culture; it also seeks to "use" student culture as a basis for classroom practice and to enhance both cultural competence and social and political awareness.

Interestingly, independent disciplinary traditions can provide alternative theoretical frames for situating how CRP might be effective in improving the academic performance of minority students. For example, the social-psychological literature on "stereotype threat" suggests that minority students underperform in highly evaluative settings such as classrooms because of the anxiety created by the

<sup>&</sup>lt;sup>4</sup> This term is used interchangeably with the term "culturally *responsive* teaching" (CRT) (Gay, 2010; Ladson-Billings, 1992b; Sleeter, 2014).

expectation of being viewed through the lens of a negative stereotype (Steele & Aronson, 1995). Several field-based randomized trials of interventions that "buffer" students against stereotype threat have shown promise in reducing achievement gaps, though their efficacy appears to be contextdependent (Aronson & Dee, 2012; Dee, 2015; Yeager & Walton, 2011). Interestingly, the active ingredients in these stereotype-threat buffers (e.g., forewarning about stereotypes, values affirmation, external attribution for experiencing challenges, and growth mindsets) closely parallel the defining elements of CRP. The theoretical logic for CRP can also be understood in a microeconomics framework in which students have imperfect information about their own suitability for academic pursuits. Benabou and Tirole (2003) argue that, in these circumstances, individuals adopt a "lookingglass" perspective in which they come to understand their own place in the world based, in part, on the cues they receive about themselves from others (e.g., schools and teachers). In such a setting, CRP may be effective because both cultural congruence and an emphasis on cultural affirmation and integrity create positive signals about belongingness in school.

5

As commonly conceived and implemented, ES courses provide a prominent and controversial example of CRP. ES courses focus on the experiences, perspectives, and histories of traditionally underrepresented ethnic or racial groups and have several specific features. They are typically organized around the principal that CRP better engages underrepresented students and meets their needs by drawing on their cultural competencies to promote academic success. That is, ES courses are theorized to positively affect student outcomes through the creation of a relevant and meaningful curriculum that affirms students' identities, draws from their funds of knowledge, and builds students' critical intellectualism (Banks, 2012; Cammarota & Romero, 2009; Giroux & Simon, 1989; Sleeter, 2014; Tintiangco-Cubales et al., 2015). To support this type of curriculum, ES courses often adopt alternative organizational and pedagogical structures following central lessons from CRP. For example, many ES courses utilize a classroom structure in which teachers work to promote engagement by structuring collaborative, equitable, reciprocal relationships between themselves and

students (Duncan-Andrade & Morrell, 2008; Sleeter, 2014; Tintiangco-Cubales et al., 2015). In addition to content that engages with students' cultural identities, and a student-focused classroom structure, ES courses also draw from critical pedagogies, using an educational praxis to provide students with tools for identifying, reflecting upon, critiquing, and acting against systemic racism and other forms of oppression (Freire, 2000; Giroux & Simon, 1989; Sleeter, 2014; Sleeter & Bernal, 2004). Recent examples of ES coursework guide students in exploring their own identities and engaging with their community, often incorporating assignments that require repeated engagement with community and family members and some type of social activism (Tintiangco-Cubales et al., 2015). Proponents of ES also stress the positive impact that these courses will have on standard educational outcomes such as students' grades, test scores, behavior, and school completion (Cabrera, Milem, Jaquette, & Marx, 2014; Matthews & Smith, 1994; Tintiangco-Cubales et al., 2015).

6

The first formal ES course was created at San Francisco State University in 1968, growing out of the civil-rights and anti-war movements. However, some argue that ES as an idea has a longer history tracing back to Freedom Schools, Black independent schools, and tribal schools, among others (Begay et al., 1995; C. D. Lee, 1992; Sleeter, 2014). Since their formalization at the post-secondary level, ES programs and curricula have spread to universities across the country, but are still relatively uncommon in secondary schools (Hurtado, Engberg, Ponjuan, & Landreman, 2002). Recently, several school districts have or are considering adopting ES courses as graduation requirements (Gilbertson, 2014; Tucker, 2014). However, the expansion and implementation of ES programs is often highly contentious. Critics often characterize ES programs as divisive, non-academic, and detrimental to students of color because they are substituting courses that promote the development of ethnic pride in place of the development of mainstream academic skills (Sleeter, 2014). When schools, colleges, and universities offer such courses or programs of study, they often become a contentious political flashpoint. For example, the school district in Tucson, Arizona, which had offered courses in Mexican-American studies, was recently found in violation of a new state law preventing the teaching of such

courses as they "promote the overthrow of the United States government," "promote resentment toward a race or class of people" and "advocate ethnic solidarity instead of the treatment of pupils as individuals," (formerly *Arizona HB 2281*, 2010, *Arizona Revised Statute § 15-112*, 2010) and subsequently eliminated this programming under threat of losing state funding (Billeaud, 2011). Student protests of the school board meeting debating this policy and the ensuing controversy were covered by a diverse segment of the national media, including Fox News, *The Daily Show with Jon Stewart*, and the *New York Times* (Cabrera, Meza, Romero, & Rodríguez, 2013).

At the same time, other districts have expanded or are considering expanding their ES offerings. For example, the Los Angeles Unified School District and the El Rancho Unified School District recently included ES courses in their high school graduation requirements (Tucker, 2014). Recently introduced legislation in California would also require all high schools to offer ES courses (Clark, 2015; Gilbertson, 2014; Tucker, 2014).<sup>5</sup> The Texas State Board of Education also recently approved legislation allowing school districts to develop courses on Mexican-American studies (Isensee, 2014). In addition, the Berkeley Unified School District has offered a freshman ES course for over 20 years, requiring it for high school graduation during nearly all of this time (Artz, 2003; Levin, 2009; Noguera, 1994; Rubin et al., 2006; Veale, 2015). As we describe in the next section, the motivating context for this study is that the San Francisco Unified School District (SFUSD) was considering scaling-up access to a pilot ES curriculum and, possibly, requiring it as a graduation requirement.

While the expansion of ES courses illustrates both their appeal and concerns, the quantitative evidence on their effects is relatively limited. Furthermore, the evidence that is available relies on research designs that cannot necessarily support credible causal inference.<sup>6</sup> For example, a small-scale

<sup>&</sup>lt;sup>5</sup> However, the governor of California, Jerry Brown, recently vetoed separate legislation that would have required the state to develop a model ES program for California's public schools and make it available to local districts (Ceasar, 2015). <sup>6</sup> This appears to be true of CRP, more generally. One possible exception is a recent randomized trial by Kisker et al. (2012), which found that a culturally relevant math curriculum significantly improved the performance of second-grade Alaskan Natives. However, these gains may conflate the effects of general instructional quality as well as cultural

descriptive study by Cammarota (2007) focused on the "Social Justice Education Project" (SJEP), a "sub-curriculum" fielded among 17 at-risk Latina/o students in a Tucson high school over four semesters between 2003 and 2005. Cammarota (2007) reports that these students were successful both in completing high school and in engaging with advanced courses. A study by Lewis, Sullivan, and Bybee (2006) examined the effects of an "Emancipatory Education" course fielded over one semester among n=65 eighth-grade students in an urban, predominantly black school. They randomly assigned one of the two participating classes to receive this intervention and found positive effects on communal orientation, school connectedness, and achievement motivation. However, the availability of only two assignment units (and the lack of evidence on balance at baseline) makes it difficult to differentiate the true effects of the course from the effects of other unobserved traits that may have differed across these two classrooms.

Two other studies have relied on regression analyses of administrative data from the largerscale implementation of ethnic studies in Tucson, Arizona. First, a brief report from the Arizona Department of Education (Francosi 2009) compared the test performance of Hispanic students in Tucson who took one or more ES course in the 2008-09 school year with Hispanic students statewide in regressions that controlled for other student traits (e.g., prior performance, mobility, and English learner status). This analysis found no evidence that course participation improved student performance. A more recent study by Cabrera et al. (2014) relied on administrative data from roughly 8,400 students over four cohorts (i.e., the graduating classes of 2008-2011) to examine the Mexican-American studies (MAS) program offered in four schools in Tucson.<sup>7</sup> In regression analyses that control for student demographic characteristics (race/ethnicity, gender, free/reduced price lunch eligibility, Census block median income, ELL, Special Ed, and GATE status, number of school transfers), prior academic achievement (ninth- and tenth-grade weighted GPA, tenth-grade

relevance. The intervention included teacher training and the intervention also improved the performance of students who were *not* Alaskan Natives.

<sup>&</sup>lt;sup>7</sup> As noted by Cabrera and colleagues the development of this program was technically unrelated to AB 2281 and was instead a solution to a 40-year-old desegregation order for TUSD.

standardized test scores), and school-level context (school fixed effects), they find evidence that MAS participation improved student outcomes.<sup>8</sup> In particular, participation in MAS was associated with an increase in the probability of graduation of 9.5 percent across all cohorts. Among the subsample of students who initially failed the exit exam, MAS participation was associated with a 6.6 percent increase in the probability of passing the all three exit exams (the reading, writing, and math AIMS tests) on average across all cohorts.<sup>9</sup>

A central challenge to these empirical studies is that participation in the MAS program was voluntary. Thus, regression-adjusted comparisons among those who did and did not enroll may suffer from omitted variable biases of an uncertain direction. For example, if students who have a latent and unobserved capacity for school engagement are more likely to enroll in these courses, naïve regressions may overstate the program's benefits. In contrast, if at-risk students are more likely to be enrolled in MAS courses, their impact is likely to be understated. Cabrera et al. (2014, page 1094) discuss these methodological challenges and acknowledge the limitations of their study noting "our results may suffer from omitted variable bias and should not be considered true causal effects."

In sum, the theoretical arguments and public enthusiasm for ES curricula have not been matched by convincing quantitative evidence on their efficacy. Our study contributes to this gap in the literature by employing a research design that can credibly support a strong causal warrant. Specifically, we rely on an explicit student assignment rule to identify the causal effects of a year-long ES course in a regression discontinuity (RD) design. Our study is also unique in that it focuses on a mature, developed course situated within a novel setting (i.e., high schools in the San Francisco Unified School District). We describe our study context and research design in more detail below.

<sup>&</sup>lt;sup>8</sup> This primary analytic sample is restricted to students who are in schools that offered the MAS curriculum. A secondary set of analyses includes nearly 17,000 students in all TUSD schools, including those without MAS programs.

<sup>&</sup>lt;sup>9</sup> However, cohort-specific results suggest that this association was not significant for all tests in all years, particularly in the final 2011-2012 cohort. The authors speculate that the political turmoil surrounding the program in this year might have weakened its effectiveness, or that the expansion of MAS offerings to additional schools might also have contributed to the lack of significant results.

## Ethnic Studies in the San Francisco Unified School District (SFUSD)

The genesis of the SFUSD ES curriculum was in 2007 when the District's Board of Education Curriculum Committee urged the district to create a high school ES curriculum. The District's Office of Learning Support and Equity, in collaboration with faculty from the College of Ethnic Studies at San Francisco State University (SFSU), subsequently initiated the curriculum design. Specifically, ten SFUSD social studies teachers formed the "Ethnic Studies Curriculum Collective" with SFSU faculty support. This group created a course framework drawing from ES curricula used in other districts and post-secondary programs across the country during the 2007-2008 school year. Over the next two years, the Collective created lesson plans, piloted the lessons in three high schools and met twice a month for lesson critique and development (SFUSD Ethnic Studies Curriculum Collective, 2012).

On February 23, 2010, the SFUSD school board unanimously approved a resolution to implement an ES pilot program in SFUSD high schools, explicitly referencing the promise of ES courses to contribute to closing achievement gaps. Five high schools participated in the pilot, offering a year-long, ninth-grade ES course from the 2010-2011 to 2012-2013 school years. The program continued into the 2013-2014 school year. In December of 2014 (i.e., after our study window), the school board voted to expand the program to be offered at all 19 of San Francisco's high schools. It is also being considered as a ninth-grade graduation requirement (Dudnick, 2014).

The design of SFUSD's ES course stressed the use of CRP as a way to engage with students that had previously felt marginalized by the traditional curriculum. Units focused on themes of social justice, discrimination, stereotypes, and social movements from U.S. history spanning the late 18<sup>th</sup> century until the 1970s. The course also encouraged students "to explore their individual identity, their family history, and their community history" and required students to design and implement service-learning projects based on their study of their local community. The designers of this curriculum hoped that these lessons and projects would increase students' commitment to social justice and improve self-esteem. In addition to the civic and psychological goals of the ES program, the program's stated intent

was to close achievement gaps and reduce dropout rates (Office of Learning Support and Equity/Humanities, Academics and Professional Development, 2009; SFUSD Ethnic Studies Curriculum Collective, 2012).

While the ES curriculum was under development for several years and across several different high schools in San Francisco, the assignment of students varied. Some of the pilot schools chose to offer the ES course to all incoming ninth graders, while other schools used the program as an intervention for students identified as at-risk for academic failure through an early-warning system. The early-warning indicator (EWI) flagged students who, in eighth grade, had either an attendance rate below 87.5 percent or a GPA (excluding physical education) below 2.0. Prior research had shown that, in SFUSD, these binary variables were highly predictive of dropping out of school. In our data, very few students had an attendance rate below the 87.5-percent threshold so the relevant "assignment variable" in our RD design is the eighth-grade GPA.<sup>10</sup> Students whose eighth-grade GPA was below 2.0 were encouraged but not compelled to take the ES course. This partial compliance implies that our RD design is "fuzzy" and that there may be external-validity caveats to our inferences if the effect of taking the ES course is heterogeneous (Imbens and Angrist 1994). We take up this and other related issues after describing our data and methods below.

## Data

We examine the impact of SFUSD's year-long ninth-grade ES course on student outcomes, primarily using data from three of the five high schools that piloted the curriculum. These three high schools assigned only some ninth-grade students, while two other schools chose to offer the ES course to all ninth-grade students. These schools typically offered two and four sections of the course in each year, although the course was not offered in all schools in every year. Our primary study sample draws from five unique school-year cohorts in these three high schools. In these five cohorts, enrollment in

<sup>&</sup>lt;sup>10</sup> We exclude the few students with attendance rates below the threshold from our analysis. This implies that we are estimating a "frontier" RD (Reardon and Robinson 2012).

ES was encouraged, but not required, for students whose eighth-grade GPA was below 2.0. Students identified by the early-warning indicators as at risk of high school failure were automatically enrolled in the ES course when they received their course schedule at the start of their ninth-grade year. Students could opt out of the course after consulting with their academic counselor, but needed to actively select out of the course to do so.<sup>11</sup> One school used this rule over 3 years (i.e., AY 2011-12 though AY 2013-14) while two other schools used this in AY 2011-12 only. Critically, only 4 unique teachers taught the ES courses in these schools and years. We discuss, along with our other robustness checks, evidence indicating that our results are not simply due to effects unique to the effectiveness of these teachers.<sup>12</sup>

Our initial sample consists of ninth graders in these five school-year cohorts. However, we exclude those who are missing our assignment variable: a recorded eighth-grade GPA (n = 226). We also exclude a cluster of 128 students with eighth-grade GPAs that are distant from the threshold and clustered at a perfect 4.0 GPA. We also exclude a small number (n=27) of additional students with extremely low eighth-grade GPAs (i.e., less than 1.25).<sup>13</sup> These sample edits imply a final "intent-to-treat" (ITT) sample of 1,405 students. Our data on these students include several measures of baseline traits. These include binary indicators for gender and for whether the student was black, Hispanic, or Asian (with white serving as the reference category). We also have eighth-grade data on whether the student was in special education, ever suspended, or identified as an English Language Learner (ELL). We also have data on each student's attendance rate in eighth-grade, the value of their assignment variable (i.e., eighth-grade GPA exclusive of PE and centered on 2.0), and a binary indicator for our "intent-to-treat" (ITT) variable (i.e., an eighth-grade GPA less than 2.0).

<sup>&</sup>lt;sup>11</sup> Similarly, students who had not been identified using the EWI system could opt into the course after consulting with their counselors if they desired to enroll, but were not automatically assigned to the course.

<sup>&</sup>lt;sup>12</sup> Specifically, we examine the effectiveness of these teachers relative to their peers in other courses (i.e., other than ethnic studies).

<sup>&</sup>lt;sup>13</sup> Based on the limited data available, we suspect some of the students with very low eighth grade GPA have unique special-education circumstances or missing data.

Table 1 presents descriptive statistics on these students. Interestingly, 60 percent of these students are of Asian descent and 23 percent are Hispanic. Only 6 percent of these students are black. Eighteen percent of these students are identified as ELLs and 12 percent have special education status. Among the cohorts in our sample, only 42 percent are female. This is due in part to the fact that there are fewer female students than male in the district overall (48 percent across all SFUSD schools), but particularly because female students are higher-achieving than our sample (recall that we exclude students who receive a perfect 4.0, which drives most of the difference in female representation between the full district and our sample). Thirteen percent of students enrolled in the ES course and 8 percent of the sample had an eighth-grade GPA below 2.0 (i.e., an intent-to-treat as taking the ES course).<sup>14</sup>

We examine three dependent variables in our analyses, ninth-grade attendance rates (which the district refers to as instructional time), ninth-grade GPA, and ninth-grade credits earned. The last two measures are defined exclusive of all social studies courses (i.e., like the ES course) and physical education. We also control for eighth-grade attendance and GPA in our models. While the average attendance rate increases slightly between eighth and ninth-grade (from 96.32 percent to 96.69 percent), GPA declines substantially during this important transition. The mean eighth-grade GPA is just above a 3.0 (a "B" on the four-point scale), by the end of ninth grade, the average GPA is 2.65 (a "C" on the four-point scale).

We measure these outcomes for *all* students observed at baseline in our intent-to-treat sample regardless of whether they completed ninth grade. So, we view the variation in these measures as reflecting both the academic progress of enrolled students and the probability a student has dropped out of school. For students to advance from ninth to tenth grade, they must complete at least 55 credits. Because we exclude physical education (which would account for 10 credits) and social studies (which would account for an additional 10), students should complete at least 35 credits by our measure in

<sup>&</sup>lt;sup>14</sup> We define treatment uptake as being enrolled in the first-semester ES course, regardless of whether a student remained in the course.

order to advance to tenth grade. In our sample, we find that 7.3 percent of students have fewer than 35 credits at the end of ninth grade (i.e., suggesting they dropped out or were required to repeat ninth grade). Furthermore, the students at risk of dropping out tend to be concentrated among those encouraged to take ES. However, we also find evidence our results also reflect changes in the performance of enrolled students. In particular, we find virtually similar results to those we report below when we rely only on GPA from the *first* semester.

## **Regression Discontinuity (RD) Design**

Our research design effectively compares those who were just eligible for assignment to the ES course (i.e., eighth-grade GPA below 2.0) to those who were just ineligible for this assignment (i.e., eighth-grade GPA at 2.0 or above). Specifically, we use a regression discontinuity (RD) design, which can provide causal inferences that are "as good as random assignment" (Lee and Lemieux 2010) in settings like this. An RD design asks whether, conditional on a students' eighth-grade GPA, student outcomes "jump" at the threshold that defined treatment eligibility (i.e., assignment to ES). The RD design is implemented by estimating reduced-form equations of the following general form:

$$Y_{ist} = \alpha + \beta I(G_{ist} < 0) + f(G_{ist}) + \lambda X_{ist} + \eta_{st} + \varepsilon_{ist}$$

where  $Y_{ist}$  is a student outcome (e.g., GPA) for ninth grader i in school s in year t. The variable,  $G_{ist}$ , is the "assignment variable" in this RD design: eighth-grade GPA centered on 2.0. The parameter of interest,  $\beta$ , identifies the jump in outcomes when eighth-grade GPA is below 2.0, conditional on  $f(G_{ist})$ , a smooth function of the assignment variable. We specify  $f(G_{ist})$  as linear but allow for different slopes above and below the threshold.<sup>15</sup> We also explore flexibly non-parametric specifications (i.e., local

<sup>&</sup>lt;sup>15</sup> We also examined models that added quadratic terms for the assignment variable. However, a comparison of Akaike information criterion (AIC) across these specifications privileged the linear specifications.

linear regressions).<sup>16</sup> The variable,  $X_{ist}$ , refers to student-level controls and  $\eta_{st}$  refers to fixed effects unique to each year at a particular school. We also rely on heteroscedastic-consistent standard errors.

15

In Table 2, we present the RD results from examining whether actually taking the ES course does indeed jump at the 2.0 threshold. We find robust evidence that the likelihood of taking the ES course jumps roughly 27 percentage points at the threshold. Figure 1 illustrates this finding graphically by showing the probability of taking ES as a function of eighth-grade GPA. This figure organizes the data in bins of width 0.1 defined by eighth-grade GPA. The top panel uses the full sample while the bottom panel uses data within a 0.7 GPA bandwidth of the threshold. These figures consistently illustrate the jump in treatment status at the threshold. However, they also underscore that, as is common in RD and experimental settings, we have partial compliance with the intent-to-treat implied by an eighth-grade GPA below 2.0. Roughly 20 percent of students with eighth-grade GPAs of 2.0 or slightly higher took ES while just over 50 percent of students below the threshold did so. This partial compliance does not confound the internal validity of the RD design because the identifying variation is based on eighth-grade GPA rather than the decision to take the course. In other words, our reducedform estimates identify the effect of being assigned to take the ES course (i.e., the "intent-to-treat" effect) rather than the effect of taking the course. However, we can recover the estimated effect of actually *taking* the ES course (i.e., the "treatment-on-the-treated" effect) by dividing our reduced-form impact estimates by the corresponding treatment uptake at the threshold (i.e., roughly 0.25).

The fundamental treatment contrast leveraged in our study is among students eligible for assignment to the ES course and those who were not. To avoid any confounds related to different grading and attendance standards across the alternative courses students around this threshold took, we define our GPA and credits-earned measures excluding data from the ES course and all other social studies courses. A related concern is that taking ES may imply that a student takes different courses in *other* subject areas. However, we found that virtually all students were initially enrolled in math, ELA,

<sup>&</sup>lt;sup>16</sup> More specifically, we show our key results using only the data in increasingly tight bandwidths around the threshold. We also found that estimates based on the optimal-bandwidth procedure introduced by Imbens and Kalyaranaman (2012) generated similar results.

and science courses and that course selection in these subject areas did not differ for students around the 2.0 GPA threshold.<sup>17</sup> We also present results using GPA measures specific to each of these three subjects.

The strong causal warrant of the RD design is based on the assumption that students' locations just above and below the 2.0 threshold are conditionally random. One compelling way to check this key assumption is by examining whether outcome-relevant student traits jump at the threshold. In Table 3, we present the key results from auxiliary regressions that examine this. Specifically, we present the results from RD regressions where the student observables are the dependent variables. The estimated jumps in these variables at the 2.0 threshold are consistently small and statistically insignificant.

A related concern in RD designs is whether students differentially manipulate their eighthgrade GPA to place themselves on one side of the 2.0 threshold. In general, efforts to raise the value of a forcing variable do not invalidate an RD design (Lee and Lemieux 2010). However, if individuals can systematically manipulate their position relative to the threshold, it can impugn an RD's internal validity. This is a unique concern in this context because eighth-grade GPA scores "heap" at a value of 2.0 and other integer and half-integer values (see Figure 5a). Students who earn an eighth-grade GPA of 2.0 may differ from those just below this value in unobserved ways that are relevant eighth-grade outcomes. The covariate balance at the threshold suggests that this is not an internal-validity threat. However, we also report results based on samples where we eliminated heaped observations. We also see (Figure 5b) that, when we eliminate these heaps, the distribution of observations is smooth at the threshold (McCrary, 2008).

Two other internal-validity concerns are unique to our study context. One is that our RD contrast may also identify any effects related to being flagged by an early-warning indicator. One way we examine this concern is to estimate our basic RD design using data from the other San Francisco

<sup>&</sup>lt;sup>17</sup> Ninth-grade students in SFUSD typically take a ninth-grade English course, either Algebra 1 or Geometry, and either Biology or Physics.

high schools that did **not** offer ES over this period. If our RD design is valid, we expect to find null results at the GPA threshold in these schools. However, if the specification were misspecified, we might find effects unique to the threshold in these schools. Similarly, if early-warning status had independent effects, we would expect to find evidence in these schools. A second concern is that our RD framework may identify the effect of the four unique teachers in our study sample rather than the effect of the course per se. We investigate this issue by examining the comparative effectiveness of these teachers in the other courses they taught. We discuss these and other critical robustness checks as we outline our results below.

## **Main Results**

Table 4 presents the main RD results examining the effects of ES eligibility on ninth-grade attendance, GPA, and credits earned. The baseline specification (i.e., the first column for each of the three outcomes) controls for the variable of interest (i.e., a binary indicator for whether the student had an eighth-grade GPA below 2.0), eighth-grade GPA, and a linear spline that allows this assignment variable to have distinct effects above and below the threshold. The subsequent specifications introduce controls for gender, race/ethnicity, and eighth-grade special education and ELL designations, eighth-grade attendance, and whether the student was ever suspended in eighth grade. These saturated specifications yield largely similar results, although the magnitude of the point estimates is reduced somewhat. Results from the most parsimonious to the most inclusive specifications consistently indicate that students with eighth-grade GPAs at the 2.0 threshold saw statistically significant improvements on all three ninth-grade academic outcomes. Drawing from the most unrestrictive model, we find robust evidence that attendance jumped by 5.6 percentage points for students at the 2.0 threshold, GPA increased by 0.39 points, and credits earned increased by 6.3 credits.

Figures 2, 3, and 4 provide graphical illustrations of these RD results. Figure 2 plots students' eighth-grade GPA scores by their ninth-grade attendance, with a line indicating the 2.0 GPA cutoff.

Figure 3 plots the relationship between eighth-grade GPA and ninth-grade GPA (excluding social studies and P.E.). Figure 4 plots the relationship between eighth-grade GPA and ninth-grade credits earned. Each of the figures shows a discontinuity at the 2.0 threshold, echoing the regression results shown in Table 4.

The instrumental-variable (IV) estimates implied by these results indicate that *taking* ES increased attendance by 21 percentage points, GPA by 1.4 grade points, and credits earned by 23 credits (or roughly four courses). We calculate these estimated effects of taking ES by inflating the effects of ES *eligibility* on academic outcomes (Table 4) by the effect of ES *eligibility* on ES take-up. This amounts to multiplying the reduced-form effects in Table 4 by roughly 3.7 (i.e., the inverse of the jump in ES uptake at the threshold in Table 2, Column 3). These effect sizes (i.e., roughly 1.5 to 2.0 of the corresponding standard deviations in Table 1) are quite large for interventions situated in field settings. However, several considerations should be noted. First and foremost, because we define these outcome measures for all students observed at baseline, some of these striking gains are likely to reflect reductions in dropping out as well as gains in the performance of enrolled students. Second, RD estimates like ours are effectively defined for students close to the 2.0 GPA threshold. These tend to be students who are at considerable academic risk so larger gains in academic performance are possible. We take up such issues of treatment heterogeneity after first exploring the robustness of our main findings.

## **Robustness Checks**

Given the consistent, large findings across a variety of ninth-grade outcomes, we next turn to examining the robustness of the apparent effects associated with the eighth-grade 2.0 GPA discontinuity. One possible confounding explanation for these findings is that they reflect the effects of the early-warning indicator (EWI) rather than the ES course. In other words, students might be receiving other services and interventions as a result of the EWI identification and this designation or

these services might be driving changes in student outcomes rather than ES. To examine this concern, we estimated the same RD specifications using similarly constructed data from SFSUD high schools that did **not** offer an ES course. We present these results in Table 5. The small and statistically insignificant coefficients for each specification and for each of the three outcomes (i.e., there are no jumps at the 2.0 threshold in these schools) indicate that EWI did not have an empirically meaningful effect on ninth-grade outcomes. These null results are consistent with the hypothesis that the Table 4 results reflect the effects of taking ES rather than the effects of an EWI designation.

An additional concern is related to the fact that student grades are reported in even grade points, leading to large clusters of students with GPAs at even-integer or half-integer GPA values (e.g., 3.0 and 3.5 rather than 2.99). As has been shown in other work using regression discontinuities to estimate causal effects, results can be biased by this heaping of the assignment variable (Barreca, Guldi, Lindo, & Waddell, 2011). We present several robustness specifications in Table 6 to examine whether our results are being driven by the preponderance of even and half-integer eighth-grade GPAs by excluding students with several specific values. In these "donut RDs" we first exclude students with eighth-grade GPAs of 2.0 exactly. In a second version, we exclude students with any whole- or halfinteger value for their eighth-grade GPA. For each of the ninth-grade academic outcomes, the point estimates presented in Table 6 are from individual regressions for the variable eighth-grade GPA is less than 2.0, akin to the point estimates shown in Table 4 from models including student controls, with the first row replicating these estimates exactly.

The results in Table 6 show that our inferences are robust in specifications that exclude students whose eighth-grade GPA fell on the heaped values of 2.0 as well other integer and half-integer values. Each of the coefficients for all three of the ninth-grade academic outcomes is statistically significant at the 5 percent level and the magnitude of the coefficients is fairly consistent whether or not the students with GPAs of 2.0 or any integer or half-integer value are included in the sample.

Table 7 presents another important robustness check based on restricting the estimation sample to observations in increasingly tight bandwidths around the threshold for both the first-stage and reduced-form effects. These results provide evidence about whether the results are biased due to functional-form assumptions or are unduly influenced by observations that are far from the 2.0 GPA threshold. The results in Table 7 indicate that both the first-stage and reduced-form estimates are robust as the sample shrinks with each of the progressively tighter bandwidths, including a bandwidth that is within half of a grade point from the 2.0 threshold. If anything, the first-stage and reduced-form estimates are larger as the bandwidth tightens.

Table 8 presents another robustness check based on simultaneously estimating jumps at the GPA threshold that actually influenced assignment to the ES course, 2.0, and at other "placebo" thresholds that have no relevance. We examine six placebo thresholds at each quarter-integer interval between GPAs of 1.0 and 3.0. Across both the first-stage and reduced-form estimates, the only statistically significant effects are observed at the 2.0 threshold, with one exception. Students at the 2.25 GPA threshold, just below the cutoff 2.25 cutoff, earn significantly fewer ninth-grade credits than students on the other side of this cutoff. With this exception, the nearly universal lack of statistically significant effects at these false thresholds is consistent with the absence of specification error.

A final robustness check stems from the particular implementation of the ES curriculum in SFUSD. While ES was piloted at five high schools over several years, assignment to ES was based on the EWI in only five school-year cohorts at three schools. In each of these school-year cohorts, only one teacher taught ES, leaving us with a total of four unique teachers during our study window. This raises the possibility that the effects we observe are the result of effects unique to these teachers rather than the ES curriculum itself. To investigate this concern, we examined the effectiveness of ES teachers relative to their peers, when teaching courses *other than* ES. We began by identifying all of the non-ES courses taught by our four ES teachers in any of the study years and then identified all of the other teachers of those same courses. The majority of these courses were social studies courses,

such as U.S. and world history, but the list also included some college counseling and homeroom-type courses, which we chose to exclude from the analysis. We focused on students in these social studies courses who had *not* taken ES. We then recovered teacher fixed effect estimates from regression models predicting each of our ninth-grade student outcomes (ninth-grade overall and subject-specific GPA, credits earned, and attendance), conditional on eighth-grade student controls and school by year fixed effects. For each of our outcomes, we examined the relative rankings of the teacher fixed effects to determine if the ES teachers were over-represented among teachers who had the largest fixed effects estimates. Across each of the outcome measures, we found the value-added estimates of the ES teachers to be quite uniformly disbursed throughout the distribution of teacher fixed effect estimates.<sup>18</sup> Wilcoxon rank-sum tests further suggest that the fixed effect estimates of ES teachers are not significantly different from those of non-ES teachers in the same subjects. Of the four ES teachers, on fairly consistently had the largest fixed-effect estimate. To ensure that this generally more effective teacher was not driving our results, we re-estimated our key ES results without this teacher. Doing so did not qualitatively alter the previously reported findings.

## **Treatment Heterogeneity**

Our main impact estimates may obscure several forms of treatment heterogeneity that are worth noting and exploring. For example, one well-known caveat about external validity involves the "localness" of RD estimates. That is, because our research design leverages the targeting of ES courses to at-risk students, our resulting estimates may not speak to the effects these courses may have on students with high-performance in eighth grade.<sup>19</sup> Second, the impact of taking the ES course could conceivably vary across students with different demographic traits. In Table 9, we present evidence on this issue by showing the first-stage and reduced-form estimates in samples defined by race, gender,

<sup>&</sup>lt;sup>18</sup> For example, for ninth-grade GPA, the ranks of the four ethnic-studies teachers were 9, 14, 30, and 35 among 37 total social studies teachers.

<sup>&</sup>lt;sup>19</sup> The in-progress scale-up of this course across SFUSD high schools may provide opportunities to explore this heterogeneity.

and ethnicity. The point estimates show that there are consistently positive effects across male, female, Asian and Hispanic groups of students. However, the improved outcomes are particularly concentrated among boys and statistically insignificant for girls. For Hispanic students, the estimated effects are consistently large and statistically significant across all ninth-grade outcomes. For Asian students, while each of the point estimates is positive, they are only significant for the first-stage and ninth-grade instructional-time effects. This suggests that, while the ES course is not harmful for any of the enrolled students, it is particularly good for male students and Hispanic students.

In Table 10, we examine whether there are heterogeneous effects on student GPA by subject. Each cell in this table reports the key RD estimate (i.e., the estimated "jump" at the 2.0 threshold) from a unique regression. The first column presents point estimates conditional on linear splines of the assignment variable and on school-by-year fixed effects. The subsequent models introduce student and eighth-grade covariates. The point estimates show that there are consistently positive, statistically significant effects on GPA specific to math and to science, despite the distal nature of their respective content to that of ES. However, in ELA, while the point estimates remain positive, they are smaller and statistically insignificant.

The literature on causal inference has also recently emphasized another possible (and subtler) form of treatment heterogeneity based on the potential-outcomes framework and how individuals respond to their intent-to-treat (i.e., as "compliers", "always takers", and "never takers"). Specifically, Imbens and Angrist (1994) show that, when treatment effects are not homogenous across these groups, estimates like ours are "local average treatment effects" (LATE). Such LATE estimates identify the effect of the treatment for those who comply with their intent-to-treat but not necessarily for those who always (or never) take up the treatment regardless of the intent-to-treat. A recent study by Bertanha and Imbens (2014) provides straightforward guidance on assessing the empirical relevance of this possible treatment heterogeneity in "fuzzy" RD applications like ours. Specifically, they recommend estimating the reduced-form RD specifications for separate samples defined by whether the student

took up the treatment (i.e.,  $ES \in 0,1$ ). We report these results in Table 11 using our saturated model (i.e., column 3 in Table 4). In the first row, we repeat our full-sample results as a point of reference. In the second row, we show the estimated "jump" in outcomes using only data from students who did not take ES (i.e., ES = 0). In this sub-sample, the threshold separates never-takers (i.e., to the left of the threshold) from the population of never-takers and compliers who are to the right of the threshold. The fact that outcomes are higher to the left of the threshold (i.e., for at least two of the three outcomes) indicates that never-takers have unobserved traits that predispose them to better student outcomes relative to compliers. Intuitively, this finding suggests that students who insist on taking a health or college preparation/study skills course in lieu of ES have unobserved traits that imply better academic outcomes.

The next row identifies the jump at the threshold for each outcome measure using only data on students who took ES (i.e., ES = 1). The population to the left of the threshold consists of compliers and always-takers while the population to the right only contains always-takers. Our evidence that each student outcome jumps significantly at the threshold could indicate that taking the course is more effective for those who only take it when assigned relative to those who insist on taking it. This could occur, for example, if culturally relevant pedagogy is less novel and relevant for the types of students who insist on taking it. Overall, these findings are consistent with the type of heterogeneity implied by the LATE theorem. As a practical matter, this evidence of treatment heterogeneity has salience for the external validity we might expect when scaling up access to this course. In particular, these findings suggest that taking the course is less necessary for the type of student who refuses to take the course (i.e., never-takers) and less effective for students who insist on taking it when available (i.e., always-takers). We revisit issues of scalability in our concluding remarks.

## Discussion

The results presented in this study indicate that the ninth-grade ES curriculum implemented in SFUSD led to large and statistically significant improvements in students' ninth-grade GPA, attendance, and credits earned. To our knowledge, this is the first study to examine the effect of any type of culturally relevant pedagogy (CRP) in a quantitative study that supports credible causal inferences. Specifically, our "regression discontinuity" (RD) design leveraged a class-assignment rule that encouraged academically at-risk students (i.e., those with eighth-grade GPA below 2.0) to take the course. We present several forms of evidence that affirm the validity of this discontinuous assignment rule as a quasi-experiment as well as evidence on the robustness of our main findings. We note evidence that these large effects appear to reflect both reductions in the probability of dropping out as well as improvements in the performance of enrolled students. We also find that the effects of this course were concentrated among males, Hispanics, and to a lesser degree, Asians.

Taken at face value, these findings provide a compelling confirmation of an extensive literature that has emphasized the capacity of CRP to unlock the educational potential of historically marginalized students. However, we also stress that our results are consistent with other theoretical frames as well. In particular, a field-experimental literature in social psychology has shown that quite modest interventions that buffer students against stereotype threat can, under the right circumstances, dramatically improve student outcomes. ES courses combine several of the active ingredients of these interventions (e.g., affirmation, external attribution for difficulties, forewarning about stereotypes) and expose students to them in an exceptionally intense and persistent manner (i.e., through a year-long course rather than a brief exercise). Furthermore, SFUSD's ES course was also targeted in a manner consistent with such "buffering" interventions (i.e., at the beginning of the school year and during a possibly difficult transition to high school). Further research that can measure alternative mediators can provide insight into the relevance of different theorized mechanisms.

As a matter of policy and practice, this study's findings should be interpreted in light of several important caveats related to external validity and scalability. First, as in all RD studies, our results focus on localized comparisons between students who are just above and below the eligibility threshold for ES enrollment. It is, thus, an open question whether the effects of this or any other ES curriculum would generalize to higher-performing students. Furthermore, we also find evidence that the benefits of taking such a course are larger among those who comply with the encouragement to take the course (i.e., relative to students who would always take it when available).

There are also several reasons to be cautious about the likely impact of scaling up or replicating this ES course. The implementation of ES in SFUSD was, arguably, conducted with a high degree of fidelity, forethought, and planning. In particular, it appeared to draw upon the work of a core group of dedicated teachers, engaging in a regular professional learning community, with outside support from experts in the subject to create and sustain the program. As scholars from a number of disciplines have noted that the effects of such smaller-scale interventions are often very different when the same policies are implemented at scale (Dodge, 2011; Welsh, Sullivan, & Olds, 2010). The broader school, district, and community contexts in which this course was situated may also be relevant. For example, the literature on stereotype threat stress that the success of buffering interventions depends critically on settings that can enhance and encourage positive "recursive" processes related to student engagement and success (Yeager and Walton 2011). Nonetheless, SFUSD's ES program appears to constitute an important proof of concept, indicating that culturally relevant pedagogy can be extraordinarily effective in supporting the academic progression of struggling students.
### References

Ainsworth-Darnell, J. W., & Downey, D. B. (1998). Assessing the oppositional culture explanation for racial/ethnic differences in school performance. *American Sociological Review*, *63*(4), 536–553.

Akerlof, G. A., & Kranton, R. E. (2002). Identity and schooling: Some lessons for the economics of education. *Journal of Economic Literature*, *XL*, 1167–1201.

Arizona HB 2281 (2010).

Arizona Revised Statute § 15-112 (2010).

Aronson, J., & Dee, T. (2012). Stereotype threat in the real world. *Stereotype Threat: Theory, Processes, and Application*, 264–279.

Artz, M. (2003, December 12). BHS to Keep Ethnic Studies. Category: Page One from The Berkeley Daily Planet. *The Berkeley Daily Planet*, p. 1. Berkeley, CA.

Aud, S., Fox, M. A., & KewalRamani, A. (2010). Status and Trends in the Education of Racial and Ethnic Groups. NCES 2010-015. *National Center for Education Statistics*.

Au, K., & Jordan, C. (1981). Teaching reading to Hawaiian children: Finding a culturally appropriate solution. *Culture and the Bilingual Classroom: Studies in Classroom Ethnography*, 139–152.

Banks, J. A. (1991). A curriculum for empowerment, action, and change. In C. E. Sleeter (Ed.), *Empowerment through multicultural education* (pp. 125–141). Albany, NY: State University of New York Press.

Banks, J. A. (1997). Teaching strategies for ethnic studies (2nd ed.). Boston: Allyn and Bacon.

Banks, J. A. (2012). Ethnic studies, citizenship education, and the public good. *Intercultural Education*, 23(6), 467–473.

Barreca, A. I., Guldi, M., Lindo, J. M., & Waddell, G. R. (2011). Saving Babies? Revisiting the effect of very low birth weight classification. *The Quarterly Journal of Economics*, *126*(4), 2117–2123.

Begay, S., Dick, G. S., Estell, D. W., Estell, J., McCarty, T. L., & Sells, A. (1995). Change from the inside out: A story of transformation in a Navajo community school. *Bilingual Research Journal*, *19*(1), 121–139.

Benabou, R., & Tirole, J. (2003). Intrinsic and extrinsic motivation. *The Review of Economic Studies*, 70(3), 489–520.

Bereiter, C., & Engelmann, S. (1966). *Teaching disadvantaged children in the preschool*. Prentice-Hall Englewood Cliffs, NJ.

Bertanha, M., & Imbens, G. W. (2014). "External Validity in Fuzzy Regression Discontinuity Designs" National Bureau of Economic Research Working Paper No. 20773.

Billeaud, J. (2011, December 27). Ariz schools' ethnic studies program ruled illegal. *Associated Press*. Retrieved from http://news.yahoo.com/ariz-schools-ethnic-studies-program-ruled-illegal-021635252.html

Bloom, H. S., Hill, C. J., Black, A. R., & Lipsey, M. W. (2008). Performance trajectories and performance gaps as achievement effect-size benchmarks for educational interventions. *Journal of Research on Educational Effectiveness*, *1*(4), 289–328.

Cabrera, N. L., Meza, E. L., Romero, A. J., & Rodríguez, R. C. (2013). "If there is no struggle, there is no progress": Transformative youth activism and the school of Ethnic Studies. *The Urban Review*, *45*(1), 7–22.

Cabrera, N. L., Milem, J. F., Jaquette, O., & Marx, R. W. (2014). Missing the (Student Achievement) Forest for All the (Political) Trees Empiricism and the Mexican American Studies Controversy in Tucson. *American Educational Research Journal*, *51*(6), 1084–1118.

Cammarota, J., & Romero, A. (2009). The social justice project: A critically compassionate intellectualism for chicano/a students. In W. Ayers, T. Quinn, & D. Stovall (Eds.), *Handbook for Social Justice Education*. New York: Routledge.

Ceasar, S. (2015, October 12). California Gov. Jerry Brown vetoes ethnic studies bill - LA Times. *Los Angeles Times*. Los Angeles, CA. Retrieved from http://www.latimes.com/local/lanow/la-me-ln-brown-ethnic-studies-bill-20151011-story.html

Clark, S. (2015, January 13). New bill would require ethnic studies offering in all California high schools. *Santa Cruz Sentinel*. Santa Cruz, CA. Retrieved from http://www.mercurynews.com/education/ci\_27311449/new-bill-would-require-ethnic-studies-offering-all

Cook, P. J., & Ludwig, J. (1997). Weighing the "burden of 'acting white": Are there race differences in attitudes toward education? *Journal of Policy Analysis and Management*, *16*(2), 256–278.

Dee, T. S. (2015). Social Identity and Achievement Gaps: Evidence from an Affirmation Intervention. *Journal of Research on Educational Effectiveness*, 8(2), 149–168.

Deutsch, M. (1967). *The disadvantaged child: Selected papers of Martin Deutsch and associates* (Vol. 1967). New York, NY: Basic Books.

Dodge, K. A. (2011). Context matters in child and family policy. Child Development, 82(1), 433-442.

Downey, D. B., & Ainsworth-Darnell, J. W. (2002). The search for oppositional culture among black students. *American Sociological Review*, *67*(1), 156–164.

Dudnick, L. (2014, December 9). SFUSD board to vote on expanding ethnic studies curriculum to all high schools. *The San Francisco Examiner*. San Francisco, CA. Retrieved from http://www.sfexaminer.com/sanfrancisco/sfusd-board-to-vote-on-expanding-ethnic-studies-curriculum-to-all-high-schools/Content?oid=2913811

Duncan-Andrade, J., & Morrell, E. (2008). The art of critical pedagogy: The promise of moving from theory to practice in urban schools. *New York: Peter Lang.* 

Fordham, S., & Ogbu, J. U. (1986). Black students' school success: Coping with the "burden of 'acting white."" *The Urban Review*, *18*(3), 176–206.

Freire, P. (2000). *Pedagogy of the oppressed*. (M. Bergman Ramos, Trans.) (30th Anniversary). New York, NY: Continuum.

Gay, G. (1988). Redesigning Relevant Curricula for Diverse Learners. *Education and Urban Society*, *2*(4), 327–40.

Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice*. Teachers College Press.

Gilbertson, A. (2014, November 19). Ethnic studies requirement added for LAUSD graduation. Retrieved November 26, 2014, from http://www.scpr.org/blogs/education/2014/11/19/17582/lausd-requiring-ethnic-studies-for-graduation/

Giroux, H. A., & Simon, R. (1989). Popular culture and critical pedagogy: Everyday life as a basis for curriculum knowledge. *Critical Pedagogy, the State and Cultural Struggle*, 236–252.

Hess, R. D., & Shipman, V. C. (1965). Early experience and the socialization of cognitive modes in children. *Child Development*, *36*(4), 869–886.

Horvat, E. M., & Lewis, K. S. (2003). Reassessing the "burden of Acting White": The importance of peer groups in managing academic success. *Sociology of Education*, *76*(4), 265–280.

Hurtado, S., Engberg, M. E., Ponjuan, L., & Landreman, L. (2002). Students' precollege preparation for participation in a diverse democracy. *Research in Higher Education*, *43*(2), 163–186.

Imbens, G. W., & Angrist, J. D. (1994). Identification and Estimation of Local Average Treatment Effects. *Econometrica*, *62*(2), 467-475.

Imbens, G., & Kalyanaraman, K. (2012). Optimal bandwidth choice for the regression discontinuity estimator. *The Review of Economic Studies*, 79, 933-959.

Isensee, L. (2014, May 7). Why Mexican American Studies is Coming to More Texas Schools. *Houston Public Media*. Houston, TX. Retrieved from http://www.houstonpublicmedia.org/news/why-mexican-american-studies-is-coming-to-more-texas-schools/

Kisker, E. E., Lipka, J., Adams, B. L., Rickard, A., Andrew-Ihrke, D., Yanez, E. E., & Millard, A. (2012). The potential of a culturally based supplemental mathematics curriculum to improve the mathematics performance of Alaska Native and other students. *Journal for Research in Mathematics Education*, *43*(1), 75–113.

Ladson-Billings, G. (1992a). Liberatory consequences of literacy: A case of culturally relevant instruction for African American students. *Journal of Negro Education*, 378–391.

Ladson-Billings, G. (1992b). Reading between the lines and beyond the pages: A culturally relevant approach to literacy teaching. *Theory into Practice*, *31*(4), 312–320.

Ladson-Billings, G. (1994). *The dreamkeepers: Successful teachers of African American students*. San Francisco, CA: Jossey-Bass.

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, *32*(3), 465–491.

Ladson-Billings, G., & Tate, W. (1995). Toward a critical race theory of education. *The Teachers College Record*, *97*(1), 47–68.

Lee, C. D. (1992). Profile of an independent Black institution: African-centered education at work. *Journal of Negro Education*, *61*(2), 160–177.

Lee, D. S., & Lemieux, T. (2010). Regression Discontinuity Designs in Economics. *Journal of Economic Literature*, 48, 281–355.

Levin, S. (2009, June 17). Racial Tensions Boil Over at Berkeley High. *East Bay Express*. Retrieved from http://www.eastbayexpress.com/eastbay/racial-tensions-boil-over-at-berkeley-high/Content?oid=1370149

Matthews, C. E., & Smith, W. S. (1994). Native American related materials in elementary science instruction. *Journal of Research in Science Teaching*, *31*(4), 363–380.

McCrary, J. (2008). Manipulation of the running variable in the regression discontinuity design: A density test. *Journal of Econometrics*, *142*(2), 698–714.

Mohatt, G., & Erickson, F. (1981). Cultural differences in teaching styles in an Odawa school: A sociolinguistic approach. In H. Trueba, G. Guthrie, & K. Au (Eds.), *Culture and the bilingual classroom: Studies in classroom ethnography* (pp. 105–119). Rowley, MA: Newbery.

Noguera, P. A. (1994). Ties that bind, forces that divide: Berkeley High School and the challenge of integration. *University of San Francisco Law Review*, *29*, 719.

O'Connor, C. (1997). Dispositions toward (collective) struggle and educational resilience in the inner city: A case analysis of six African-American high school students. *American Educational Research Journal*, *34*(4), 593–629.

Office of Learning Support and Equity/Humanities, Academics and Professional Development. (2009). *Proposal to pilot a 9th grade Ethnic Studies course in the San Francisco Unified School District during the 2010-11 school year*. San Francisco, CA: San Francisco Unified School District.

Rubin, B. C., Wing, J. Y., Noguera, P. A., Fuentes, E., Liou, D., Rodriguez, A. P., & McCready, L. T. (2006). Structuring inequality at Berkeley High. *Unfinished Business: Closing the Racial Achievement Gap in Our Schools*, 29–86.

SFUSD Ethnic Studies Curriculum Collective. (2012). *Ethnic Studies Strategic Plan 2012-2013*. San Francisco Unified School District.

29

Sleeter, C. E. (2014). *The Academic and Social Value of Ethnic Studies: A Research Review*. Washington, D.C.: National Education Association Research Department.

Sleeter, C. E., & Bernal, D. D. (2004). Critical pedagogy, critical race theory, and antiracist education: Implications for multicultural education. *Handbook of Research on Multicultural Education*, *2*, 240–258.

Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, *69*(5), 797.

Stetser, M. C., & Stillwell, R. (2014). *Public High School Four-Year On-Time Graduation Rates and Event Dropout Rates: School Years 2010-11 and 2011-12.* (No. NCES 2014-391.). National Center for Education Statistics.

Tintiangco-Cubales, A., Kohli, R., Sacramento, J., Henning, N., Agarwal-Rangnath, R., & Sleeter, C. (2015). Toward an Ethnic Studies Pedagogy: Implications for K-12 Schools from the Research. *The Urban Review*, 47(1), 104–125.

Tucker, J. (2014, November 22). Ethnic studies requirement proposed for S.F. high schools. Retrieved November 24, 2014, from http://www.sfchronicle.com/news/article/Ethnic-studies-requirement-proposed-for-S-F-high-5911492.php

Tyson, K., Darity, W., & Castellino, D. R. (2005). It's not "a black thing": Understanding the burden of acting white and other dilemmas of high achievement. *American Sociological Review*, *70*(4), 582–605.

Valenzuela, A. (1999). *Subtractive Schooling: US-Mexican Youth and the Politics of Caring*. Ithaca, NY: State University of New York Press.

Veale, L. (2015, February 26). Bay Area schools put race on the syllabus. San Francisco, CA: kalw. Retrieved from http://kalw.org/post/bay-area-schools-put-race-syllabus

Welsh, B. C., Sullivan, C. J., & Olds, D. L. (2010). When early crime prevention goes to scale: A new look at the evidence. *Prevention Science*, *11*(2), 115–125.

Yeager, D. S., & Walton, G. M. (2011). Social-psychological interventions in education: They're not magic. *Review of Educational Research*, *81*(2), 267–301.

Yosso, T. J. (2002). Toward a critical race curriculum. *Equity & Excellence in Education*, 35(2), 93–107.

Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race Ethnicity and Education*, 8(1), 69–91.

Yosso, T. J., Parker, L., Solorzano, D. G., & Lynn, M. (2004). From Jim Crow to affirmative action and back again: A critical race discussion of racialized rationales and access to higher education. *Review of Research in Education*, *28*, 1–25.



(b) ±0.7 Bandwidth

Figure 1 - Ninth-Grade Ethnic-Studies Participation by Eighth-Grade GPA



(b)  $\pm 0.7$  Bandwidth

Figure 2 - Ninth-Grade Attendance by Eighth-Grade GPA



(b) ±0.7 Bandwidth

Figure 3 - Ninth-Grade GPA by Eighth-Grade GPA



(b)  $\pm 0.7$  Bandwidth

Figure 4 - Ninth-Grade Credits Earned by Eighth-Grade GPA



(b) Density Test (McCrary 2008), Excluding Integer and Half-Integer Heaps

Figure 5 - Distribution of Eighth-Grade GPA centered on 2.0

Table 1 - Summary Statistics

Variable	Mean	Std. Dev	Min	Max
Grade-9 Attendance	96.32	6.41	20.11	100
Grade-9 GPA (excluding P.E. & social studies)	2.65	0.97	0	4
Grade-9 Credits Earned	48.21	9.81	0	80
Grade-9 Ethnic Studies	0.13	0.33	0	1
Grade-8 GPA (excluding P.E.)	3.03	0.67	1.29	3.93
I(Grade-8 GPA $\leq$ 2.0)	0.08	0.28	0	1
Female	0.42	0.49	0	1
Black	0.06	0.24	0	1
Hispanic	0.23	0.42	0	1
Asian	0.60	0.49	0	1
Grade-8 Special Education	0.12	0.33	0	1
Grade-8 Attendance	96.68	3.14	87.50	100
Grade-8 Ever Suspended	0.02	0.13	0	1
Grade-8 English Language Learner	0.18	0.39	0	1

Notes: N = 1,405 9th graders from five analysis cohorts, in three SFUSD high schools in fall 2011, 2012, 2013. Grade-8 GPA, while not centered here for comparability with Grade-9 GPA, is centered in all analyses.

Independent Variable	(1)	(2)	(3)	(4)	(5)
I(Grade-8 GPA $\leq$ 2.0)	0.274***	0.268***	0.273***	0.255***	0.247**
	(0.098)	(0.100)	(0.097)	(0.097)	(0.099)
Female		0.023	0.012	0.012	0.019
		(0.017)	(0.017)	(0.017)	(0.019)
Black		0.106**	0.144***	0.144***	0.146**
		(0.051)	(0.050)	(0.051)	(0.057)
Hispanic		0.077**	0.073**	0.076**	0.092***
		(0.031)	(0.030)	(0.031)	(0.033)
Asian		-0.017	-0.021	-0.018	-0.014
		(0.023)	(0.024)	(0.024)	(0.026)
Grade-8 Special Ed			-0.170***	-0.182***	-0.183***
			(0.023)	(0.023)	(0.026)
Grade-8 Attendance			-0.007*	-0.007*	-0.006
			(0.004)	(0.004)	(0.004)
Grade-8 Ever Suspended			-0.056	-0.053	-0.053
			(0.059)	(0.063)	(0.063)
Grade-8 ELL			0.026	0.027	0.027
			(0.024)	(0.024)	(0.027)
Excluding Grade-8 GPA = 2.0	no	no	no	yes	no
Excluding Grade-8 GPA = any					
integer or half-integer	no	no	no	no	yes
$R^2$	0.178	0.195	0.222	0.228	0.218
Sample Size	1405	1405	1405	1375	1195

Table 2 - Regression Discontinuity Estimates, Determinants of Grade 9 Ethnic-Studies Participation

Notes: Student data are from five school-by-year cohorts of SFUSD 9th graders. All models condition on school-byyear fixed effects and grade-8 GPA with separate splines above and below the threshold. Grade-8 GPA is centered at 2.0. Robust standard errors are reported in parentheses.

Independent Variable	Estimate	
Female	0.014	
	(0.090)	
Black	0.090	
	(0.071)	
Hispanic	-0.040	
	(0.098)	
Asian	0.064	
	(0.098)	
Grade-8 Special Ed	-0.009	
1	(0.078)	
Grade-8 Attendance	1.198*	
	(0.658)	
Grade-8 Ever Suspended	0.009	
Stude of Elver Subpended	(0.036)	
Grade-8 ELL	-0.042	
	(0.092)	

Table 3 - Regression Discontinuity Estimates, Covariate Balance

Notes: Each point estimate is from a separate RD regression where the baseline covariate is the dependent variable. All models condition on school-by-year fixed effects and grade-8 GPA with separate splines above and below the threshold. N = 1,405 in all models. Robust standard errors are reported in parentheses. \* p<0.10; \*\* p<0.05; \*\*\* p<0.01

Independent Variable	Gra	de-9 Attendar	nce	(	Grade-9 GPA		Grade	-9 Credits Ea	
I(Grade-8 GPA < 2.0)	6.164***	6.397***	5.638***	0.413***	0.442***	0.387***	6.482***	6.723***	6.328***
	(1.607)	(1.577)	(1.449)	(0.138)	(0.136)	(0.132)	(2.272)	(2.273)	(2.201)
Female		-0.393	-0.094		0.084**	0.111***		-0.321	0.026
		(0.310)	(0.289)		(0.035)	(0.035)		(0.466)	(0.462)
Black		-3.638***	-3.346***		-0.456***	-0.479***		-2.980**	-3.414**
		(0.982)	(0.860)		(0.093)	(0.093)		(1.401)	(1.384)
Hispanic		-1.184**	-1.197**		-0.363***	-0.350***		-2.165**	-2.134**
		(0.549)	(0.496)		(0.065)	(0.064)		(0.915)	(0.912)
Asian		0.810*	-0.495		0.039	-0.023		-0.308	-0.646
		(0.422)	(0.447)		(0.055)	(0.056)		(0.749)	(0.774)
Grade-8 Special Ed			0.616			0.179***			4.239***
-			(0.495)			(0.054)			(0.761)
Grade-8 Attendance			0.725***			0.046***			0.384***
			(0.089)			(0.007)			(0.106)
Grade-8 Ever Suspended			-8.434***			-0.377***			-7.727***
			(2.225)			(0.143)			(2.475)
Grade-8 ELL			-0.605			-0.101**			-0.889
			(0.456)			(0.047)			(0.654)
$\overline{\mathbf{R}^2}$	0.213	0.248	0.379	0.564	0.597	0.618	0.236	0.245	0.281
Sample Size	1405	1405	1405	1404	1404	1404	1404	1404	1404

Table 4 - Regression Discontinuity Estimates, Grade-9 Outcomes

Notes: Student data are from five school-by-year cohorts of SFUSD 9th graders. All models condition on school-by-year fixed effects and grade-8 GPA with separate splines above and below the threshold. Grade 8 average GPA is centered at 2.0. Robust standard errors are reported in parentheses.

Independent Variable	Gra	ade-9 Attendar	nce		Grade-9 GPA		Grad	e-9 Credits Ea	rned
I(Grade-8 GPA < 2.0)	1.603	2.093	1.799	-0.111	-0.053	-0.063	-2.875	-2.403	-2.460
	(1.786)	(1.711)	(1.580)	(0.128)	(0.125)	(0.120)	(2.597)	(2.562)	(2.451)
Female		-1.245***	-0.717***		0.056**	0.099***		-0.691*	-0.132
		(0.265)	(0.241)		(0.025)	(0.024)		(0.356)	(0.347)
Black		-4.078***	-3.720***		-0.537***	-0.533***		-4.054***	-3.688***
		(0.916)	(0.829)		(0.066)	(0.064)		(1.061)	(1.042)
Hispanic		-1.784***	-1.954***		-0.437***	-0.451***		-2.698***	-2.987***
1		(0.504)	(0.492)		(0.049)	(0.049)		(0.669)	(0.669)
Asian		0.827**	-0.982**		0.020	-0.094**		0.004	-1.646***
		(0.384)	(0.430)		(0.037)	(0.039)		(0.461)	(0.514)
Grade-8 Special Ed			-0.777			0.097*			0.849
L.			(0.592)			(0.053)			(0.671)
Grade-8 Attendance			0.800***			0.054***			0.703***
			(0.066)			(0.005)			(0.084)
Grade-8 Ever Suspended			-6.293***			-0.612***			-8.740***
Grade-6 Ever Suspended			(1.559)			(0.116)			(2.656)
Grade-8 ELL			-1.053**			-0.123***			0.172
			(0.445)			(0.037)			(0.563)
$\mathbb{R}^2$	0.140	0.182	0.277	0.454	0.500	0.534	0.301	0.316	0.353
Sample Size	2860	2860	2860	2851	2851	2851	2851	2851	2851

Table 5 - Regression Discontinuity Estimates, Grade-9 Outcomes in High Schools without Ethnic Studies

Notes: Student data are from 9th graders in SFUSD high schools that did not offer Ethnic Studies. All models condition on school-by-year fixed effects and grade-8 GPA with separate splines above and below the threshold. Grade-8 GPA is centered at 2.0. Robust standard errors are reported in parentheses.

Sample	Grade-9 Attendance	Grade-9 GPA	Grade-9 Credits Earned	Sample Size
Full Sample	5.638***	0.387***	6.328***	1405
	(1.449)	(0.132)	(2.201)	
Excluding Grade-8 GPA = 2.0	5.452***	0.371***	5.490**	1374
	(1.438)	(0.133)	(2.198)	
Excluding Grade-8 GPA =	5.831***	0.344**	5.127**	1194
any integer or half-integer	(1, 600)	(0, 126)	(2, 270)	

Table 6 - Regression Discontinuity Estimates, Grade-9 Outcomes in High Schools with and without Heaping

any integer or half-integer(1.609)(0.136)(2.279)Notes: Student data are from five school-by-year cohorts of SFUSD 9th graders. All models condition on school-by-<br/>year fixed effects, grade-8 GPA with separate splines above and below the threshold, and other student controls.Grade-8 GPA is centered at 2.0. The sample size for GPA and credits earned is 1,404. One student attended part of the

fall semester, but left before earning final grades in their courses. Robust standard errors are reported in parentheses.

Bandwidth					
Sample	Ethnic Studies	Grade-9 Attendance	Grade-9 GPA	Grade-9 Credits Earned	Sample Size
Full Sample	0.273***	5.638***	0.387***	6.328***	1405
	(0.097)	(1.449)	(0.132)	(2.201)	
$\pm 1.0$	0.261***	6.802***	0.450***	8.884***	633
	(0.097)	(1.536)	(0.142)	(2.378)	
± 0.9	0.278***	7.152***	0.468***	9.522***	545
	(0.097)	(1.575)	(0.143)	(2.435)	
$\pm 0.8$	0.300***	7.081***	0.481***	9.726***	486
	(0.098)	(1.600)	(0.144)	(2.483)	
± 0.7	0.298***	6.777***	0.509***	9.677***	429
	(0.097)	(1.670)	(0.148)	(2.547)	
± 0.6	0.335***	7.693***	0.557***	11.079***	378
	(0.104)	(1.937)	(0.156)	(2.732)	
± 0.5	0.363***	6.567***	0.524***	10.405***	340
	(0.111)	(1.641)	(0.164)	(2.830)	

Table 7 - Regression Discontinuity Estimates, Grade-9 Outcomes by Bandwidth Restrictions

Notes: Student data are from five school-by-year cohorts of SFUSD 9th graders. All models condition on school-by-year fixed effects, grade-8 GPA with separate splines above and below the threshold, and other student controls. Grade-8 GPA is centered at 2.0. Robust standard errors are reported in parentheses. \* p<0.10; \*\* p<0.05; \*\*\* p<0.01

Threshold	Ethnic Studies	Grade-9 Attendance	Grade-9 GPA	Grade-9 Credits Earned
Grade-8 GPA <1.5	0.085	-4.975	0.034	-1.538
	(0.181)	(6.373)	(0.274)	(5.979)
Grade-8 GPA <1.75	0.018	-4.173	-0.255	-2.540
	(0.191)	(3.167)	(0.271)	(5.037)
Grade-8 GPA <2	<b>0.347</b> *** (0.130)	<b>5.339</b> ** (2.270)	<b>0.441**</b> (0.182)	<b>8.493</b> *** (3.274)
Grade-8 GPA <2.25	-0.086	-1.202	-0.090	-4.579**
	(0.053)	(1.399)	(0.108)	(1.788)
Grade-8 GPA <2.5	0.046	-1.502	-0.065	-0.519
	(0.050)	(0.921)	(0.099)	(1.313)
Grade-8 GPA <2.75	0.044	-0.269	0.106	-0.815
	(0.040)	(0.513)	(0.089)	(1.057)
Grade-8 GPA <3	0.018	0.729*	-0.049	-0.986
	(0.034)	(0.423)	(0.082)	(0.888)

Table 8 - Regression Discontinuity Estimates, Placebo and Actual Thresholds

Notes: Student data are from five school-by-year cohorts of SFUSD 9th graders. All models condition on school-by-year fixed effects, grade-8 GPA with separate splines above and below the threshold, and other student controls. Grade-8 average GPA is centered at 2.0. Robust standard errors are reported in parentheses.

	Ethnic Studies	Grade-9 Attendance	Grade-9 GPA	Grade-9 Credits Earned	Sample Size
Full Sample	0.273***	5.638***	0.387***	6.328***	1404
	(0.097)	(1.449)	(0.132)	(2.201)	
Male	0.300***	6.432***	0.395**	8.021***	818
	(0.113)	(1.655)	(0.154)	(2.603)	
Female	0.189	2.662	0.319	2.449	586
	(0.193)	(2.809)	(0.273)	(3.632)	
Hispanic	0.307**	5.430*	0.406*	7.945**	324
1	(0.146)	(2.789)	(0.211)	(3.757)	
Asian	0.445***	4.831***	0.311	3.943	844
	(0.155)	(1.579)	(0.239)	(3.795)	

Table 9 - Regression Discontinuity Estimates by Student Traits

Notes: Student data are from five school-by-year cohorts of SFUSD 9th graders. All models condition on school-byyear fixed effects, grade-8 GPA with separate splines above and below the threshold, and other student controls. Grade-8 GPA is centered at 2.0. Robust standard errors are reported in parentheses.

Variable	(1)	(2)	(3)
Grade-9 GPA	0.413***	0.442***	0.387***
	(0.138)	(0.136)	(0.132)
Grade-9 GPA - Math	0.505**	0.521**	0.462**
	(0.205)	(0.211)	(0.210)
Grade-9 GPA - Science	0.459**	0.481***	0.430**
	(0.192)	(0.185)	(0.180)
Grade-9 GPA - ELA	0.217	0.253	0.195
	(0.189)	(0.178)	(0.175)
Basic RD controls	yes	yes	yes
Student Demographics	no	yes	yes
Grade-8 Traits	no	no	yes

Table 10 - Regression Discontinuity Estimates, Effect of Ethnic-Studies Eligibility on Subject-Specific GPA

Notes: Student data are from five school-by-year cohorts of SFUSD 9th graders. All models condition on school-byyear fixed effects, grade-8 GPA with separate splines above and below the threshold, and other student controls. Grade-8 GPA is centered at 2.0. Robust standard errors are reported in parentheses.

Sample	Grade-9 Attendance	Grade-9 GPA	Grade-9 Credits Earned
Full Sample	5.638***	0.387***	6.328***
	(1.449)	(0.132)	(2.201)
ES = 0	4.477**	0.330*	3.991
	(2.025)	(0.181)	(3.312)
ES = 1	5.074**	0.536***	6.414*
	(2.091)	(0.202)	(3.414)

Table 11 - Regression Discontinuity Estimates by Complier Status

Notes: Student data are from five school-by-year cohorts of SFUSD 9th graders. All models condition on school-by-year fixed effects, grade-8 GPA with separate splines above and below the threshold, and other student controls. Grade-8 GPA is centered at 2.0. The last two rows show RD estimates for separate samples of students who did (ES=1) and did not (ES=0) take the ES course (Bertanha and Imbens 2014). Robust standard errors are reported in parentheses.

This page intentionally left blank

### KENOSHA UNIFIED SCHOOL DISTRICT Kenosha, Wisconsin

#### November 27, 2018

#### Proposal to Change to Fifth Grade Instrumental Start for Band and Orchestra

#### **Background**

Kenosha Unified School District offers beginning performance music lessons to elementary students in grades 4 and 5. Currently orchestra lessons are offered to students entering grades 4 and 5, with band lessons offered in fifth grade only. This proposal is to request that instruction in orchestra and band start in fifth grade beginning with the 2019-2020 school year.

As student demographics have changed and district poverty levels have increased, the instrumental music directors have identified the need to modify the existing elementary lesson structure in order to increase support to the at-risk student population. The instrumental music selection data demonstrates that up to 50% of elementary students who select an orchestra instrument in fourth grade, transition to a band instrument in fifth grade. Students without a home support system are more likely to struggle with orchestra instruments in fourth grade and not see immediate success; then, the same students switch to band in fifth grade. For similar reasons then these same students are not successful in band and are more likely to drop instrumental music altogether. The transition to a single start time will reduce the number of students in each lesson and afford the directors the ability to provide more individualized support, thus increasing the likelihood that they will experience early success and remain in the instrumental music program.

The coordinator of fine arts has monthly department meetings with all directors. At these meetings throughout the 2017-18 school year there was discussion focused on why the proposed change in start time would benefit Kenosha's elementary students. The pros and cons chart below is a compilation of the information gleaned from these discussions.

PROS	CONS
Band and orchestra directors unanimously support this change	The community may view this as making a cut to the program
There is a one-time decision to be in band or orchestra	
Eliminates students "trying" one and switching to the other	

#### **Impact**

# **Considerations**

Some community pushback in making this change is anticipated; however, having the full support of band and orchestra directors will reduce this significantly because they will join forces in positively communicating the new process to the families at the schools they serve (Appendix A). Currently orchestra students have the option to begin lessons in the summer before fourth grade and band lessons begin in the fall of fifth grade. If this change is approved, orchestra lessons would begin in the summer before fifth grade and band lessons would begin in the fall. Orchestra students may also choose to begin lessons in the fall (and that is current practice). Initial feedback from the chief of school leadership, regional coordinators of school leadership and learning and principal representatives are supportive of the change.

Date	Activity
September 2018	Obtain signatures of support from all
	directors (Appendix A)
September 14, 2018	Meeting with breakfast cluster elementary
	principals to gain feedback
October 2018	Principal breakfast cluster members sharing
	start time change at breakfast meetings
November 9, 2018	Share at agenda review meetings
November 12, 2018	Share at Curriculum/Program Committee
	meeting

## **Timeline**

November 27, 2018	Request Board approval at November meeting
November - December 2018	Coordinator of fine arts and orchestra directors will update the recruitment procedures and prepare a letter for parents
January 2018	Coordinator of fine arts will facilitate communication of the change in start time for elementary orchestra to the Orchestra Booster Club. Letter to parents of third and fourth grade students is sent home in weekly folders outlining the updated program.
April - May 2018	Recruitment for students entering fifth grade at all elementary schools begins for band and orchestra

# **Recommendation**

At its November 17, 2018, meeting, the Curriculum/Program Standing Committee voted to forward this report to the Board of Education for consideration. It is recommended that the Board of Education approve changing the performance music lessons for orchestra from fourth to fifth grade beginning in the 2019-20 school year.

Dr. Sue Savaglio-Jarvis Superintendent of Schools

Mrs. Julie Housaman Chief Academic Officer

Mr. Scott Plank Coordinator of Fine Arts



Department of Fine Arts 262-359-6388

September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email	prefered -
splank@kusd.edu) by Friday, September 28 at 4pm.*	

Yes, I am an advocate of this programming shift	<u>    X    </u>
No, I do not advocate this programming shift	

Director Name (Print)

ROBERT B WELLS

Director Signature

Robert B. Welle

Date <u>10/3/2018</u>



Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign,	date and	return t	his docume	ent to fine	arts (	(scan	and e	mail	prefered	÷
splank@kus	d.edu) by	Friday,	September	r 28 at 4p	m.*					

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

**Director Name (Print)** 

Director Signature

Date



Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered - splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

V

No, I do not advocate this programming shift

Direct	or Name (Print)	Brittan	y Teschler
Direct	or Signature	Briting	Arschlie
20000	/ /	¥-7)	l de la companya de l
Date	9/25/	2018	



Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered - splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)

Director Signature

ona.

Date



Department of Fine Arts 262-359-6388

September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

 $\sim$ 

No, I do not advocate this programming shift

Director Name (Print)

Director Signature

E. TERCEK Jenek

Date  $\frac{9/28/18}{28}$ 



Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered - splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)

Director Signature

Date



Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and	return this document	to fine arts (scan	and email prefered -
splank@kusd.edu) by	Friday, September 2	8 at 4pm.*	

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)

X

Director Signature

Keith Robinson Keith Rolinson

27/2018 Date



Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered - splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)

Kathy Replej

**Director Signature** 

0 Date



Department of Fine Arts 262-359-6388

September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)

**Director Signature** 

Lindsay Pytel Lindsay Pytel

Date \_\_\_\_\_\_\_\_\_



Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered - splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)

Director Signature

Date



Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No. I do not advocate this programming shift

**Director Name (Print)** 

**Director Signature** 

Geoff Poole

9125/18 Date


September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and retur	n this document to fine arts	(scan and email prefered -
	y, September 28 at 4pm.*	

Yes, I am an advocate of this programming shift

5		/	
1	$\checkmark$		
1	~		
<u></u>			

No, I do not advocate this programming shift

**Director Name (Print)** 

**Director Signature** 

10/4/18 Date



September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)

michael Monk

Director Signature

Date

9/24/12



September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered - splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift



No, I do not advocate this programming shift

Director Name (Print)

Allison Millsaps

Director Signature

24/18 Date



September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered - splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)

Jennifer Marun

Director Signature

Date



September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra.
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered - splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift



No, I do not advocate this programming shift

**Director Name (Print)** 

Director Signature

Date



September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (	(scan and email prefered -
splank@kusd.edu) by Friday, September 28 at 4pm.*	

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)	Matt Maccari
Director Signature	May
Date 09(281	$ \breve{8} \vee$



September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered - splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift



No, I do not advocate this programming shift

Director Name (Print)

Director Signature

Date



September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered - splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

**Director Name (Print)** 

**Director Signature** 

Date



Department of Fille Arts 202-35

September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- · Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered - splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)	Jeren y Kriedeman
Director Signature	Jangthan
Date <u>9/24/</u>	18



September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered - splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)	Heather Kamikawa
Director Signature	Hothi Stanikan
Date 9/26/20	518



September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)

Mueller A Mul Karl

Director Signature

Date



September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered - splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)

**Director Signature** 

Date 09/26/18



September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered - splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)

way Dickinson

Director Signature

9.24-18 Date



September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered - splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

**Director Name (Print)** 

**Director Signature** 

10/4/18 Date



September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign,	, date and	return	this docur	ment to fine	e arts	(scan	and e	email	prefere	d -
splank@kus	d.edu) by	Friday,	Septemb	oer 28 at 4p	om.*					

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)

Leslie Cook Lelio Cinsta

Director Signature

9/24 Date



September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)

Director Signature

Angela Barone angela Baron

Date 9/28/18

chool District Department of Fine Arts 262-359-6388

September 24, 2018

Alignment of fifth grade band and orchestra start time for KUSD schools:

In order for us to move forward with this programming shift proposal (tentatively slated for 2019-2020 if approved), fine arts needs the signature of every member of the band and orchestra departments noting their advocacy for this change.

Moving forward with this shift would mean that orchestra would begin the summer before fifth grade and band would begin the fall of fifth grade.

Additional elements for consideration:

- We would need to prepare and execute a communication plan for parents/community
- Recruiting would need to be done jointly between band and orchestra
- No reduction in orchestra staffing would occur due to this change elementary orchestra group sizes would become smaller

Please sign, date and return this document to fine arts (scan and email prefered splank@kusd.edu) by Friday, September 28 at 4pm.\*

Yes, I am an advocate of this programming shift

No, I do not advocate this programming shift

Director Name (Print)

Director Signature

Helen Breitenbach Cooper HoenBreitenbuck Cooper

Date 10 4 18

This page intentionally left blank

## KENOSHA UNIFIED SCHOOL DISTRICT Kenosha, Wisconsin

### November 27, 2018

### New Course and Course Drop Proposals: Science

### **Background**

The Medical Science Academy instructors at Indian Trail High School propose adding Microbiology to their course offerings and dropping Forensic Science. Microbiology is a course that aligns more closely with the content of the other Medical Science Academy Courses while filling a current gap in the curriculum. It will provide an introduction to content that will better prepare students for further study and careers in medical science related fields.

Since the adoption and implementation of new science standards, the content and investigative skills covered in the current Forensic Science course overlap with content in other Medical Science Academy courses making the course obsolete. The course change proposal is coming forward at this time as part of phase three of the curriculum review cycle for high school science elective courses.

### **Courses**

Course	Action	School	Appendix
ITA Forensic Science	Drop	Indian Trail Medical	А
		Science Academy	
Microbiology	Add	Indian Trail Medical	В
		Science Academy	

#### **Recommendation**

At its November 13, 2018, meeting, the Curriculum/Program Standing Committee voted to forward this report to the Board of Education for consideration. It is recommended that the Board of Education approve dropping Forensic Science and adding Microbiology to the course catalogue.

Dr. Sue Savaglio-Jarvis Superintendent of Schools

Mrs. Julie Housaman Chief Academic Officer Ms. Christine Pratt Coordinator of Science

Appendix A



### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 6/13/2018 Administrator's Name: Christine Pratt

Department and School: Science: Indian Trail Medical Science Academy

Course Name: ITA Forensics

Request: 🗆 New Course 📄 New Course Name 🔅 Course Revision 👘	$\boxtimes$ Remove Course
---	---------------------------

Credits: 0.5 Check if honors:  $\Box$ 

Recommended Prerequisites (if any): NA

<u>Rationale</u>: This course will be replaced by a microbiology course. Since the adoption and implementation of new science standards, the content and investigative skills covered in ITA Forensic Science overlap with content in other Medical Science Academy courses making this course obsolete. Deleting it will make way for the microbiology course that is more closely aligned with the district science standards and the course/career pathways of the Medical Science Academy.

Proposed Course Description: In three or four sentences, write a course overview.

N/A

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

N/A

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

N/A

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$0

D. Facilities/Space: \$0

B. Textbooks/Kits: \$0

E. Professional Learning: \$0

C. Supplementary: \$0

Appendix B



#### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 6-14-2018 Administrator's Name: Christine Pratt

Department and School: Med Sci Academy at Indian Trail High School and Academy

Course Name: Microbiology

Request:	X New Course	□ New Course Name	□ Course Revision	□ Remove Course
request.				

Credits: .5 Check if honors:  $\Box$ 

Recommended Prerequisites (if any): None

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

Microbiology is a course that aligns closely with the content of the other Medical Science Academy Courses while filling a current gap in the curriculum. The content of this course, while very important for students interested in a medical science field is not found in other science. It will provide an introduction to content that will better prepare students for further study and careers in medical science related fields.

Proposed Course Description: In three or four sentences, write a course overview.

This course is designed to build upon student investigations that began in grades K-8 and high school biology and chemistry and will be performance and laboratory based. It integrates the study of microbial physiology, ecology, and genetics with instruction focusing on the impact microorganisms have on health, agriculture, biotechnology and the environment. Areas of study include classification of microorganisms; cellular structure and function; metabolic diversity; microbial genetics; control of microbial growth; microbial ecology, biotechnology and applied microbiology; and host-microbe interactions. Careers related to medicine, health-care, research, food science and biotechnology should be emphasized throughout the curriculum. Real-life applications should be emphasized through case studies concerning diseases; epidemiology; food preparation and safety; and use of microbes in industry, agriculture, biotechnology and the environment.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

This course covers content that is above and beyond the Next Generation Science Standards. The course content aligns with HS\_LS1-1, LS1-2, LS1-3, LS1-4, LS2-3, LS2-5, LS2-7, LS3-2, LS4-2, LS4-4, HS-ETS1-1, ETS1-2

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Week 1: Cell Basics Week 2-3: Lab Safety/Microscopy Techniques Week 4: Careers in Microbiology Week 5: Lab Techniques Week 6-7: Bacterial Cell Growth and Reproduction Week 8: Gram Positive and Gram Negative Classification
Week 9-10: Parasitology
Week 11-12: Virology
Week 13: Fermentation
Week 14: Food Safety
Week 15: Environmental Microbes
Week 16-17: Control of Microbial Growth and Antimicrobial Drugs
(2 weeks allowed for flexibility and/or major project)

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

- A. Teaching Staff: No Additional Costs
- D. Facilities/Space: No Additional Costs
- B. Textbooks/Kits: \$11,000 Teaching and Learning budget
- C. Supplementary: (\$2000 for equipment from Teaching and Learning budget)
- E. Professional Learning: Included in cost of textbook adoption (see B)

2

## KENOSHA UNIFIED SCHOOL DISTRICT Kenosha, Wisconsin

#### November 27, 2018

### **Proposed Program Changes to the Certified Nursing Assistant Program**

#### **Background**

The Certified Nursing Assistant (CNA) program is designed for students with a desire to become Certified Nursing Assistants, to explore the nursing pathway or to become a healthcare professional other than nursing. This program was first offered to Kenosha Unified School District students in 2004 through Youth Options at Gateway Technical College. Initially Gateway reserved seats for high school students at their campus. As demand for the program increased Gateway no longer had the capacity to reserve spots for high school students. High school students had the option to register at Gateway for the CNA course, but Gateway students had priority in registering and most often the high school students were not able to obtain a spot. In order to provide this opportunity for high school students, a contract for service course was developed with Gateway. KUSD pays Gateway to provide a CNA instructor at the high schools and offer the course during the school day. Currently KUSD offers CNA through contract for service with Gateway at Indian Trail High School and Academy and Tremper High School.

In 2016 Gateway instructors began hosting a CNA meeting each semester for parents and students to review the program requirements. The Gateway instructors share the costs associated with the course and emphasize that this course is not intended to be an option for exploring the healthcare field and that students who do not plan to take the exam and work in the healthcare industry should not enroll in this course. Students who successfully complete the course have only one year to complete the exam. If this deadline is not met, the course must be retaken prior to registering for the exam. As demonstrated in the CNA Course History Chart below a minimal number of students enrolling in the CNA course

Academic requirements to enroll in the CNA course include: an ACT reading score of 15+ or an Accuplacer reading score of 237. The instructor completes the state test paperwork with each student before the class ends. The chart below includes the breakdown of expenses related to the course and identifies whether the district or the student is responsible for payment of these fees.

Item	KUSD Pays	Student Pays
Class Expense - \$462.66	Х	
Workbook Fee - \$16.50		Х
Background Check - \$50.00		х
Medical Document Manager- \$25.00		Х
Uniform (scrubs, watch and shoes) Approximate cost: \$75-\$100		Х
CNA Test - \$125.00 (fee waived until December 2020 through a Gateway Fast Forward grant)		Х

## **CNA Course Costs**

The chart below includes data from 2014-15 through 2017-18 on the number of students from each high school who have completed the course and the state exam.

CNA 2014-15					
School	Number of Students Enrolled	Number of Students Passed Test			
Bradford Students	11	4			
Tremper Students	20	6			
Indian Trail Students	40	10			
Reuther Students	6	1			
Lakeview Students	1	0			
Total	78	21			
Took Class at Tremper	25				
Took Class at Indian Trail	53				
	CNA 2015-16				
School	Number of Students Enrolled	Number of Students Passed Test			
Bradford Students	4	2			
Tremper Students	16	5			
Indian Trail Students	40	14			
Reuther Students	6	0			

## CNA Course History 2014-2018

Lakeview Students	0	0
Harborside Students	1	0
eSchool Students	1	1
Total	68	22
Took Class at Tremper	44	
Took Class at Indian Trail	24	
	CNA 2016-17	
School	Number of Students Enrolled	Number of Students Passed Test
Bradford Students	12	5
Tremper Students	12	3
Indian Trail Students	43	13
Reuther Students	5	0
Lakeview Students	0	0
Harborside Students	3	0
Total	75	21
Took Class at Tremper	16	
Took Class at Indian Trail	59	
	CNA 2017-18	
School	Number of Students Enrolled	Number of Students Passed Test
Bradford Students	9	2
Tremper Students	27	6
Indian Trail Students	36	19
Reuther Students	1	1
Harborside Students	4	2
Total	77	30
Took Class at Tremper	20	
Took Class at Indian Trail	57	

## **Rationale**

Currently the CNA course is offered at Indian Trail and Tremper High School and all KUSD high school students are eligible to enroll. Dedicated classroom space with a bathroom

and sink access are required for the classroom instruction. All equipment (hospital beds, full body mannequin, etc.) required for the classrooms were donated by the Kenosha County Long Term Care Work Alliance. It may be possible to obtain donated items for the Tremper classroom; however, the timeframe for availability of these items is unknown. In its current condition, the classroom at Tremper should no longer be used as a CNA classroom until the outof-date equipment is replaced.

The intended outcome for students taking the course is obtaining state certification to become a nursing assistant. With only 25% of students enrolled in the CNA course taking the state exam this outcome is not being met. Staff members from Gateway Technical College and Kenosha Unified School District have provided the following feedback for reconfiguration of the existing CNA course in district high schools.

Stakeholder	Challenges with Current Program Structure
Gateway Technical College – Julie Capelli, Nursing Assistant Program Director	<ul> <li>Tremper High School</li> <li>Some of the equipment is out of date - approximately \$15K-\$25K to complete the essential updates.</li> <li>Tremper offers the course beginning at 7:17 am. It is challenging to find an instructor for this timeframe because the schedule only allows for two hours of instruction rather than four. Therefore, the instructor is committed to two hours of instruction for the length of a semester as opposed to one</li> </ul>
	<ul> <li>quarter with four hours per day of instruction.</li> <li>Clinical opportunities for students are limited due to the early AM course schedule.</li> <li>Students do not experience an entire bathing and feeding rotation in their clinical experience due to two-hour time frame. Instructors feel that the students do not get the full experience compared to other sections that are taught at Gateway.</li> </ul>
	<ul> <li>Purpose for course enrollment</li> <li>Students share that their "parents are making them" take the course and that they do not have an interest or plan to take the exam.</li> <li>Currently there are no prerequisites required to take this course and CNA is being viewed as an exploratory course.</li> <li>Students do not follow through and take the CNA exam.</li> </ul>

	<ul> <li>Schedule</li> <li>The overall school year schedule is challenging due to testing, early release days, assemblies, snow days, etc.</li> </ul>
KUSD - high school principals and counselors	<ul> <li>Scheduling the Course</li> <li>At Indian Trail students are scheduled for periods 6 and 7 for this first quarter course. These students have two open blocks of instructional time for the second quarter.</li> <li>At Bradford and Reuther students must be released for periods 5, 6 and 7 to provide time for transportation to Indian Trail. These students have three open blocks of instructional time for the second quarter.</li> <li>Costs associated with the course</li> <li>Students have shared that they are not able to take the test due to the exam fees</li> <li>Transportation</li> <li>Transportation for students at Reuther and Bradford to Indian Trail</li> </ul>

## **Proposed CNA Program Plan**

The proposed program updates will address the desired program outcomes of increasing course enrollment and increasing the number of students passing the exam as well as offering a solution to existing schedule and out-of-date equipment challenges. The updates include:

- Replace the Tremper CNA course with a summer course at Froedtert South Campus to provide students access to current equipment and an opportunity to experience the learning in an authentic setting. The course can be scheduled for four hours without impacting the school day schedule.
- Adjust the time CNA is offered at Indian Trail High School Academy from the last two periods of the school day to 3:30-7:30 so that students are not left with two or three open periods for one quarter. This change will also allow students at other district high schools to commute to Indian Trail at the end of the school day and not impact the school day schedule.

- Implement a prerequisite requirement for the CNA course to provide students an opportunity to explore the medical field to ensure that the CNA students have an interest in the medical field and a strong desire to complete the exam. Prerequisite course options include:
  - Medical Terminology
  - Exploring Health Occupations
  - Any course in the MedSci Academy
- Implement a formal application process that will include: three formal references, an essay and a completed application form to further ensure that students electing to enroll in this course are committed to earning their CNA license.
- Students will be encouraged to enroll in CNA junior year so that they are able to participate in work-related experience senior year. After the exam is passed each student will work with the Youth Apprenticeship Specialist at their school to coordinate placement in a job.
- Bus tokens for transportation to Froedtert and ITHSA will be provided through the Technical Incentive Grant for students receiving free or reduced lunch can receive bus tokens for students who need transportation assistance to Froedtert and ITA. That will be paid for through the Technical Incentive Grant.
- The proposed summer schedule at Froedtert South Campus and the proposed school year schedule at Indian Trail High School Academy are in the chart below:

Proposed Summer 2019 CNA Schedule (Students select <i>one</i> of two options below) Courses Offered at Froedtert South Campus		
Option 1 Option 2		
<b>Theory</b>	<b>Theory</b>	
6/12-7/12	6/12-7/5	
Monday - Thursday 4-8:00 pm	Monday - Thursday 7:35 am - 1:35 pm	
Clinical	<b>Clinical</b>	
7/16 - 8/2	7/16 - 8/2	
Monday - Thursday 4-8:00 pm	Tuesday - Thursday 7:30 - 11:30 am	

Proposed School Year 2019-2020 Schedule Courses offered at Indian Trail		
Quarter 1 Quarter 3		
<u>Theory</u>	<u>Theory</u>	
9/5-10/12	1/22-2/22	
M-TH 3:30-7:30	M-Th 3:30-7:30	
<u>Clinical</u>	<u>Clinical</u>	
10/16-11/2	2/26-3/20	
M-TH, 3:30-7:30.	M-TH, 3:30-7:30	

• Information will be provided to school counselors regarding the recommended career pathway for students with an interest in healthcare career opportunities.

	-
9th or 10th Grade	Exploring Health Careers
9th or 10th Grade	Medical Terminology
By March 1st of 10th Grade	Apply for C.N.A. Program
11th Grade	Nursing Assistant
12th Grade	Health Services Youth Apprenticeship

## **Healthcare Career Pathway**

• As outlined in the communication timeline below the coordinator of career and technical education, Gateway CNA program personnel, high school principals and counselors have been exploring options to better serve our students interested in healthcare college and career pathways.

Date	Activity
Spring 2018	Gateway met with coordinator of career and technical education to share proposed CNA program change.
Spring 2018	Email communication with high school principals and counselors to explain proposed change and gain feedback.
November 2018	Proposed change brought to agenda review, standing committee and to the Board for approval

## **Communication Timeline**

December 2018	Collaborate with Gateway to develop message for communication to high school principals and counselors as well as parents and students in English and Spanish
January 2019	Communication to all stakeholders in English and Spanish is completed prior to registration for 2019-2020 school year

## **Budget Impact**

The chart below will demonstrate that the proposed change is cost neutral. The annual cost to provide this course to students has varied from \$34,000 to \$37,000 over the past four years and actual costs are dependent on the actual student enrollment in the course.

Existing CNA Program Cost		
Year Approximate Cost		
2014-15	\$37,350.00	
2015-16	\$35,550.00	
2016-17	\$34,650.00	
2017-18	\$35,574.00	

While expenses remain cost neutral, ACT 59 will provide reimbursement to the district for each student who successfully completes the exam and is certified to become a CNA. This district reimbursement varies based on the number of requests statewide for reimbursement. Reimbursements have been as high as \$1000.00 per student, but can be as low as \$300. Nonetheless, if 60 KUSD students pass the exam the reimbursement to the district would range from \$18,000.00 to \$60,000.00. This funding could be used to reimburse students receiving free and reduced lunch for the CNA exam costs.

## **Recommendation**

At its November 13, 2018, meeting, the Curriculum/Program Standing Committee voted to forward this report to the Board of Education for consideration. It is recommended that the

Board of Education approve the request to eliminate the CAN course at Tremper High School and to change the start time for the CAN course from the school day to after school at Indian Trail High School and Academy beginning in the 2019-20 school year.

Dr. Sue Savaglio-Jarvis Superintendent of Schools

Ms. Julie Housaman Chief Academic Officer

Ms. Cheryl Kothe Coordinator of Career and Technical Education This page intentionally left blank

## Kenosha Unified School District Kenosha, Wisconsin

### November 27, 2018

## COURSE CHANGE PROPOSALS: YOUTH APPRENTICESHIP

### Background

Youth Apprenticeship is a program designed by the Wisconsin Department of Workforce Development for high school juniors and seniors who want hands-on learning in an occupation area at a worksite along with classroom instruction. This is a one- or two-year elective program that combines academic and technical instruction with mentored on-the-job learning.

Seven Course Change Proposals and ten new course proposals are being submitted to update the names of Youth Apprenticeship opportunities in the career and technical education area to match the Wisconsin Department of Workforce Development names. The new courses are updates to Youth Apprenticeship that were not put in the curriculum when Youth Apprenticeship first started in the district.

CURRENT COURSE NAME	NEW COURSE TITLE	SCHOOLS	APPENDIX
Architectural Design—YAP	Architecture & Construction—YAP Level 1	Bradford, Indian Trail, LakeView, Reuther, and Tremper	А
Financial Services—YAP	Finance—YAP Level 1	Bradford, Indian Trail, LakeView, Reuther, and Tremper	В
Health Services—YAP	Health Science—YAP Level 1	Bradford, Indian Trail, LakeView, Reuther, and Tremper	С
Hospitality/Tourism—YAP	Hospitality, Lodging & Tourism—YAP Level 1	Bradford, Indian Trail, LakeView, Reuther, and Tremper	D
Manufacturing/Machining— YAP	Manufacturing—YAP Level 1	Bradford, Indian Trail, LakeView, Reuther, and Tremper	E
Auto Technology—YAP	Transportation, Distribution & Logistics—YAP Level 1	Bradford, Indian Trail, LakeView, Reuther, and Tremper	F

### **Course Name Change Requests**

CURRENT COURSE NAME	NEW COURSE TITLE	SCHOOLS	APPENDIX
Principles—Engineering— YAP	Science Technology, Engineering & Mathematics—YAP Level 1	Bradford, Indian Trail, LakeView, Reuther, and Tremper	G

# New Youth Apprenticeship Course Requests

NEW COURSE	SCHOOLS	APPENDIX
Architecture & Construction—YAP Level 2	Bradford, Indian Trail,	Н
	LakeView, Reuther, and	
	Tremper	
Art, A/V Technology & Communications—	Bradford, Indian Trail,	Ι
YAP Levels 1 and 2	LakeView, Reuther, and	
	Tremper	
Finance—YAP Level 2	Bradford, Indian Trail,	J
	LakeView, Reuther, and	
	Tremper	
Heath Science—YAP Level 2	Bradford, Indian Trail,	K
	LakeView, Reuther, and	
	Tremper	
Hospitality, Lodging & Tourism-YAP	Bradford, Indian Trail,	L
Level 2	LakeView, Reuther, and	
	Tremper	
Manufacturing—YAP Level 2	Bradford, Indian Trail,	М
	LakeView, Reuther, and	
	Tremper	
Marketing—YAP Levels 1 & 2	Bradford, Indian Trail,	N
-	LakeView, Reuther, and	
	Tremper	
Science, Technology, Engineering &	Bradford, Indian Trail,	0
Mathematics (STEM)—YAP Level 2	LakeView, Reuther, and	
	Tremper	
Transportation, Distribution & Logistics—	Bradford, Indian Trail,	Р
YAP Level 2	LakeView, Reuther, and	
	Tremper	
Information Technology—YAP Level 2	Bradford, Indian Trail,	Q
	LakeView, Reuther, and	
	Tremper	

### **Recommendation**

At its November 13, 2018, meeting, the Curriculum/Program Standing Committee voted to forward this report to the Board of Education for consideration. It is recommended that the Board of Education approve this request for seven course name changes and the addition of ten new courses for the Youth Apprenticeship Program as follows beginning in the 2019-20 school year:

CURRENT COURSE NAME	NEW COURSE TITLE
Architectural Design—YAP	Architecture & Construction—YAP
	Level 1
Financial Services—YAP	Finance—YAP Level 1
Health Services—YAP	Health Science—YAP Level 1
Hospitality/Tourism—YAP	Hospitality, Lodging & Tourism—YAP
	Level 1
Manufacturing/Machining—YAP	Manufacturing—YAP Level 1
Auto Technology—YAP	Transportation, Distribution &
	Logistics—YAP Level 1
Principles—Engineering—YAP	Science, Technology, Engineering &
	Mathematics—YAP Level 1

NEW COURSES	
Architecture & Construction—YAP Level 2	
Art, A/V Technology & Communications—YAP Levels 1 and 2	
Finance—YAP Level 2	
Health Science—YAP Level 2	
Hospitality, Lodging & Tourism—YAP Level 2	
Manufacturing—YAP level 2	
Marketing—YAP Level 2	
Science, Technology, Engineering & Mathematic (STEM)—YAP Level 2	
Transportation, Distribution & Logistics—YAP Level 2	
Information Technology—YAP Level 2	

Dr. Sue Savaglio-Jarvis Superintendent of Schools

Ms. Julie Housaman Chief Academic Officer

Ms. Cheryl Kothe Coordinator of Career and Technical Education



### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education--Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: 868111 & 868112 Architectural Design-YAP

Credits: .5 Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

Updated course name from Wisconsin Department of Workforce Development

Proposed Course Description: In three or four sentences, write a course overview.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.).

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$

- D. Facilities/Space: \$
- B. Textbooks/Kits: \$ E. Professional Learning: \$
- C. Supplementary: \$
### **APPENDIX B**



#### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: 818111 & 818112 Financial Services-YAP

Credits: Click here to enter text. Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

Updated course name from the Wisconsin Department of Workforce Development

Proposed Course Description: In three or four sentences, write a course overview.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$

D. Facilities/Space: \$

B. Textbooks/Kits: \$

E. Professional Learning: \$

C. Supplementary: \$

### **APPENDIX C**



### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: 858111 & 858112 Health Services-YAP

Credits: Click here to enter text. Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

Updated course name from the Wisconsin Department of Workforce Development

Proposed Course Description: In three or four sentences, write a course overview.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$

- D. Facilities/Space: \$.
- B. Textbooks/Kits: \$.
- E. Professional Learning: \$

C. Supplementary: \$

### **APPENDIX D**



### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: 848311 & 848312 Hospitality/Tourism—YAP

Request:  $\Box$  New Course  $\boxtimes$  New Course Name  $\Box$  Course Revision  $\Box$  Remove Course

Credits: .5 Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

Updated course name from the Wisconsin Department of Workforce Development

Proposed Course Description: In three or four sentences, write a course overview.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.).

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$

- D. Facilities/Space: \$
- B. Textbooks/Kits: \$ E. Professional Learning: \$
- C. Supplementary: \$

### **APPENDIX E**



### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: 888211 & 888212 Manufacturing/Machining—YAP

Credits: Click here to enter text. Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

Updated course name from the Wisconsin Department of Workforce Development

Proposed Course Description: In three or four sentences, write a course overview.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$

D. Facilities/Space: \$

B. Textbooks/Kits: \$

E. Professional Learning: \$

C. Supplementary: \$



### **COURSE CHANGE PROPOSAL**

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: 878311 & 878312 Auto Technology-YAP

Request:  $\Box$  New Course  $\boxtimes$  New Course Name  $\Box$  Course Revision  $\Box$  Remove Course

Credits: .5 Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

Updated course name from the Wisconsin Department of Workforce Development

Proposed Course Description: In three or four sentences, write a course overview.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$

- D. Facilities/Space: \$
- B. Textbooks/Kits: \$ E. Professional Learning: \$
- C. Supplementary: \$



### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: 888411 & 888412 Principles-Engineering-YAP

Request:  $\Box$  New Course  $\boxtimes$  New Course Name  $\Box$  Course Revision  $\Box$  Remove Course

Credits: .5 Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

Updated course name from the Wisconsin Department of Workforce Development

Proposed Course Description: In three or four sentences, write a course overview.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$

- D. Facilities/Space: \$
- B. Textbooks/Kits: \$ E. Pro
- E. Professional Learning: \$

C. Supplementary: \$

### **APPENDIX H**



### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: Architecture & Construction—YAP Level 2

Request: ⊠ New Course □ New Course Name □ Course Revision □ Remove Course

Credits: .5 each semester Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

The Youth Apprenticeship Program is a two-year program and there are currently no second year courses in the course catalog.

Proposed Course Description: In three or four sentences, write a course overview.

Architecture & Construction—YAP—is a one- or two-year apprenticeship. Students earn credit and get paid for working for a local business. Students will receive a certificate from the state upon successful completion of the program.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

Please see skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Please see skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

А.	Teaching Staff: \$0	D. Facilities/Space: \$0
----	---------------------	--------------------------

- B. Textbooks/Kits: \$0 E. Professional Learning: \$0
- C. Supplementary: \$0

Department of Workforce Development Division of Employment and Training



# Architecture and Construction Skill Standards Checklist

Student Name	YA Student ID Number
YA Coordinator	YA Consortium
School District	High School Graduation Date
Certification Areas Completed:         Required Skills - For EACH Pathway         Check ✓ completed areas	Level One Requirements:         Students must complete         ALL listed below         Check ✓ completed areas         □       Required Skills         □       Minimum of ONE Pathway Unit         □       Minimum of 2 semesters         related instruction       Minimum of 450 work hours         *First Aid and OSHA 10 trainings         required only once.         Level Two Requirements:         Students must complete         ALL listed below         Check ✓ completed areas         □       Required Skills for EACH         pathway       Minimum of 4 semesters         □       Minimum of 900 work hours         *Units can be completed two       *Units can be completed two

Total Hours Employed	Company Name	Telephone Number
		( )
		( )

DETW-17019 (R. 08/2014)

# Instructions for the Worksite Mentor(s) and Instructor(s)

The Skill Standards Checklist is a list of the competencies (tasks) to be achieved through mentoring and training at the worksite.

- The worksite mentor should rate each competency as the student acquires and demonstrates the skill *according to the performance criteria.*
- A competency may be revisited and the score raised as the student becomes more proficient at the worksite.
- The mentor and student should go over this checklist together on a regular basis to record progress and plan future steps to complete the required competencies.

I certify that this student has successfully completed the competencies required in my department. Circle your YA role, print and sign your name, and complete with the department name and the date signed.

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature

### SIGN this page IF you have been a mentor, trainer, or instructor of this student

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

# **Operational Program Notes for Skill Standards Checklist**

# 1. Architecture and Construction Youth Apprenticeship Curriculum

- Definitions:
  - Competency The worksite skill to be performed
  - Performance Standards How to assess skill performance as applicable to worksite.
  - Learning Objectives Content knowledge recommended to learn these skills; may be taught by the employer, school district and/or technical college.
  - Skill Standards Checklist The documented list of competencies completed by the YA student.
  - W/S Listed after a skill indicates that skill performance may be learned and assessed at the worksite OR in the classroom in a simulated setting. However, a simulated setting should ONLY be used IF there is no possibility of skill performance at the worksite.
- Performance Standards & Learning Objectives are located in applicable Appendices of the **Program Guide for this Youth Apprenticeship.**
- 2. ALL Youth Apprentices MUST complete the Required Skills (Core Skills and Safety) competencies for each Pathway they are enrolled in.
  - The Required Skills competencies may be completed concurrently with the specific Pathway process technical competencies.
  - The Required Skills are common skills specific to all Architecture and Construction sub-sectors. These skills are *aligned with* the National States' Career Clusters standards for the Architecture and Construction.
- 3. Youth Apprenticeship choices (depending on job placement)
  - Competencies have been reviewed by the Department of Workforce Development for Child Labor Laws. Contact the Department of Workforce Development's Equal Rights Division/Labor Standards Bureau at (608) 266-6860 for questions regarding child labor laws. SEE Appendix A for special Child Labor Law considerations in this YA Program.
  - Students will complete a **Minimum Rating** in the Required Skills and in one pathway unit for Level ONE Architecture and Construction YA and a **Minimum Rating** in the Required Skills and two pathways units for a Level TWO Architecture and Construction YA.
  - The Department of Workforce Development Occupational Certificate will indicate "Architecture and Construction" attained when the program is completed.

## 4. Competency Ratings

- Rate the student on the competencies regularly and revisit the competencies with the student periodically to offer the opportunity for an improved rating.
- Arrangements must be made to ensure that the student learns, practices, AND performs each competency **even if** that competency is not part of their regular job function.
- "Entry Level" criteria should be interpreted to mean "able to do the task satisfactorily."
- "Assist" in front of a skill indicates that the student should perform the skill *as indicated in the curriculum* "while assisting a worksite professional." Training should go beyond "observation only" for these skills. It will be up to the employer to determine the criticality of each specific task, training completed, and the actual level of supervision required. See curriculum details for requirements.

# **Required Skills**

**Required** of **ALL** Architecture and Construction YA Students *Copy this page* **FOR EACH** pathway to be completed

CORE SKILLS	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Apply academic knowledge			
2. Apply career knowledge			
3. Apply Architecture and Construction industry knowledge			
4. Communicate effectively			
5. Take direction and corrective feedback			
6. Act professionally			
7. Demonstrate customer service skills			
8. Cooperate with others in a team setting			
9. Think critically			
10. Exhibit regulatory and ethical responsibilities			
11. Use basic technology			
12. Use resources wisely			

SAFETY		Minimum rating of 2 for EACH Check Rating		
		1	2	3
1.	Follow personal safety requirements			
2.	Maintain a safe work environment			
3.	Demonstrate professional role to be used in an emergency			

CERTIFICATIONS	Completed	Verification Signature
1. Occupational Safety and Health Administration (OSHA) 10 Training		
2. First Aid Training		

## **Rating Scale:**

- 3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Check the Appropriate Division:

Residential

Commercial

Carpentry Fundamentals Unit	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Read blueprints, plans and specifications			
2. Interpret symbols and procedures			
3. Identify job prep needs and develop job task plan			
4. Execute job prep needs as a coordinated effort			
5. Select tools and materials			
6. Use hand tools and light duty tools			
7. Operate tools and equipment safely			
8. Assist with the installation of materials per job specifications			
9. Demonstrate accuracy in measuring using various instruments			
10. Maintain clean and safe work environment			
11. Clean up work area			
12. Practice quality craftsmanship			
Please select a minimum of one competency from below	(13-16) to	complete	
13. Assist with rough framing or forming			
14. Assist with finish framing or forming			
15. Assist with interior finishing			
16. Assist with exterior finishing			

### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Check the Appropriate Division:

Residential

Commercial

Electrical Fundamentals Unit		rating of 2 fo	
	1	2	3
1. Read blueprints, plans and specifications			
2. Interpret symbols and procedures			
3. Identify job prep needs and develop job task plan			
4. Execute job prep needs as a coordinated effort			
5. Select tools and materials			
6. Use hand tools and light duty tools			
7. Operate tools and equipment safely			
8. Assist with the installation of materials per job specifications			
9. Demonstrate accuracy in measuring using various instruments			
10. Maintain clean and safe work environment			
11. Clean up work area			
12. Practice quality craftsmanship			
<ol> <li>Assist with cutting wire, cable, conduit and raceway, cording and cutting chasses</li> </ol>			
14. Assist with pulling wires and attaching wires			
15. Assist with connecting conductors to switches, receptacles or appliances			
16. Assist with installation of switches, outlet boxes and fixture boxes			
17. Assist in rough-in feeders and circuits			

### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Check the Appropriate Division:

Residential

Commercial

Masonry/Concrete Fundamentals Unit		rating of 2 fo Check Rating	
	1	2	3
1. Read blueprints, plans and specifications			
2. Interpret symbols and procedures			
3. Identify job prep needs and develop job task plan			
4. Execute job prep needs as a coordinated effort			
5. Select tools and materials			
6. Use hand tools and light duty tools			
7. Operate tools and equipment safely			
8. Assist with the installation of materials per job specifications			
9. Demonstrate accuracy in measuring using various instruments			
10. Maintain clean and safe work environment			
11. Clean up work area			
12. Practice quality craftsmanship			
Please select a minimum of two competencies from below (13-17)	to complete	)	
13. Assist with cutting brick and block			
<ol> <li>Assist with depositing, spreading, consolidating, and striking of concrete in a form</li> </ol>			
15. Lay masonry units to job specification			
16. Assist with selecting the correct types of materials for the job			
17. Perform volume estimates for concrete quantity requirements			

### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Check the Appropriate Division
--------------------------------

	Residential	Residential   Commercial		
Mechanical/HVAC Fundamentals Unit		Minimum rating of 2 for EACH Check Rating		
		1	2	3
1. Read blueprints, plans and specificat	ions			
2. Interpret symbols and procedures				
3. Identify job prep needs and develop j	ob task plan			
4. Execute job prep needs as a coordina	ated effort			
5. Select tools and materials				
6. Use hand tools and light duty tools				
7. Operate tools and equipment safely				
8. Assist with the installation of materials per job specifications				
9. Demonstrate accuracy in measuring using various instruments				
10. Maintain clean and safe work environment				
11. Clean up work area				
12. Practice quality craftsmanship				
Please select a minimum of two	competencies from below	w (13-17) to	complete	
13. Assist with basic equipment problem diagnosis for heating and cooling sys				
14. Assist with basic equipment repair for heating systems and cooling systems				
15. Set up and fabricate metals				
16. Assist with the installation of fabricate	ed parts			
17. Transfer measurements into a workable drawing				

### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Check the Appropriate Division:

Residential Commercial

Plumbing/Sprinkler Fitting Fundamentals Unit		rating of 2 fc Check Rating	
	1	2	3
1. Read blueprints, plans and specifications			
2. Interpret symbols and procedures			
3. Identify job prep needs and develop job task plan			
4. Execute job prep needs as a coordinated effort			
5. Select tools and materials			
6. Use hand tools and light duty tools			
7. Operate tools and equipment safely			
<ol> <li>Assist with the installation of materials per job specifications</li> </ol>			
<ol> <li>Demonstrate accuracy in measuring using various instruments</li> </ol>			
10. Maintain clean and safe work environment			
11. Clean up work area			
12. Practice quality craftsmanship			
13. Assist with testing and maintenance of fixtures			

## **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

# **Design/Pre-Construction Pathway**

Architectural Drafting Unit – REQUIRED FIRST		Minimum rating of 2 for EAC Check Rating	
	1	2	3
1. Interpret technical drawings			
2. Use measuring devices accurately			
3. Organize databases, files and drawings			
4. Reproduce documents and plans			
5. Compile site measurements and other data			
6. Use architectural drafting software			
7. Develop 2D (orthographic) view drawings			
8. Develop 3D view models			
9. Dimension drawings			
10. Apply lettering and basic annotation to drawings			
11. Prepare working drawings			
12. Assist to research building codes and site requirements			
13. Participate on an architectural design project			

### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

# **Design/Pre-Construction Pathway**

Arc	hitectural Planning Unit	tural Planning Unit Minimum rating of 2 for EA Check Rating		or EACH
		1	2	3
1.	Draw a site plan			
2.	Draw sectional and elevation views			
3.	Draw a floor plan			
4.	Develop a stair section drawing			
5.	Draw a floor system and foundation plan			
6.	Draw a framing plan			
7.	Draw a roof framing plan			
8.	Develop sustainable/conservation elements into a design			
9.	Review completed architectural plans and documents			
10.	Revise drawings			
11.	Construct a Bill of Materials			
12.	Assist to develop architectural detail schedules			
13.	Assist to coordinate architectural project activities			

### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

# Additional Certifications, Training, Seminars and Projects

Please list in detail any additional certifications earned, any training and seminars attended, and/or any projects completed during the course of the Architecture and Construction Youth Apprenticeship.

Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		
Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		
•		
Notes/Comments		
Dete Os malated	Martin /Taria and a star star Oine stars	Data O'ana I
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Other Notes or Comments	3	

## **APPENDIX I**



### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: Art, A/V Technology & Communications—YAP Level 1

Request: ⊠ New Course □ New Course Name □ Course Revision □ Remove Course

Credits: .5 each semester Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

The Youth Apprenticeship Program is a two-year program, and there are currently no second year courses in the course book.

Proposed Course Description: In three or four sentences, write a course overview.

The Art, A/V Technology & Communications Youth Apprenticeship Program is a one- or two-year apprenticeship. Students earn credit and get paid for working for a local business. Students will receive a certificate from the state upon successful completion of the program.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A.	Teaching Staff:	\$0	
----	-----------------	-----	--

D. Facilities/Space: \$0

B. Textbooks/Kits: \$0

E. Professional Learning: \$0

C. Supplementary: \$0

Department of Workforce Development Division of Employment and Training



# Arts, A/V Technology and Communications Skill Standards Checklist

Student Name	YA Student ID Number
YA Coordinator	YA Consortium
School District	High School Graduation Date
Certification Areas Completed:         Required Skills - For EACH Pathway         Check ✓ completed areas         □       Core Skills         □       Core Skills         □       Safety and Security         Printing Technology Pathway         □       Graphic Design and Pre-Press Unit	Level One Requirements: Students must complete ALL listed below Check ✓ completed areas □ Required Skills □ Minimum of ONE Unit □ Minimum of 2 semesters related instruction □ Minimum of 450 work hours
Press and Post-Press Operations Unit*	Level Two Requirements: Students must complete ALL listed below Check ✓ completed areas □ Required Skills □ Minimum of TWO Units* □ Minimum of 4 semesters related instruction □ Minimum of 900 work hours * The Press and Post-Press Operations Unit can be completed two times IF different processes are learned

Total Hours Employed	Company Name	Telephone Number
		( )
		( )

DETW-10039-E (N. 08/2012)

# Instructions for the Worksite Mentor(s) and Instructor(s)

The Skill Standards Checklist is a list of the competencies (tasks) to be achieved through mentoring and training at the worksite.

- The worksite mentor should rate each competency as the student acquires and demonstrates the skill *according to the performance standards criteria.*
- A competency may be revisited and the score raised as the student becomes more proficient at the worksite.
- The mentor and student should go over this checklist together on a regular basis to record progress and plan future steps to complete the required competencies.

I certify that this student has successfully completed the competencies required in my department. Circle your YA role, sign and print your name, and complete with the date signed and the department name.

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Mantar/Trainer/Instructor Cignature	Mantar/Trainar/Instructor Cignature

#### SIGN this page IF you have been a mentor, trainer, or instructor of this student

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

# **Operational Program Notes for Skill Standards Checklist**

## 1. Arts, A/V Technology, and Communications Youth Apprenticeship Curriculum

- Definitions:
  - Competency- The worksite skill to be performed.
  - Performance Standards- How to assess skill performance as applicable to worksite.
  - Learning Objectives- Content knowledge recommended to learn these skills; may be taught by the employer, school district, and/or technical college.
  - Skill Standards Checklist- The documented list of competencies completed by the YA student.
  - W/S- Listed after a skill indicates that skill performance may be learned and assessed at the worksite OR in the classroom in a simulated setting. However, a simulated setting should ONLY be used IF there is no possibility of skill performance at the worksite.
- Performance Standards and Learning Objectives are located in applicable Appendices of the **Program Guide for this Youth Apprenticeship.**
- 2. ALL Youth Apprentices **MUST** complete the Required Skills (Core Skills and Safety and Security) competencies.
  - The Required Skills competencies may be completed concurrently with the Technical Skills competencies.
  - The Required Skills are common skills specific to all Arts, A/V Technology, and Communications industry sub-sectors. These skills are *aligned with* the National States' Career Clusters standards for Arts, A/V Technology, and Communications.

## 3. Youth Apprenticeship choices (depending on job placement)

- Competencies have been reviewed by the Department of Workforce Development for Child Labor Laws. Contact the Department of Workforce Development's Equal Rights Division/Labor Standards Bureau at 608-266-6860 for questions regarding child labor laws. SEE Appendix A for special Child Labor Law considerations in this YA Program.
- Students will complete a Minimum Rating in the Required Skills and Technical Skills in one unit for a Level ONE Arts, A/V Technology, and Communications YA, and a Minimum Rating in the Required Skills and Technical Skills in two units for a Level TWO Arts, A/V Technology, and Communications YA. The Press and Post-Press Operations Unit may be completed two times for a Level TWO program; however, different processes must be taught and learned.
- The Department of Workforce Development Occupational Certificate will indicate "Arts, A/V Technology, and Communications" attained when the program is completed.

## 4. Competency Ratings

- Rate the student on the competencies regularly and revisit the competencies with the student periodically to offer the opportunity for an improved rating.
- Arrangements must be made to ensure that the student learns, practices, AND performs each competency **even if** that competency is not part of their regular job function.
- "Entry Level" criteria should be interpreted to mean "able to do the task satisfactorily."
- "Assist" in front of a skill indicates that the student should perform the skill as indicated in the curriculum "while assisting a worksite professional." Training should go beyond "observation only" for these skills. It will be up to the employer to determine the criticality of each specific task, training completed, and the actual level of supervision required. See curriculum details for requirements.

# **Required Skills**

Required of ALL Arts, A/V Technology, and Communications YA Students

CORE SKILLS	KILLS Minimum rating of 2 for EAC Check Rating		
	1	2	3
1. Apply academic knowledge			
2. Apply career knowledge			
<ol> <li>Apply Arts, A/V Technology, and Communications industry knowledge</li> </ol>			
4. Communicate effectively			
5. Act professionally			
6. Demonstrate customer service skills			
7. Cooperate with others in a team setting			
8. Think critically			
9. Exhibit regulatory and ethical responsibilities			
10. Use resources wisely			
11. Use basic technology			

SAFETY and SECURITY	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Follow personal safety requirements			
2. Maintain a safe work environment			
3. Demonstrate professional role to be used in an emergency			
4. Follow security procedures			
5. Maintain confidentiality			

### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance and supervision | Rarely displays behavior

Graphic Design and Pre-Press Unit		Minimum rating of 2 for EACH Check Rating		
		1	2	3
1.	Study effective design elements (W/S)			
2.	Analyze a job ticket			
3.	Use graphics and/or pre-press software			
4.	Maintain project, image, photo, and/or illustration files			
5.	Obtain scanned or photographic images			
6.	Create and/or edit objects, shapes, charts, images, and/or graphics			
7.	Apply and/or correct color			
8.	Select typography			
9.	Create and/or edit a layout			
10.	Perform pre-flight print on job files			
11.	Review proofs			
12.	Trap project files			
13.	Impose and configure press sheets			
14.	Send completed files to RIP			
15.	Produce print plates/stencils (N/A for digital printing)			
16.	Maintain pre-press equipment			
17.	Participate on a print project team			

## **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance and supervision | Rarely displays behavior

*Choose* one Press <u>AND</u> one Post-Press operation. *Check* the appropriate Press <u>AND</u> Post-Press Processes taught and learned. *Copy* pages 6-7 **if** unit is repeated for a Level TWO.



Press and Post-Press Operations Unit		Minimum rating of 2 for EACH Check Rating		
Skills for BOTH Operations		2	3	
1. Review job ticket				
2. Select materials				
3. Perform safety checks				
4. Operate tools and equipment safely				
5. Monitor equipment for correct operation				
6. Clean up				
7. Complete job tracking documentation				
Press Operations				
8. Register print job				
9. Mount plate/screen (N/A for digital printing)				
10. Load paper and ink				
11. Set up press				
12. Verify press set up (make-ready)				
13. Perform press operation				

Continued on next page

Press and Post-Press Operations Unit - continued		Minimum rating of 2 for EACH Check Rating		
Post-Press Operations	1 2 3		3	
14. Identify paper options for project				
15. Calculate most efficient cuts/folds				
16. Set up post-press equipment				
17. Verify post-press set up (make-ready)				
18. Perform post-press operation				

### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance and supervision | Rarely displays behavior

# Additional Certifications, Training, Seminars, and/or Projects

Please list in detail any additional certifications earned, any training and seminars attended, and/or any projects completed during the course of the Arts, A/V Technology, and Communications Youth Apprenticeship.

Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		
•		
Notes/Comments		
Data Carrindata d	Mandan/Tanin an/landanadan Oinnadana	Dete Olane d
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		

Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed

Other Notes or Comments	

## **APPENDIX J**



### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: Art, A/V Technology & Communications—YAP Level 2

Request: ⊠ New Course □ New Course Name □ Course Revision □ Remove Course

Credits: .5 each semester Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

The Youth Apprenticeship Program is a two-year program, and there are currently no second year courses in the course book.

Proposed Course Description: In three or four sentences, write a course overview.

The Art, A/V Technology & Communications Youth Apprenticeship Program is a one- or two-year apprenticeship. Students earn credit and get paid for working for a local business. Students will receive a certificate from the state upon successful completion of the program.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A.	Teaching Staff: \$0	). D.	Facilities/Space:
----	---------------------	-------	-------------------

- B. Textbooks/Kits: \$0 E. Professional Learning: \$0
- C. Supplementary: \$0

\$0

Department of Workforce Development Division of Employment and Training



# Arts, A/V Technology and Communications Skill Standards Checklist

Student Name	YA Student ID Number
YA Coordinator	YA Consortium
School District	High School Graduation Date
Certification Areas Completed:         Required Skills - For EACH Pathway         Check ✓ completed areas         □       Core Skills         □       Core Skills         □       Safety and Security         Printing Technology Pathway         □       Graphic Design and Pre-Press Unit         □       Press and Post-Press Operations Unit*	Level One Requirements: Students must complete ALL listed below Check ✓ completed areas □ Required Skills □ Minimum of ONE Unit □ Minimum of 2 semesters related instruction □ Minimum of 450 work hours
	Level Two Requirements: Students must complete ALL listed below Check ✓ completed areas Required Skills Minimum of TWO Units* Minimum of 4 semesters related instruction Minimum of 900 work hours * The Press and Post-Press Operations Unit can be completed two times IF different processes are learned

Total Hours Employed	Company Name	Telephone Number
		( )
		( )

DETW-10039-E (N. 08/2012)

# Instructions for the Worksite Mentor(s) and Instructor(s)

The Skill Standards Checklist is a list of the competencies (tasks) to be achieved through mentoring and training at the worksite.

- The worksite mentor should rate each competency as the student acquires and demonstrates the skill *according to the performance standards criteria.*
- A competency may be revisited and the score raised as the student becomes more proficient at the worksite.
- The mentor and student should go over this checklist together on a regular basis to record progress and plan future steps to complete the required competencies.

I certify that this student has successfully completed the competencies required in my department. Circle your YA role, sign and print your name, and complete with the date signed and the department name.

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Menter/Treiner/Unetruster Simeture	Mantar/Trainar/Instructor Cignature

#### SIGN this page IF you have been a mentor, trainer, or instructor of this student

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

# **Operational Program Notes for Skill Standards Checklist**

## 1. Arts, A/V Technology, and Communications Youth Apprenticeship Curriculum

- Definitions:
  - Competency- The worksite skill to be performed.
  - Performance Standards- How to assess skill performance as applicable to worksite.
  - Learning Objectives- Content knowledge recommended to learn these skills; may be taught by the employer, school district, and/or technical college.
  - Skill Standards Checklist- The documented list of competencies completed by the YA student.
  - W/S- Listed after a skill indicates that skill performance may be learned and assessed at the worksite OR in the classroom in a simulated setting. However, a simulated setting should ONLY be used IF there is no possibility of skill performance at the worksite.
- Performance Standards and Learning Objectives are located in applicable Appendices of the **Program Guide for this Youth Apprenticeship.**
- 2. ALL Youth Apprentices **MUST** complete the Required Skills (Core Skills and Safety and Security) competencies.
  - The Required Skills competencies may be completed concurrently with the Technical Skills competencies.
  - The Required Skills are common skills specific to all Arts, A/V Technology, and Communications industry sub-sectors. These skills are *aligned with* the National States' Career Clusters standards for Arts, A/V Technology, and Communications.

## 3. Youth Apprenticeship choices (depending on job placement)

- Competencies have been reviewed by the Department of Workforce Development for Child Labor Laws. Contact the Department of Workforce Development's Equal Rights Division/Labor Standards Bureau at 608-266-6860 for questions regarding child labor laws. SEE Appendix A for special Child Labor Law considerations in this YA Program.
- Students will complete a Minimum Rating in the Required Skills and Technical Skills in one unit for a Level ONE Arts, A/V Technology, and Communications YA, and a Minimum Rating in the Required Skills and Technical Skills in two units for a Level TWO Arts, A/V Technology, and Communications YA. The Press and Post-Press Operations Unit may be completed two times for a Level TWO program; however, different processes must be taught and learned.
- The Department of Workforce Development Occupational Certificate will indicate "Arts, A/V Technology, and Communications" attained when the program is completed.

## 4. Competency Ratings

- Rate the student on the competencies regularly and revisit the competencies with the student periodically to offer the opportunity for an improved rating.
- Arrangements must be made to ensure that the student learns, practices, AND performs each competency **even if** that competency is not part of their regular job function.
- "Entry Level" criteria should be interpreted to mean "able to do the task satisfactorily."
- "Assist" in front of a skill indicates that the student should perform the skill as indicated in the curriculum "while assisting a worksite professional." Training should go beyond "observation only" for these skills. It will be up to the employer to determine the criticality of each specific task, training completed, and the actual level of supervision required. See curriculum details for requirements.

# **Required Skills**

Required of ALL Arts, A/V Technology, and Communications YA Students

CORE SKILLS		Minimum rating of 2 for EACH Check Rating		
	1	2	3	
1. Apply academic knowledge				
2. Apply career knowledge				
<ol> <li>Apply Arts, A/V Technology, and Communications industry knowledge</li> </ol>				
4. Communicate effectively				
5. Act professionally				
6. Demonstrate customer service skills				
7. Cooperate with others in a team setting				
8. Think critically				
9. Exhibit regulatory and ethical responsibilities				
10. Use resources wisely				
11. Use basic technology				

SAFETY and SECURITY	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Follow personal safety requirements			
2. Maintain a safe work environment			
3. Demonstrate professional role to be used in an emergency			
4. Follow security procedures			
5. Maintain confidentiality			

### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance and supervision | Rarely displays behavior

Graphic Design and Pre-Press Unit		Minimum rating of 2 for EACH Check Rating		
		1	2	3
1.	Study effective design elements (W/S)			
2.	Analyze a job ticket			
3.	Use graphics and/or pre-press software			
4.	Maintain project, image, photo, and/or illustration files			
5.	Obtain scanned or photographic images			
6.	Create and/or edit objects, shapes, charts, images, and/or graphics			
7.	Apply and/or correct color			
8.	Select typography			
9.	Create and/or edit a layout			
10.	Perform pre-flight print on job files			
11.	Review proofs			
12.	Trap project files			
13.	Impose and configure press sheets			
14.	Send completed files to RIP			
15.	Produce print plates/stencils (N/A for digital printing)			
16.	Maintain pre-press equipment			
17.	Participate on a print project team			

## **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance and supervision | Rarely displays behavior

*Choose* one Press <u>AND</u> one Post-Press operation. *Check* the appropriate Press <u>AND</u> Post-Press Processes taught and learned. *Copy* pages 6-7 **if** unit is repeated for a Level TWO.



Press and Post-Press Operations Unit	Minimum rating of 2 for EACH Check Rating		
Skills for BOTH Operations	1 2		3
1. Review job ticket			
2. Select materials			
3. Perform safety checks			
4. Operate tools and equipment safely			
5. Monitor equipment for correct operation			
6. Clean up			
7. Complete job tracking documentation			
Press Operations			
8. Register print job			
9. Mount plate/screen (N/A for digital printing)			
10. Load paper and ink			
11. Set up press			
12. Verify press set up (make-ready)			
13. Perform press operation			

Continued on next page

Press and Post-Press Operations Unit - continued	Minimum rating of 2 for EACH Check Rating		
Post-Press Operations	1	2	3
14. Identify paper options for project			
15. Calculate most efficient cuts/folds			
16. Set up post-press equipment			
17. Verify post-press set up (make-ready)			
18. Perform post-press operation			

### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance and supervision | Rarely displays behavior
# Additional Certifications, Training, Seminars, and/or Projects

Please list in detail any additional certifications earned, any training and seminars attended, and/or any projects completed during the course of the Arts, A/V Technology, and Communications Youth Apprenticeship.

Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		

Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed

Other Notes or Comments		



#### **COURSE CHANGE PROPOSAL**

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, AND Reuther

Course Name: Finance—YAP Level 2

Request: ⊠ New Course □ New Course Name □ Course Revision □ Remove Course

Credits: .5 each semester Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

The Youth Apprenticeship Program is a two-year program, and there are currently no second year courses in the course book.

Proposed Course Description: In three or four sentences, write a course overview.

The Finance Youth Apprenticeship Program is a one- or two-year apprenticeship. Students earn credit and get paid for working for a local business. Students will receive a certificate from the State upon successful completion of the program.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$0.
-------------------------

D. Facilities/Space: \$0.

B. Textbooks/Kits: \$0

E. Professional Learning: \$0.

C. Supplementary: \$0



# Finance Skill Standards Checklist

Student Name	School District
YA Coordinator	YA Consortium
High School Graduation Date	
Certification Areas Completed: Required Skills - For EACH Pathway Check ✓ completed areas ☐ Core Skills ☐ Safety and Security Finance Business Financial Management Pathway ☐ Accounting Services Basic Unit ☐ Accounting Services Advanced Unit	Level One Requirements: Students must complete ALL listed below Check ✓ completed areas Required Skills Minimum of ONE Unit Minimum of two semesters related instruction Minimum rating of 450 work hours
Banking and Related Services Pathway         Banking Basic Unit         Plus minimum 7 additional Competencies         Banking Advanced Unit         Plus minimum 10 additional Competencies         Insurance Pathway         Insurance Services Unit	Level Two Requirements: Students must complete all listed below Check ✓ completed areas

Total Hours Employed	Company Name	Telephone Number

DETW-16368 (N. 7/2008)

# Instructions for the Worksite Mentor(s) and Instructor(s)

The Skill Standards Checklist is a list of the competencies (tasks) to be achieved through mentoring at the worksite.

- The worksite mentor should rate each competency as the student acquires and demonstrates the skill *according to the performance criteria.*
- A competency may be revisited and the score raised as the student becomes more proficient at the worksite.
- The mentor and student should go over this checklist together on a regular basis to record progress and plan future steps to complete the required competencies.

I certify that this student has successfully completed the competencies required in my department. Circle your YA role, sign and print your name, and complete with the date and the name of your department.

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

# SIGN this page IF you have been a mentor, trainer, or instructor of this student

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

# **Operational Program Notes for Skill Standards Checklist**

### 1. Finance Youth Apprenticeship Curriculum

- Definitions:
  - Competency- The worksite skill to be performed
  - o Performance Standards- HOW the worksite will assess skill performance
  - Learning Objectives- Content knowledge to learn these skills; may be taught by the employer, school district and/or technical college.
  - Skill Standards Checklist- The documented list of competencies completed by the YA student
- Performance Standards & Learning Objectives are located in the **Program Guide for this Youth Apprenticeship.**
- 2. ALL Youth Apprentices MUST complete the Required Skills (Core Skills and Safety & Security) competencies for EACH UNIT they are enrolled in.
  - The Required Skills competencies may be completed concurrently with the Finance Unit technical competencies.
  - The Required Skills are common skills specific to all Finance sub-sectors. These skills are *aligned with* the National States' Career Clusters Foundations standards for the Finance Career Cluster.

### 3. Youth Apprenticeship choices (depending on job placement)

- Competencies have been reviewed by the Department of Workforce Development for Child Labor Laws. Contact the Department of Workforce Development's Equal Rights Division/Labor Standards Bureau at 608-266-6860 for questions regarding child labor laws.
- Students will complete a MINIMUM of one unit for a Level One Finance YA and a MINIMUM of two units for a Level TWO Finance YA.
- **NOTE: Units within each Pathway build upon each other.** Therefore, switching between pathways, after the successful completion of the first year, is allowable provided that the student begins the second year in the first unit listed under the NEW pathway choice.
- The Department of Workforce Development Occupational Certificate will indicate "Finance plus the Name of the specific Pathway" attained when the program is completed.

### 4. Competency Ratings

- Rate the student on the competencies regularly and revisit the competencies with the student periodically to offer the opportunity for an improved rating
- Arrangements must be made to ensure that the student learns, practices, AND performs each competency **even if** that competency is not part of their regular job function
- "Entry Level" criteria should be interpreted to mean "able to do the task satisfactorily."

### **Required Skills**

**Required** of **ALL** Finance YA Students Copy this page **FOR EACH** unit to be completed

CORE SKILLS		Minimum rating of 2 for EACH Check Rating		
	1	2	3	
1. Apply applicable academic knowledge				
2. Apply applicable career knowledge				
3. Apply applicable financial industry knowledge				
4. Communicate effectively				
5. Communicate effectively on the phone				
6. Act professionally				
7. Demonstrate customer service skills				
8. Cooperate with others in a team setting				
9. Think critically				
10. Exhibit legal & ethical responsibilities				
11. Use technology				

SAFETY AND SECURITY		Minimum rating of 2 for EACH Check rating		
	1	2	3	
1. Follow personal safety requirements				
2. Maintain a safe work environment				
3. Demonstrate professional role in an emergency				
4. Follow security procedures				
5. Maintain confidentiality				

#### **Rating Scale:**

- 3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

## **Business Financial Management Pathway**

Accounting Services - Basic Competencies		Minimum rating of 2 for EACH Check Rating		
Basic Operations	1	2	3	
1. Maintain accounts				
2. Store financial records				
3. Assist to process checks				
4. Process journal entries				
5. Post journal entries				
6. Balance accounts after recording transaction				
7. Assist to prepare adjusting entries				
8. Prepare worksheets				
9. Record receipts				
10. Assist to prepare financial statements				
11. Assist to process period end closing entries				
	÷	•		

Fixed Assets		2	3
12. Maintain fixed asset records			
13. Assist to process asset depreciation			
14. Assist to process depreciation budget			

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

## **Business Financial Management Pathway**

Accounting Services - Advanced Competencies	Minimum rating of 2 for EACH Check Rating		
Accounts Receivable	1	2	3
1. Process customer invoices and receipts			
2. Allocate receipt for invoices			
Accounts Payable	1	2	3
3. Process receiving document			
4. Process credit memorandum			
5. Assist to process payment authorization			
	•		
Payroll	1	2	3
6. Calculate employee work hours			
	4	2	2
Tax Reporting	1	2	3
7. Assist with company tax reporting			
Inventory	1	2	3
8. Record inventory usage			
9. Record inventory receipts			
10. Assist to physically inventory merchandise or materials			
11. Assist to process results of inventory			
12. Process inventory adjustments			
	<u> </u>		
Cost Accounting	1	2	3
13. Assist to cost account a new or revised product or service			
Internal Audit	1	2	3
14. Assist to audit monthly procedures			
Budget Analysis	1	2	3
15. Assist to process budget reports			

#### **Rating Scale:**

- 3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Banking Basic - Required Competencies	Minimum rating of 2 for EAC Check Rating		
	1	2	3
1. Process transactions using a computer			
2. File transactions			
<ol><li>Follow cash management/handling procedures</li></ol>			
Teller Services	1	2	3
<ol><li>Process personal cash deposits</li></ol>			
5. Process personal check deposits			
6. Process personal withdrawals by cash			
7. Process negotiable instrument transactions - on-us checks			
O Decessory a section la instrument transportions of the set the section of the s			

1.	Process negoliable instrument transactions - on-us checks		
8.	Process negotiable instrument transactions - other than on-us checks		
9.	Process transfers between accounts		
10.	Respond to customer account inquires and requests		
11.	Perform end of day drawer balance		
12.	Issue cashier's/official check		
13.	Cross-sell financial institution products and services		

Banking Basic Additional Competencies	Minimum rating of 2 for EACH Check Rating			
Choose at least 7 from 21 below				
Teller Services	1	2	3	
1. Process night depository				
2. Process & accept bulk coinage for cash or deposit				
3. Process business deposits				

Sup	oport Services	1	2	3
4.	Process incoming mail			
5.	Process credit card payments			
6.	Process cash advances			
7.	Place stop payment on check			
8.	Investigate and resolve customer problems			
9.	Assist to change customer name/account title			
10.	Assist to add co-owner or authorized signer to customer account			
11.	Assist to help a customer with account reconciliation			
12.	Rent safe deposit boxes			
13.	Wire transfer funds			
14.	Process federal tax payments			

Continued on next page

Finance Youth Apprenticeship Skill Standards Checklist

Banking Basic Additional Competencies - continued	Minimum rating of 2 for EACH Check Rating		
Support Services	1	2	3
15. Balance automated teller machine (ATM)			
16. Process a customer statement			
17. Process checks			
18. Proof or encode items			
19. Process electronic or internet payments			
20. Process return items			
21. Assist with an internal audit			

#### Rating Scale:

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Banking Advanced - Required Competencies	Mini	Minimum rating of 2 for EACH Check Rating		
Products & Marketing	1		2	3
1. Obtain/complete documentation to close accounts				
2. Obtain/Complete documentation to open accounts				
3. Collaborate with marketing team efforts				
4. Assist to evaluate marketing efforts				
5. Close savings account				
6. Assist to open new savings account				
Lending Services	1		2	3
7. Identify prospective loan customers				

8.	Process loan payments		
9.	Respond to customer loan account inquiries and requests		
10.	Maintain and update customer loan files		

Banking Advanced - Additional Competencies Minimum rating of 2 for E Check Rating							
	Choose at least 10 from list of 21 below						
Pro	ducts & Marketing	1	2	3			
1.	Assist with promotional efforts						
2.	Close checking account						
3.	Assist to open new checking account						
4.	Assist to issue certificate of deposit						
5.	Assist to process decedent accounts						
6.	Issue US savings bonds						
7.	Redeem US savings bonds						
8.	Issue money orders						
9.	Issue travelers checks						
10.	Issue foreign currency						
-			-				
Ler	iding Services	1	2	3			
11.	Compile documentation for loan closing						
12.	Assist to complete a loan application with a customer						
13.	Order credit reports						
14.	Assist to collect and recover funds on default loans						
	Consumer Lending		2	3			
15.	Process documents for consumer loan application						
16.	Assist to pre-approve consumer loan customer						

Continued on next page

Banking Advanced - Additional Competencies - continued	Minimum rating of 2 for EACH Check Rating		
Mortgage Lending	1	2	3
17. Process documents for mortgage loan application			
18. Assist to pre-approve mortgage loan customer			
19. Set mortgage loan closing date and time			

Commercial Lending	1	2	3
20. Process documents for commercial loan application			
21. Assist to pre-approve commercial loan customer			

#### Rating Scale:

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

### **Insurance Pathway**

Insurance Service Competencies	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Maintain and update customer files			
2. Process premium payments			
Marketing	1	2	3
3. Identify prospective customers			
4. Assist to evaluate marketing efforts			
5. Collaborate with marketing team efforts			
		•	•
Policy Management	1	2	3
6. Gather and update information on application			
7. Process customer application for insurance coverage			
8. Respond to customer inquiries			
9. Assemble insurance contract for mailing			
10. Respond to customer change requests			
11. Manage policy changes			
Claims	1	2	3
12. Set up claim file			
13. Review claim file for completeness			
14. Update information regarding claims			
15. Process simple claim			
16. Assist to evaluate and settle claim			
		<b>^</b>	•
Investigations	1	2	3
17. Order supporting documents			
18. Assist to complete investigation			
19. Assist with investigation report			

#### **Rating Scale:**

- **3** = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

# Additional Certifications, Training, Seminars and Projects

Please list in detail any additional certifications earned, any training and seminars attended, and/or any projects completed during the course of the Finance Youth Apprenticeship. **Circle your YA role**, and sign your name, then complete with the date.

Description		
Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		
Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		
Description		
Notes/Comments		

Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
----------------	-------------------------------------	-------------

Other Notes or Comments	

#### **APPENDIX L**



#### **COURSE CHANGE PROPOSAL**

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: Health Sciences—YAP Level 2

Request: ⊠ New Course □ New Course Name □ Course Revision □ Remove Course

Credits: .5 each semester Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

The Youth Apprenticeship Program is a two-year program, and there are currently no second year courses in the course book.

Proposed Course Description: In three or four sentences, write a course overview.

The Health Sciences Youth Apprenticeship Program is a one- or two-year apprenticeship. Students earn credit and get paid for working for a local healthcare business. Students will receive a certificate from the state upon successful completion of the program.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Stati. 50	A.	Teaching Staff:	\$0
-----------------------	----	-----------------	-----

D. Facilities/Space: \$0

B. Textbooks/Kits: \$0

E. Professional Learning: \$0

C. Supplementary: \$0



# Health Science Skill Standards Checklist

Student Name	YA Student ID Number
YA Coordinator	YA Consortium
School District	High School Graduation Date
Certification Areas Completed:         Required Skills - For EACH Pathway         Check ✓ completed areas (p. 4)         □ Core Skills         □ Safety & Security         Therapeutic Services Pathway         □ Dental Assistant Unit (p. 5)	Level One Requirements: Students must complete ALL listed below Check ✓ completed areas Required Skills Minimum of ONE Unit Minimum of 2 semesters related instruction Minimum of 450 work hours
Medical Assistant Unit (p. 6)  Nursing Assistant Unit* (p. 7)  Pharmacy Technician Unit (p. 9)	Level Two Requirements: Students must complete ALL listed below Check ✓ completed areas □ Required Skills for EACH pathway
Health Informatics Pathway	Minimum of <b>TWO Units</b>
Medical Office Unit (p. 10)	<ul> <li>Minimum of 4 semesters related instruction</li> <li>Minimum of 900 work hours</li> </ul>
Ambulatory/Support Services Pathway	* Unit can be completed two times for a Level Two as indicated on Unit Page
Ambulatory/Support Services Unit* (p. 11)	
<u>CHOICES</u> : Dietary, Imaging, Laboratory, Optician/Optometry, Physical Therapy (PT)	

Total Hours		
Employed	Company Name	Telephone Number
		( )
		( )

DET-10208-E (R. 12/2016)

# Instructions for the Worksite Mentor(s) and Instructor(s)

The Skill Standards Checklist is a list of the competencies (tasks) to be achieved through mentoring and training at the worksite.

- The worksite mentor should rate each competency as the student acquires and demonstrates the skill *according to the performance standards criteria.*
- A competency may be revisited and the score raised as the student becomes more proficient at the worksite.
- The mentor and student should go over this checklist together on a regular basis to record progress and plan future steps to complete the required competencies.

**I certify** that this student has successfully completed the competencies required in my department. Circle your YA role, sign and print your name, and complete with the date signed and the department name.

#### SIGN this page IF you have been a mentor, trainer, or instructor of this student

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

# **Operational Program Notes for Skill Standards Checklist**

### 1. Health Science Youth Apprenticeship Curriculum

- Definitions:
  - Competency- The worksite skill to be performed.
  - Performance Standards- HOW to assess skill performance as applicable to worksite.
  - Learning Objectives- Content knowledge recommended to learn these skills; may be taught by the employer, school district, and/or technical college.
  - o Skill Standards Checklist- The documented list of competencies completed by the YA student.
  - W/S- Listed after a skill indicates that skill performance may be learned and assessed at the worksite OR in the classroom in a simulated setting. However, a simulated setting should ONLY be used IF there is no possibility of skill performance at the worksite.
- Performance Standards & Learning Objectives are located in the applicable Appendices of the **Program** Guide for this Youth Apprenticeship.

2. ALL Youth Apprentices **MUST** complete the Required Skills (Core Skills and Safety & Security) competencies for EACH Pathway they are enrolled in.

- The Required Skills competencies may be completed concurrently with the Technical Skills competencies.
- The Required Skills are common skills specific to all Health Science industry sub-sectors. These skills are aligned with the National Association of State Directors of Career & Technical Education (NASDCTEc) standards for Health Science and the Wisconsin Nurse Aide Candidate Handbook.

### 3. Youth Apprenticeship choices (depending on job placement)

- Worksites can be chosen from any number of health, clinical, or ambulatory care settings which can train the required skills.
- "Client" is used to refer to customers, residents, patients, and/or persons seeking services.
- Competencies have been reviewed by the Department of Workforce Development for Child Labor Laws. Contact the Department of Workforce Development's Equal Rights Division/Labor Standards Bureau at 608-266-6860 for questions regarding child labor laws. SEE Appendix A for special Child Labor Law considerations in this YA Program.
- Students will complete a **Minimum Rating** in the Required Skills and one pathway unit for a Level ONE Health Science YA and a **Minimum Rating** in the Required Skills and two pathway units for a Level TWO Health Science YA.
- The Nursing Assistant Unit may be completed two times for a Level TWO program IF additional competencies are mastered. The Ambulatory/Support Services Unit may be completed two times for a Level TWO program as long as the student is placed in a different service area.
- The Department of Workforce Development Occupational Certificate will indicate "Health Science" attained when the program is completed.

### 4. Competency Ratings

- Rate the student on the competencies regularly and revisit the competencies with the student periodically to offer the opportunity for an improved rating.
- Arrangements must be made to ensure that the student learns, practices, AND performs each competency even if that competency is not part of their regular job function.
- "Entry Level" criteria should be interpreted to mean "able to do the task satisfactorily."
- "Assist" in front of a skill indicates that the student should perform the skill as *indicated in the curriculum* "while assisting a worksite professional." Training should go beyond "observation only" for these skills. It will be up to the employer to determine the criticality of each specific task, training completed, and the actual level of supervision required. See curriculum details for requirements.

## **Required Skills**

**Required** of **ALL** Health Science YA Students Copy this page **FOR EACH** pathway to be completed

CORE SKILLS		Minimum rating of 2 for EACH Check Rating		
	1	2	3	
1. Apply academic knowledge				
2. Apply career knowledge				
3. Apply Health Science industry knowledge				
4. Communicate effectively				
5. Act professionally				
6. Demonstrate customer service skills				
7. Cooperate with others in a team setting				
8. Think critically				
9. Exhibit regulatory & ethical responsibilities				
10. Use resources wisely				
11. Use basic technology				

SAFETY & SECURITY	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Follow personal safety requirements			
2. Maintain a safe work environment			
3. Demonstrate professional role to be used in an emergency			
4. Follow security procedures			
5. Maintain confidentiality			

#### **Rating Scale:**

- **3** = Exceeds entry level criteria/Requires minimal supervision/Consistently displays this behavior
- 2 = Meets entry level criteria/Requires some supervision/Often displays this behavior
- 1 = Needs improvement/Requires much assistance & supervision/Rarely displays behavior

ntal Assistant Unit Minimum rating of 2 fo Check Rating			
	1	2	3
1. Use Standard Precautions & Infection Prevention			
Office	1	2	3
2. Create &/or maintain the client record			
3. Complete client identification labels			
4. Complete lab forms			
5. Assist to maintain emergency kit			
Lab	1	2	3
6. Mix dental materials			
7. Clean removable appliances			
8. Process dental radiographs			
9. Assist to evaluate radiographs for diagnostic quality			
10. Prepare procedural trays & set-ups			
11. Perform sterilization &/or disinfection procedures			
12. Prepare room for exam/procedures			
Clinical/Chairside	1	2	3
13. Receive & prepare client for treatment			
14. Transfer dental instruments			
15. Operate water/air syringe & suction			
16. Apply topical fluoride			
17. Chart dental conditions			
18. Assist with common clinical procedures			
19. Apply topical anesthetic to the injection site			
20. Measure vital signs (W/S)			
21. Provide client education & instructions			

**W/S =** Worksite Experience or In Simulation

#### **Rating Scale:**

- **3** = Exceeds entry level criteria/Requires minimal supervision/Consistently displays this behavior
- 2 = Meets entry level criteria/Requires some supervision/Often displays this behavior
- 1 = Needs improvement/Requires much assistance & supervision/Rarely displays behavior

**Clinical Setting:** 

Medical Assistant Unit		rating of 2 heck Ratin	
	1	2	3
22. Use Standard Precautions & Infection Prevention			
Clerical	1	2	3
23. Manage client appointments			
24. Create &/or maintain the client record			
25. Complete client identification labels			
26. Verify client &/or insurance information			
27. Order & receive supplies &/or equipment			
Lab	1	2	3
28. Clean & prepare supplies &/or instruments			
29. Instruct clients in collection of specimens			
30. Process specimens for testing			
31. Assist in performing testing			
Clinical	1	2	3
32. Obtain/update client information			
33. Position client			
34. Measure height/weight			
35. Measure vital signs (W/S)			
36. Set up area for exam/procedures			
37. Assist with exam/procedures			
38. Assist with medication &/or immunization administration (W/S)			
39. Clean & restock after procedures			
40. Perform CPR (W/S)			
41. Use First Aid measures (W/S)			

**W/S =** Worksite Experience or In Simulation

#### **Rating Scale:**

- **3** = Exceeds entry level criteria/Requires minimal supervision/Consistently displays this behavior
- 2 = Meets entry level criteria/Requires some supervision/Often displays this behavior
- 1 = Needs improvement/Requires much assistance & supervision/Rarely displays behavior

Students *are required* to earn CNA certification through a DHFS approved CNA program with DHFS approved instructors.

CNA Registry Number: Clinical Setting:

Level One (one year program) = Required Skills + 8 Additional Skills Level Two (two year program) = Required Skills + 16 Additional Skills

Nursing Assistant Unit		rating of 2 heck Ratin	
Required Skills	1	2	3
1. Use Standard Precautions & Infection Prevention			
2. Clean room & change unoccupied bed linens			
3. Follow care plan			
4. Report client changes			
5. Position client			
6. Ambulate client			
7. Measure temperature, pulse, respirations			
8. Assist client with toileting			
9. Provide client comfort measures			
10. Perform CPR (W/S)			
Additional Skills	1	2	3
1. Transport client			
2. Assist to transfer client (W/S)			
3. Maintain inventory of supplies &/or equipment			
4. Manage client appointments			
5. Obtain/update client information			
6. Measure blood pressure			
7. Measure height/weight			
8. Measure pulse oximetry			
9. Measure fluid intake & output			
10. Measure EKG			

**W/S =** Worksite Experience or In Simulation

#### Continued on next page

#### **Rating Scale:**

- 3 = Exceeds entry level criteria/Requires minimal supervision/Consistently displays this behavior
- 2 = Meets entry level criteria/Requires some supervision/Often displays this behavior
- 1 = Needs improvement/Requires much assistance & supervision/Rarely displays behavior

Nursing Assistant Unit - continued Minimum rating of 2 Check Ratir				
Additional Skills - continued	Additional Skills - continued		2	3
11. Measure blood sugar				
12. Instruct clients in collection of specime	ns			
13. Process specimens for testing				
14. Perform phlebotomy				
15. Assist in performing testing				
16. Make occupied bed				
17. Provide client skin care				
18. Apply non-prescription topical medicati	ions			
19. Prepare &/or serve food				
20. Aid client with eating & hydration				
21. Aid client with oral hygiene				
22. Aid client with grooming- hair care				
23. Aid client with grooming- nail care				
24. Aid client with grooming- dress & undre	ess			
25. Aid client with grooming- shaving				
26. Care for client with urinary catheter				
27. Provide ostomy care				
28. Aid client with bathing				
29. Give bedbath				
30. Apply TED (anti-embolism) stockings				
31. Aid client to perform range of motion e	xercises			
32. Set up area for exam/procedures				
33. Assist with exam/procedures				
34. Assist with medication &/or immunizati	on administration			
35. Assist with care of client with dementia	l			
36. Use isolation techniques				
37. Perform choking maneuver (W/S)				
38. Use First Aid measures (W/S)				
39. Assist with post-mortem care (W/S)				

W/S = Worksite Experience or In Simulation

#### **Rating Scale:**

- 3 = Exceeds entry level criteria/Requires minimal supervision/Consistently displays this behavior
- 2 = Meets entry level criteria/Requires some supervision/Often displays this behavior
- 1 = Needs improvement/Requires much assistance & supervision/Rarely displays behavior

Pha	Pharmacy Technician Unit		Minimum rating of 2 for EACH Check Rating	
		1	2	3
1.	Maintain pharmacy business documents			
2.	Create &/or maintain the client record			
3.	Obtain/update client information			
4.	Verify client &/or insurance information			
5.	Accept orders			
6.	Use aseptic technique			
7.	Clean & prepare supplies &/or instruments			
8.	Process orders			
9.	Generate medication labels			
10.	Perform calculations for medication orders			
11.	Weigh & measure accurately			
12.	Assist to prepare topical &/or oral finished dose medications			
13.	Assist to prepare compounded, diagnostic, &/or parenteral medications (W/S)			
14.	Provide medication to client			
15.	Order & receive supplies &/or equipment			
16.	Perform inventory of supplies, equipment, &/or medications			
17.	Manage cash drawer			
18.	Merchandise retail items			
19.	Participate in quality assurance practices			

**W/S =** Worksite Experience or In Simulation

#### **Rating Scale:**

- 3 = Exceeds entry level criteria/Requires minimal supervision/Consistently displays this behavior
- 2 = Meets entry level criteria/Requires some supervision/Often displays this behavior
- 1 = Needs improvement/Requires much assistance & supervision/Rarely displays behavior

# **Health Informatics Pathway**

Medical Office Setting:

Ме	Medical Office Unit		rating of 2 heck Ratin	
		1	2	3
1.	Maintain medical office correspondence			
2.	Perform records management duties			
3.	Locate information in the client record			
4.	Create &/or maintain the client record			
5.	Obtain/update client information			
6.	Complete client identification labels			
7.	File manual client records (W/S)			
8.	Verify client &/or insurance information			
9.	Process health information requests			
10.	Manage client appointments			
11.	Answer phones			
12.	Assist with basic coding for client billing (W/S)			
13.	Complete insurance & claim forms			
14.	Perform basic bookkeeping duties (W/S)			
15.	Use common office software applications			
16.	Use database systems to process information			
17.	Prepare reports			
18.	Maintain office equipment			
19.	Order & receive supplies &/or equipment			
20.	Perform an inventory of supplies &/or equipment			

**W/S =** Worksite Experience or In Simulation

#### **Rating Scale:**

- 3 = Exceeds entry level criteria/Requires minimal supervision/Consistently displays this behavior
- 2 = Meets entry level criteria/Requires some supervision/Often displays this behavior
- 1 = Needs improvement/Requires much assistance & supervision/Rarely displays behavior

# **Ambulatory/Support Services Pathway**

**Clinical Setting:** 

Level One (one year program) = General Skills + Skills from ONE Specific Service area Level Two (two year program) = General Skills + Skills from TWO Specific Service areas

Am	Ambulatory/Support Services Unit Minimum rating of 2 f Check Ratin			
Gei	neral Skills	1	2	3
1.	Maintain department documents			
2.	Create &/or maintain the client record			
3.	Complete client identification labels			
4.	Manage orders &/or appointments			
5.	Use computer systems to process information (W/S)			
6.	Prepare reports			
7.	Order & receive supplies &/or equipment			
Spe	ecific Service- Dietary	1	2	3
1.	Assist to plan menus based on nutritional needs			
2.	Assist to prepare food			
3.	Verify food content matches dietary restrictions			
4.	Take food orders			
5.	Serve food			
6.	Measure/monitor food & fluid intake			
7.	Aid client with eating & hydration (W/S)			
8.	Perform choking maneuver (W/S)			
Spe	ecific Service- Imaging	1	2	3
1.	Assist to prepare diagnostic agents			
2.	Set up diagnostic area			
3.	Assist to explain diagnostic procedure to client			
4.	Assist client with dressing & undressing			
5.	Position client			
6.	Assist with diagnostic imaging (Simulate only)			
7.	Clean & restock after procedure			

W/S = Worksite Experience or In Simulation

#### Rating Scale:

- 3 = Exceeds entry level criteria/Requires minimal supervision/Consistently displays this behavior
- **2** = Meets entry level criteria/Requires some supervision/Often displays this behavior
- 1 = Needs improvement/Requires much assistance & supervision/Rarely displays behavior

# **Ambulatory/Support Services Pathway**

Ambulatory/Support Services Unit- continued			rating of 2 the contracting of 2 the contraction of	
Spe	ecific Service- Laboratory	1	2	3
1.	Use aseptic technique			
2.	Clean & prepare glassware &/or instruments			
3.	Weigh & measure accurately			
4.	Perform calculations & conversions			
5.	Prepare reagents, solutions, &/or buffers			
6.	Operate lab equipment properly			
7.	Conduct testing according to protocol			
8.	Record & analyze test results			
Spe	ecific Service- Optician/Optometry	1	2	3
1.	Obtain lens prescriptions			
2.	Measure client eye lengths, centers, & distances			
3.	Set up optometry area			
4.	Assist to perform eye exam			
5.	Instruct clients how to care for eyewear			
6.	Order & purchase frames & lenses			
7.	Fit glasses to clients			
		I		
Spe	ecific Service- Physical Therapy (PT)	1	2	3
1.	Set up treatment area			
2.	Assist to explain treatment to client			
3.	Position clients on therapy equipment			
4.	Measure vital signs			
5.	Assist with application/adjustment of orthotic & assistive devices			
6.	Assist client with performing range of motion exercise			
7.	Assist client with prescribed exercise program			
8.	Assist client with gait training			
9.	Administer active & passive treatments			

W/S = Worksite Experience or In Simulation

#### **Rating Scale:**

- 3 = Exceeds entry level criteria/Requires minimal supervision/Consistently displays this behavior
- 2 = Meets entry level criteria/Requires some supervision/Often displays this behavior
- 1 = Needs improvement/Requires much assistance & supervision/Rarely displays behavior

# Additional Certifications, Training, Seminars and Projects

Please list in detail any additional certifications earned, any training and seminars attended, and/or any projects completed during the course of the Health Science Youth Apprenticeship.

Description		
Notes/Comments		
Date Completed	Signature	Date Signed
Description		
Notes/Comments		
Date Completed	Signature	Date Signed
Description		
Notes/Comments		
Date Completed	Signature	Date Signed
Other Notes or Commer	nts	

#### **APPENDIX M**



#### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: Hospitality, Lodging & Tourism—YAP Level 2

Request: ⊠ New Course □ New Course Name □ Course Revision □ Remove Course

Credits: .5 each semester. Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

The Youth Apprenticeship Program is a two-year program, and there are currently no second year courses in the course book.

Proposed Course Description: In three or four sentences, write a course overview.

The Hospitality, Lodging & Tourism Youth Apprenticeship Program is a one- or two-year apprenticeship. Students earn credit and get paid for working for a local business. Students will receive a certificate from the state upon successful completion of the program.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A.	Teaching Staff:	\$0
----	-----------------	-----

D. Facilities/Space: \$0

B. Textbooks/Kits: \$0

E. Professional Learning: \$0

C. Supplementary: \$0



# Hospitality, Lodging, and Tourism Skill Standards Checklist

Student Name	School District
YA Coordinator	YA Consortium
High School Graduation Date	
Certification Areas Completed: Required Skills - For EACH Pathway Unit Check ✓ completed areas ☐ Core Skills ☐ Safety and Security Hospitality, Lodging, and Tourism Restaurant & Food/Beverage Services Pathway ☐ Food & Beverage - Dining Area Unit ☐ Food & Beverage - Kitchen Area Unit	Level One Requirements: Students must complete ALL listed below Check ✓ completed areas ☐ Required Skills ☐ Minimum of TWO Units ☐ Minimum of 2 semesters related instruction ☐ Minimum of 450 work hours
Lodging Pathway Lodging – Front Office Unit Lodging – Housekeeping Unit Travel & Tourism Pathway Re servations & Tour/Activity Unit ALL Pathways Maintenance & Grounds Unit Meetings & Events Unit Marketing & Sales I Unit Marketing & Sales II Unit Management I Unit Management II Unit	Level Two Requirements: Students must complete ALL listed below Check ✓ completed areas □ Required Skills for EACH Pathway □ Minimum of FOUR Units □ Minimum of 4 semesters related instruction □ Minimum of 900 work hours

Total Hours Employed	Company Name	Telephone Number
		( )
		( )

DETW-16401 (R. 07/2009)

# Instructions for the Worksite Mentor(s) and Instructor(s)

Mentor/Trainer/Instructor Signature

The Skill Standards Checklist is a list of the competencies (tasks) to be achieved through mentoring at the worksite.

- The worksite mentor should rate each competency as the student acquires and demonstrates the skill • according to the performance criteria.
- A competency may be revisited and the score raised as the student becomes more proficient at the • worksite.
- The mentor and student should go over this checklist together on a regular basis to record progress and ٠ plan future steps to complete the required competencies.

I certify that this student has successfully completed the competencies required in my department. Circle your YA role, sign and print your name, and complete with the date signed and the department name.

#### SIGN this page IF you have been a mentor, trainer, or instructor of this student Mentor/Trainer/Instructor Signature

Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Department	Department
Date Signed	Date Signed
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

# **Operational Program Notes for Skill Standards Checklist**

### 1. Hospitality, Lodging, and Tourism Youth Apprenticeship Curriculum

- Definitions:
  - o Competency- The worksite skill to be performed
  - o Performance Standards- HOW the worksite will assess skill performance
  - Learning Objectives- Content knowledge to learn these skills; may be taught by the employer, school district and/or technical college.
  - Skill Standards Checklist- The documented list of competencies completed by the YA student
- Performance Standards & Learning Objectives are located in the **Program Guide for this Youth Apprenticeship.**
- 2. ALL Youth Apprentices **MUST** complete the Required Skills (Core Skills and Safety & Security) competencies for EACH UNIT they are enrolled in.
  - The Required Skills competencies may be completed concurrently with the Hospitality, Lodging, and Tourism technical competencies.
  - The Required Skills are common skills specific to all hospitality and tourism sub-sectors. These skills are *aligned with* the National States' Career Clusters Foundations standards for Hospitality and Tourism Career Cluster.

#### 3. Youth Apprenticeship choices (depending on job placement)

- Specific technical skill pathway units are also aligned with the American Hotel and Lodging Educational Institute's Lodging Management Program and the National Restaurant Association's ProStart® program as applicable.
- Competencies have been reviewed by the DWD for Child Labor Laws. Contact the Department of Workforce Development's Equal Rights Division/Labor Standards Bureau at 608-266-6860 for questions regarding child labor laws.
- Students will complete a MINIMUM of two units for a Level ONE Hospitality, Lodging, & Tourism YA in any combination, and a MINIMUM of four units for a Level TWO Hospitality, Lodging, & Tourism YA in any combination. Units can be chosen from different pathways in any combination.
- The DWD Occupational Certificate will indicate "Hospitality, Lodging, & Tourism" when the program is completed.

### 4 Competency Ratings

- Rate the student on the competencies regularly and revisit the competencies with the student periodically to offer the opportunity for an improved rating.
- Arrangements must be made to ensure that the student learns, practices, AND performs each competency **even if** that competency is not part of their regular job function.
- "Entry Level" criteria should be interpreted to mean "able to do the task satisfactorily."

## **Required Skills**

**Required** of **ALL** Hospitality, Lodging, & Tourism YA Students *Copy this page* **FOR EACH PATHWAY** to be completed

CORE SKILLS	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Apply applicable academic knowledge			
2. Apply applicable career knowledge			
<ol> <li>Apply applicable hospitality, lodging, and tourism industry knowledge</li> </ol>			
4. Communicate effectively			
5. Communicate effectively on the phone			
6. Act professionally			
7. Demonstrat e customer service skills			
8. Cooperate with others in a team setting			
9. Think critically			
10. Exhibit legal & ethical responsibilities			
11. Use technology			

SAFETY AND SECURITY	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Follow personal safety requirements			
2. Maintain a safe work environment			
3. Demonstrate professional role in an emergency			
4. Follow security procedures			

#### **Rating Scale:**

- 3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

# **Restaurant & Food/Beverage Services Pathway**

Food & Beverage- Dining Area Unit	Minimum rating of 2 for EACH Check Rating		
	1	2	3
<ol> <li>Follow safe food handling and sanitation procedures</li> </ol>			
2. Ensure dining area readiness			
3. Seat the customer			
4. Serve customers at the table			
5. Process sales			
6. Maintain service area and bus station			
7. Set up a meeting/event			
8. Serve customers at a meeting/event			
9. Assist with management tasks			

Food & Beverage- Kitchen Area Unit		Minimum rating of 2 for EACH Check Rating	
	1	2	3
1. Follow safe food handling and sanitation procedures			
2. Follow inventory procedures			
3. Operate foodservice equipment			
4. Coordinate food orders			
5. Assist to prepare menu items			
6. Perform kitchen steward tasks			
7. Assist with management tasks			

#### Rating Scale:

- **3** = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

# Lodging Pathway

Lodging- Front Office Unit	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Operate a telecommunications system			
2. Process reservations			
3. Assist with guest arrival and departure			
4. Register the guest			
5. Serve as guest liaison			
6. Process guest checkout			
7. Perform special guest services			
8. Perform guest accounting			
9. Perform front office cashier duties			

Lodging- Housekeeping Unit	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Prepare cleaning supplies and carts			
2. Clean public spaces- Floors			
<ol><li>Clean public spaces- Lobby/Front Desk</li></ol>			
4. Clean public spaces- Other Areas			
5. Clean guest rooms			
6. Clean laundry			
7. Manage room supply and linen inventory			
8. Assist with management tasks			

**Rating Scale:** 

- 3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

# **Travel & Tourism Pathway**

Reservations & Tour/Activity Unit	Minimum rating of 2 for EACH Check Rating		
Office Duties	1	2	3
1. Maintain office environment			
2. Manage office records & reports			
<ol> <li>Maintain tour/activity schedules, calendar of events, attractions, &amp; community services information</li> </ol>			
<ol> <li>Perform clerical duties such as filing, typing, answering phones, and routing mail and messages</li> </ol>			
5. Respond to customer inquiries			
6. Market & distribute tour & destination information			
Planning & Reservations	1	2	3
7. Assess customer interests & requirements			
8. Assist to plan travel, tour/activity, information, & highlights			
<ol> <li>Assist to arrange details such as accommodations, transportation, &amp; equipment</li> </ol>			
10. Make & confirm reservations			
11. Issue tickets			
Tour/Activity	1	2	3
<ol> <li>Set up required supplies, equipment, facilities, etc. prior to tour/activity</li> </ol>			
13. Collect fees & tickets			
14. Assist to conduct tour/activity			
15. Conclude tour/activity			

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior
Maintenance and Grounds Unit		rating of 2 <b>heck Ratin</b>	
	1	2	3
1. Prepare maintenance supplies and carts			
2. Operate tools and equipment safely			
3. Use tools to maintain grounds and equipment			
4. Assist to perform routine preventative maintenance			
5. Assist with routine repair maintenance			
6. Assist with maintenance communication			
7. Maintain grounds- Public Spaces			
8. Maintain grounds- Green Spaces			
9. Perform preventative maintenance of public areas			
10. Perform routine maintenance on guest rooms (LODGING ONLY)			

### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Meetings and Events Unit	Minimum rating of 2 for EACH Check Rating		
Set up	1	2	3
1. Clean floors			
2. Set up tables & equipment required			
3. Break down/clear function rooms after events			
Serve customers	1	2	3
4. Prepare dining & service tables			
5. Provide food service			
6. Prepare and provide beverages			
7. Maintain tables during service			
8. Refresh meeting rooms			
9. Respond to guest inquiries			
10. Clear tables			
Plan meeting/event	1	2	3
<ol> <li>Assist to assess customer objectives and requirements for meetings/events</li> </ol>			
12. Assist to create a customized event/menu			
13. Assist to reserve meeting/event & develop orders			
Coordinate meeting/event	1	2	3
<ol> <li>Monitor meeting/event to ensure facilities &amp; service conform to customer requirements</li> </ol>			
Financial Transactions	1	2	3
15. Assist to invoice a bill for services			
16. Process payments/advance deposits			
17. Process reservation changes/cancellations			

#### Rating Scale:

**3** = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Marketing and Sales I Unit	Minimum rating of 2 for EACH Check Rating		
Sales	1	2	3
1. Assist to sell products & services using effective sales techniques			
2. Prevent unnecessary losses			
3. Reserve requested products or services			
<ol> <li>Assist to determine quote and pricing for product or service requested</li> </ol>			
5. Complete/run all required sales reports			
6. Process payments & advance deposits			
7. Process reservation changes/cancellations			
Promotions	1	2	3
8. Assist to develop promotional materials			
9. Assist to prepare and plan advertisements			
10. Send direct mailings			
11. Perform telemarketing			
12. Maintain media schedules and files			

**Rating Scale:** 

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Marketing and Sales II Unit Prerequisite: Marketing & Sales I		rating of 2 heck Ratin	
Marketing Research	1	2	3
<ol> <li>Survey customer, employee, and competitor perceptions of product/service</li> </ol>			
<ol> <li>Identify and quantify the need for your product/service in the marketplace</li> </ol>			
3. Research target demographics			
<ol><li>Research the objectives and needs of target customers</li></ol>			
5. Prepare a list of prospective customers			
6. Research places to sell services			
<ol> <li>Assist to forecast sales using sales history, popularity indices, and production sheets</li> </ol>			
Marketing Strategies	1	2	3
8. Assist to test different ways to present a specific product/service			
<ol> <li>Assist to develop a new/revised marketing strategy for a specific product/service</li> </ol>			
Evaluation	1	2	3
<ol> <li>Research customer satisfaction, market size &amp; growth, &amp; buying cycles to evaluate marketing</li> </ol>			
<ol> <li>Assist to audit services to ensure service is as described and advertised</li> </ol>			
12. Assist to evaluate customer complaints regarding services, products, or personnel			

### **Rating Scale:**

**3** = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Management I Unit		Minimum rating of 2 for EACH Check Rating	
Staffing Requirements	1	2	3
<ol> <li>Assist to coordinate work schedules, deadlines, and duty assignments</li> </ol>			
<ol><li>Schedule training to be provided to staff</li></ol>			
3. Assist to deliver training			
4. Maintain records pertaining to work assignments & staff training			
Guest Services	1	2	3
5. Obtain customer feedback from guests			
6. Assist to investigate root causes of customer complaints			
7. Assist to create an improvement plan with management			
8. Assist to develop methods to maximize customer experience			
Physical Resources	1	2	3
9. Arrange for necessary maintenance and repair work			
10. Requisition or purchase items			
11. Monitor inventory levels			
12. Monitor parking and security services			
Marketing Promotions	1	2	3
13. Assist to create promotional message to target a specific market			
14. Assist to develop promotional materials such as advertisements, coupons, brochures and web-based designs			
15. Present a promotional or improvement plan to management			

### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Management II Unit	Minimum rating of 2 for EACH Check Rating		
Prerequisite: Management I		песк капп	g
Service Audits	1	2	3
1. Identify & conduct a critical service audit			
Financial Resources	1	2	3
<ol> <li>Perform general office duties such as filing, answering telephones, and handling routine correspondence</li> </ol>			
3. Operate office equipment			
4. Maintain order forms, invoices & shipping documents			
5. Maintain inventory records			
6. Assist to record cash & checks			
7. Assist to record and summarize financial data			
Human Resources	1	2	3
8. Advertise or post job vacancies			
<ol> <li>Process, verify, and maintain documentation relating to personnel activities</li> </ol>			
10. Compile and prepare reports pertaining to personnel activities			
<ol> <li>Assist to research, compile, and prepare reports, manuals, correspondence, and other information required by management or governmental agencies</li> </ol>			
12. Update procedures, policies, and standards manuals			

#### **Rating Scale:**

- 3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

## Additional Certifications, Training, Seminars and Projects

Please list in detail any additional certifications earned, any training and seminars attended, and/or any projects completed during the course of the Hospitality, Lodging, & Tourism Youth Apprenticeship.

Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Date completed		Dute orgined
Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		
Notes/Comments		

Date Completed	Mentor/Trainer/Instructor Signature	Date Signed

Other Notes or Comments		

### **APPENDIX N**



#### **COURSE CHANGE PROPOSAL**

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: Manufacturing-YAP Level 2

Request: ⊠ New Course □ New Course Name □ Course Revision □ Remove Course

Credits: .5 each semester Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

The Youth Apprenticeship Program is a two-year program, and there are currently no second year courses in the course book.

Proposed Course Description: In three or four sentences, write a course overview.

The Manufacturing Youth Apprenticeship Program is a one- or two-year apprenticeship. Students earn credit and get paid for working for a local business. Students will receive a certificate from the state upon successful completion of the program.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

	A.	Teaching Staff:	\$0
--	----	-----------------	-----

D. Facilities/Space: \$0

B. Textbooks/Kits: \$0.

E. Professional Learning: \$0

C. Supplementary: \$0.



# Manufacturing Skill Standards Checklist

Student Name	YA Student ID Number
YA Coordinator	YA Consortium
School District	High School Graduation Date
Certification Areas Completed:         Required Skills - For EACH Pathway         Check ✓ completed areas         □ Core Skills         □ Safety         □ Manufacturing Fundamentals	Level One Requirements: Students must complete ALL listed below Check ✓ completed areas Required Skills Minimum of ONE Unit Minimum of 2 semesters related instruction Minimum of 450 work hours
Production Pathway         Assembly and Packaging Unit         Manufacturing Processes Unit*         Machining Unit*         Welding Unit*	Level Two Requirements: Students must complete ALL listed below Check ✓ completed areas □ Required Skills for EACH pathway □ Minimum of TWO Units □ Minimum of 4 semesters related instruction
Production Operations Management Pathway  Production Operations Management Unit	<ul> <li>Minimum of 4 semesters related instruction</li> <li>Minimum of 900 work hours</li> <li>* Unit can be completed two times IF different processes are learned</li> </ul>
Maintenance, Installation, and Repair Pathway	
Advanced Industrial Equipment Unit	-

Total Hours Employed	Company Name	Telephone Number
		( )
		( )

DETW-16165-E (R. 08/2012)

## Instructions for the Worksite Mentor(s) and Instructor(s)

The Skill Standards Checklist is a list of the competencies (tasks) to be achieved through mentoring and training at the worksite.

- The worksite mentor should rate each competency as the student acquires and demonstrates the skill *according to the performance standards criteria.*
- A competency may be revisited and the score raised as the student becomes more proficient at the worksite.
- The mentor and student should go over this checklist together on a regular basis to record progress and plan future steps to complete the required competencies.

I certify that this student has successfully completed the competencies required in my department. Circle your YA role, sign and print your name, and complete with the date signed and the department name.

#### SIGN this page IF you have been a mentor, trainer, or instructor of this student

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature	
Printed Name	Printed Name	
Department	Department	
Date Signed	Date Signed	

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
T finted Name	Thinked Name
Department	Department
Department	Department
Date Signed	Date Signed

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

## **Operational Program Notes for Skill Standards Checklist**

Manufacturing Youth Apprenticeship Skill Standards Checklist

## 1. Manufacturing Youth Apprenticeship Curriculum

- Definitions:
  - o Competency- The worksite skill to be performed
  - Performance Standards- How to assess skill performance as applicable to worksite.
  - Learning Objectives- Content knowledge recommended to learn these skills; may be taught by the employer, school district, and/or technical college.
  - o Skill Standards Checklist- The documented list of competencies completed by the YA student.
  - W/S- Listed after a skill indicates that skill performance may be learned and assessed at the worksite OR in the classroom in a simulated setting. However, a simulated setting should ONLY be used IF there is no possibility of skill performance at the worksite.
- Performance Standards and Learning Objectives are located in the applicable Appendices of the **Program Guide for this Youth Apprenticeship.**
- 2. ALL Youth Apprentices **MUST** complete the Required Skills (Core Skills, Safety, and Manufacturing Fundamentals) competencies for EACH Pathway they are enrolled in.
  - The Required Skills competencies may be completed concurrently with the Technical Skills competencies.
  - The Required Skills are common skills specific to all manufacturing industry sub-sectors. These skills are *aligned with* the National States' Career Clusters standards for Manufacturing and the Manufacturing Skill Standards Council (MSSC).

### 3. Youth Apprenticeship choices (depending on job placement)

- Worksites can be chosen from any number of the manufacturing SUB-INDUSTRIES such as: Chemical, Computers and Electronic, Electrical Equipment and Appliances, Food and Beverage, Furniture, Machine, Non-Metallic Minerals, Plastic and Rubber Production, Primary and Fabricated Metals, Printing, Textiles, Apparel and Leather, Transportation, Wood; or
  - PROCESSING any variety of manufacturing MATERIALS such as:

Metals (Ferrous, Non-Ferrous, Powdered), Polymers (Wood, Textiles, Leather, Plastic, Elastomer), Chemicals, Finishes (Wood Finishes, Metal Finishes), and Food and Beverage

AS LONG AS the competencies related to that SUB-INDUSTRY and MATERIAL are allowable by DWD Child Labor Laws. Contact the Department of Workforce Development's Equal Rights Division/Labor Standards Bureau at 608-266-6860 for questions regarding child labor laws.

- Competencies have been reviewed by the Department of Workforce Development for Child Labor Laws. Contact the Department of Workforce Development's Equal Rights Division/Labor Standards Bureau at 608-266-6860 for questions regarding child labor laws. SEE Appendix A for special Child Labor Law considerations in this YA Program.
- Students will complete a MINIMUM of one Manufacturing unit for a Level ONE Manufacturing YA and a MINIMUM of two Manufacturing units for a Level TWO Manufacturing YA. The Manufacturing Processes, Machining, or Welding units may be completed two times for a Level TWO program; however different processes must be taught and learned.
- The Department of Workforce Development Occupational Certificate will indicate "Manufacturing" attained when the program is completed.

## 4. Competency Ratings

- Rate the student on the competencies regularly and revisit the competencies with the student periodically to offer the opportunity for an improved rating.
- Arrangements must be made to ensure that the student learns, practices, AND performs each competency even if that competency is not part of their regular job function.
- "Entry Level" criteria should be interpreted to mean "able to do the task satisfactorily."
- "Assist" in front of a skill indicates that the student should perform the skill as indicated in the curriculum "while assisting a worksite professional." Training should go beyond "observation only" for these skills. It will be up to the employer to determine the criticality of each specific task, training completed, and the actual level of supervision required. See curriculum details for requirements.

## **Required Skills**

**Required** of **ALL** Manufacturing YA Students *Copy this page* **FOR EACH** unit to be completed

CORE SKILLS		Minimum rating of 2 for EACH Check Rating			
	1	2	3		
1. Apply academic knowledge					
2. Apply career knowledge					
3. Apply manufacturing industry knowledge					
4. Communicate effectively					
5. Act professionally					
6. Cooperate with others in a team setting					
7. Think critically					
8. Exhibit regulatory and ethical responsibilities					
9. Use resources wisely					
10. Use basic technology					

SAFETY	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Follow personal safety requirements			
2. Maintain a safe work environment			
3. Demonstrate professional role to be used in an emergency			

MANUFACTURING FUNDAMENTALS	Minimum rating of 2 for EACH Check Rating		
	1 2 3		
1. Focus on customer needs			
2. Measure using various instruments			
3. Operate tools and equipment safely			
4. Practice quality assurance principles			

#### **Rating Scale:**

**3** = Exceeds entry level criteria/Requires minimal supervision/Consistently displays this behavior

2 = Meets entry level criteria/Requires some supervision/Often displays this behavior

1 = Needs improvement/Requires much assistance and supervision/Rarely displays behavior

Assembly and Packaging Unit		Minimum rating of 2 for EACH Check Rating		
		1	2	3
1.	Read technical drawings and work orders			
2.	Interpret assembly and packaging symbols and procedures			
3.	Identify set up for assembly			
4.	Select tools and materials			
5.	Perform safety checks			
6.	Perform assembly set up			
7.	Verify assembly set up			
8.	Perform assembly			
9.	Perform quality checks			
10.	Build packaging			
11.	Package product			
12.	Process packaging documents			
13.	Clean up			
14.	Monitor equipment for correct operation			
15.	Document equipment use and/or operational problems			

#### **Rating Scale:**

3 = Exceeds entry level criteria/Requires minimal supervision/Consistently displays this behavior

2 = Meets entry level criteria/Requires some supervision/Often displays this behavior

1 = Needs improvement/Requires much assistance and supervision/Rarely displays behavior

### **Manufacturing Processes Unit**

Check the appropriate Process.

Copy pages 6-7 if unit is repeated for a Level TWO.

<ul> <li>Casting</li> <li>Conditioning</li> <li>Filling</li> <li>Finishing</li> </ul>	<ul> <li>Forming</li> <li>Joining/Combining</li> <li>Molding</li> <li>Separating</li> </ul>

### **Manufacturing Processes Examples**

### 1. Casting

Examples: Metal, Sand, Die, Plaster, Slush, Static, Centrifugal, Continuous

### 2. Conditioning

Examples: Heat Treating, Annealing, Hardening, Tempering

- 3. Filling
  - Examples: Aseptic, Canning, Bottling

### 4. Finishing

Examples: Barrel, Sanding, Deburring, Buffing, Brushing, Polishing, Electropolishing, Chemical cleaning, Ultrasonic cleaning, Vapor degreasing, Painting, Coating, Dipping, Electroplating, Engraving, Plating

### 5. Forming

Examples: Forging, Open/Closed Die, Extrusion, Pressing, Punching, Blanking, Drawing, Piercing

### 6. Joining/Combining

Examples: Welding, Brazing, Soldering, Sintering, Adhesive Bonding, Thermosetting, Fastening, Stitching, Stapling, Press-Fitting, Chemical

### 7. Molding

Examples: Powder Compaction, Sintering, Injection, Blow, Liquid Resin, Thermoforming, Extrusion, Foam, Vacuum forming, Compression, Shrink filling

### 8. Separating

Examples: Cutting, Sawing, Centrifuging, Filtration, Pressing, Distillation, Evaporation, Fractionalization, Chemical

Manufacturing Processes Unit		Minimum rating of 2 for EACH Check Rating		
		1	2	3
1.	Read technical drawings and work orders			
2.	Interpret symbols and procedures			
3.	Identify set up			
4.	Select tools and materials			
5.	Perform safety checks			
6.	Assist to perform set up			
7.	Verify set up			
8.	Perform start up			
9.	Operate equipment			
10.	Monitor product and process specifications			
11.	Process production documents			
12.	Shutdown process			
13.	Clean up			
14.	Monitor equipment for correct operation			
15.	Document equipment use and/or operational problems			

#### **Rating Scale:**

3 = Exceeds entry level criteria/Requires minimal supervision/Consistently displays this behavior

2 = Meets entry level criteria/Requires some supervision/Often displays this behavior

1 = Needs improvement/Requires much assistance and supervision/Rarely displays behavior

Check the appropriate Process.

Copy this page if unit is repeated for a Level TWO.

Gı
M

rinder Machine Center Lathe Other:\_\_\_\_\_

Ма	chining Unit		rating of 2 heck Ratin	
		1	2	3
1.	Read machining technical drawings and work orders			
2.	Interpret machining symbols and procedures			
3.	Identify set up			
4.	Select tools and materials			
5.	Perform safety checks			
6.	Assist to perform set up			
7.	Verify set up			
8.	Perform start up			
9.	Operate machining equipment			
10.	Monitor machining product and process specifications			
11.	Process production documents			
12.	Shutdown machining process			
13.	Clean up			
14.	Use hand tools			
15.	Use CNC equipment (W/S)			
16.	Monitor equipment for correct operation			
17.	Document equipment use and/or operational problems			

W/S = Worksite Experience or In Simulation

#### **Rating Scale:**

- 3 = Exceeds entry level criteria/Requires minimal supervision/Consistently displays this behavior
- 2 = Meets entry level criteria/Requires some supervision/Often displays this behavior

1 = Needs improvement/Requires much assistance and supervision/Rarely displays behavior

Check the appropriate Processes. Copy this page if unit is repeated for a Level TWO.

Welding	Processes	Thermal/Chemical Cutting Processes		
	Flux-cored arc welding (FCAW)		Air Carbon Arc	
	Gas metal arc welding (GMAW (MIG))		Laser	
	Gas tungsten arc welding (GTAW (TIG))		Oxy-fuel Manual	
	Submerged arc welding (SAW)		Oxy-fuel Machine	
	Shielded metal arc welding (SMAW (Stick))		Plasma Manual	
	Other:		Plasma Machine Other:	

We	Iding Unit		rating of 2 t heck Ratin	
		1	2	3
1.	Read welding technical drawings and work orders			
2.	Interpret welding symbols and procedures			
3.	Layout and plan work			
4.	Perform safety checks			
5.	Prepare base metal			
6.	Set up to fabricate base metal			
7.	Fabricate base metal			
8.	Thermally/chemically cut metal			
9.	Tack work pieces			
10.	Weld metal			
11.	Monitor product and process			
12.	Assist to inspect, measure, and/or test completed metal pieces			
	Welding Standard or Code Used:			
13.	Process production documents			
14.	Clean up			
15.	Monitor equipment for correct operation			
16.	Perform routine preventive maintenance (PM)			
17.	Document equipment use, PM, and/or operational problems			

### **Rating Scale:**

3 = Exceeds entry level criteria/Requires minimal supervision/Consistently displays this behavior

- 2 = Meets entry level criteria/Requires some supervision/Often displays this behavior
- 1 = Needs improvement/Requires much assistance and supervision/Rarely displays behavior

## **Production Operations Management Pathway**

Production Operations Management Unit		Minimum rating of 2 for EACH Check Rating		
Inventory	1	2	3	
1. Assist to purchase materials and supplies				
2. Receive inventory				
3. Manage inventory levels				
4. Distribute materials and products				
5. Assist to develop inventory forecasts (W/S)				
6. Maintain inventory records				
Resources				
7. Assist to develop a production plan for customer order (W/S)				
8. Assist to record and summarize financial data				
9. Assist to coordinate work schedules and duty assignments				
Quality Management				
10. Use quality tools				
11. Calibrate tools and equipment (W/S)				
12. Assist to analyze production process for productivity (W/S)				
13. Monitor operations for product and process quality				
14. Assist to investigate root causes of product and/or process failure				
15. Take corrective action to restore or maintain quality				
16. Participate in quality improvement processes				

**W/S =** Worksite Experience or In Simulation

#### **Rating Scale:**

- 3 = Exceeds entry level criteria/Requires minimal supervision/Consistently displays this behavior
- 2 = Meets entry level criteria/Requires some supervision/Often displays this behavior
- 1 = Needs improvement/Requires much assistance and supervision/Rarely displays behavior

## Maintenance, Installation, and Repair Pathway

Basic Industrial Equipment Unit		Minimum rating of 2 for EACH Check Rating		
	1	2	3	
1. Read technical drawings and work orders				
2. Interpret equipment symbols and procedures				
3. Maintain schedules, communication, and documentation				
4. Monitor equipment for correct operation				
5. Identify maintenance requirements				
6. Layout and plan work				
7. Perform safety checks				
8. Use hand tools				
9. Perform preventive maintenance (PM)				
10. Perform lubrication procedures				
11. Assist with basic equipment problem identification and diagno	sis 🗌			
12. Assist with basic equipment repair				
13. Assist to re-qualify equipment				

### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance and supervision | Rarely displays behavior

## Maintenance, Installation, and Repair Pathway

Advanced Industrial Equipment Unit		Minimum rating of 2 for EACH Check Rating		
	1	2	3	
1. Calibrate tools and equipment (W/S)				
2. Set up and fabricate metal				
3. Mount a bearing				
4. Install mechanical fasteners				
5. Assist with electrical circuit problem identification and diagnos	sis 🗌			
6. Assist with motor control problem identification and diagnosis				
7. Assist with hydraulic and/or pneumatic problem identification diagnosis	and			
8. Maintain and repair mechanical drive system components				
9. Maintain and repair electrical control system components				
<ol> <li>Maintain and repair hydraulic and/or pneumatic system components</li> </ol>				
11. Assist to install and qualify equipment				

W/S = Worksite Experience or In Simulation

#### **Rating Scale:**

- 3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance and supervision | Rarely displays behavior

## Additional Certifications, Training, Seminars and Projects

Please list in detail any additional certifications earned, any training and seminars attended, and/or any projects completed during the course of the Manufacturing Youth Apprenticeship.

· · ·	9	5 11 1	
Description			
Notes/Comments			
Date Completed	Signature		Date Signed
Description			
Notes/Comments			
Date Completed	Signature		Date Signed
Description			
Notes/Comments			
Date Completed	Signature		Date Signed
Other Notes or Comments	5		



#### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: Marketing-YAP Level 1

Request: ⊠ New Course □ New Course Name □ Course Revision □ Remove Course

Credits: .5 each semester Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Co-requisite- Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

The Youth Apprenticeship Program has added new programs, and we have students interested in this pathway.

Proposed Course Description: In three or four sentences, write a course overview.

The Marketing Youth Apprenticeship Program is a one- or two-year apprenticeship. Students earn credit and get paid for working for a local business. Students will receive a certificate from the state upon successful completion of the program.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$0

D. Facilities/Space: \$0

B. Textbooks/Kits: \$0

E. Professional Learning: \$0

C. Supplementary: \$0



# Marketing Skill Standards Checklist

Student Name		YA Student ID Number			
YA Coordinato	r	YA Consortium			
School District		High School Graduation Date			
Certification Areas Completed: Required Skills - For EACH Pathway Unit Check ✓ completed areas □ Core Skills □ Safety and Security □ Marketing Core Foundations Marketing Career Pathway		Level One Requirements:         Students must complete ALL listed below         Check ✓ completed areas         □ Required Skills         □ Minimum of 1 pathway unit         □ Minimum of 2 semesters related instruction         □ Minimum of 450 work hours			
Professiona     Merchandis	I Sales Unit	Level Two Requirements: Students must complete ALL listed below Check ✓ completed areas			
Marketing Communication Unit     Mir     Marketing Research / Competitive		<ul> <li>Required Skills</li> <li>Minimum of 2 pathway units</li> <li>Minimum of 4 semesters related instruction</li> <li>Minimum of 900 work hours</li> </ul>			
Intelligence	Ianagement / Leadership Unit				
	<u> </u>				
Total Hours Employed	Company Name		Telephone Number		
			( )		
			( )		
			( )		

Instructions for the Worksite Mentor(s) and Instructor(s)

The Skill Standards Checklist is a list of the competencies (tasks) to be achieved through mentoring at the worksite.

- The worksite mentor should rate each competency as the student acquires and demonstrates the skill according to the performance criteria.
- A competency may be revisited and the score raised as the student becomes more proficient at the worksite.
- The mentor and student should go over this checklist together on a regular basis to record progress and plan future steps to complete the required competencies.

**I certify** that this student has successfully completed the competencies required in my department. Circle your YA role, sign and print your name, and complete with the date signed and the department name.

#### SIGN this page IF you have been a mentor, trainer, or instructor of this student

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Company/Department	Company/Department
Date Signed	Date Signed

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
inenter, rianer, neuterer eignature	
Printed Name	Printed Name
Company/Department	Company/Department
Company/Department	Company/Department
Data Cimeral	Data Cimeral
Date Signed	Date Signed

	-
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Company/Department	Company/Department
Date Signed	Date Signed

Marketing Youth Apprenticeship Skill Standards Checklist

## Operational Program Notes for Skill Standards Checklist

## 1. Marketing Youth Apprenticeship Curriculum

- Definitions:
  - Competency- The worksite skill to be performed.
  - Performance Standards- How the worksite will assess skill performance.
  - Learning Objectives- Content knowledge to learn these skills; may be taught by the employer, school district and/or technical college.
  - Skill Standards Checklist- The documented list of competencies completed by the YA student.
  - Performance Standards & Learning Objectives are located in the **Program Guide for this Youth Apprenticeship**.

2. **ALL** Youth Apprentices **MUST** complete the Required Skills (Core Skills, Safety & Security, and Marketing Core Foundations) competencies.

- The Required Skills competencies may be completed concurrently with the Marketing, Sales and Service technical competencies.
- The Required Skills are common skills specific to all Marketing pathways. These skills are aligned with the National States' Career Clusters Foundations standards for Marketing, Sales and Service Career Cluster.

### 3. Youth Apprenticeship Requirements

- Specific technical skill pathway units are also aligned with the MBA Research & Curriculum Center as well as the Assessment of Skills and Knowledge for Business (A\*S\*K) Institute industry certification.
- Competencies have been reviewed by the DWD for Child Labor Laws. Contact the Department of Workforce Development's Equal Rights Division/Labor Standards Bureau at 608-266- 6860 for questions regarding child labor laws. (See Appendix A for Special Child Labor Law considerations in this YA program.)
- Students will complete a MINIMUM of one pathway for each Level ONE Marketing YA and a MINIMUM of two pathways for a Level TWO Marketing YA. Units can be chosen from different pathways in any combination.
- The Department of Workforce Development Occupational Certificate will indicate "Marketing" when the program is completed.

### 4. Competency Ratings

- Rate the student on the competencies regularly and revisit the competencies with the student periodically to offer the opportunity for an improved rating.
- Arrangements must be made to ensure that the student learns, practices, AND performs each competency even if that competency is not part of their regular job function.
- "Entry Level" criteria should be interpreted to mean "able to do the task satisfactorily."

## Required Skills-Required of ALL Marketing YA Students

CORE SKILLS		rating of 2 for the characteristic content of the characteristic c	
	1	2	3
1. Defend decisions by employing critical thinking skills			
2. Communicate effectively using verbal and non-verbal language			
3. Use interpersonal skills to resolve conflicts with others in an ethical manner			
4. Demonstrate effective decision-making, problem solving and goal setting			
5. Demonstrate positive work behaviors and personal qualities			
6. Develop positive relationships with others			
7. Exhibit professional traits for retaining employment			
8. Work effectively with diverse individuals and adapt to company culture			
<ol> <li>Apply data and information to communicate ideas and create new opportunities</li> </ol>			
10. Adopt workplace tools to increase personal and organizational productivity			
11. Employ teamwork skills to achieve collective goals			
SAFETY AND SECURITY	Minimum	rating of 2 for	or EACH
		heck Rating	
	1	2	3
1. Maintain a safe and healthful work environment			
2. Follow risk management procedures			
3. Demonstrate professional role in an emergency			
4. Follow security procedures			
MARKETING CORE FOUNDATIONS		rating of 2 for the characteristic contracter in the characteristic contracter in the characteristic contracter in the characteristic contracter is the character is	
	1	2	3
1. Facilitate business to customer relationships/interactions			
2. Identify a company's unique selling proposition			
3. Analyze cost/profit relationships to guide business decision making			
4. Apply marketing information to meet customer needs			
5. Use order-fulfillment processes to move product through the supply chain			
6. Position products/services to acquire business image			
7. Understand pricing strategies to determine products optimal price			
8. Manage promotional activities to maximize return on promotional			
efforts			

### Rating Scale:

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Professional Sales Unit		Minimum rating of 2 for EACH Check Rating		
		1	2	3
1.	Reinforce company's image to exhibit the company's brand promise			
2.	Apply customer relationship management to show its contributions to the company			
3.	Utilize digital communication in the selling process			
4.	Plan sales activities to increase sales efficiency and effectiveness			
5.	Acquire product knowledge to communicate product features and benefits to ensure customer satisfaction			
6.	Perform pre-sales activities to facilitate sales presentations			
	Employ sales processes and techniques to enhance customer relationships and to increase the likelihood of making sales			
8.	Process the sale and collect payment to complete the exchange			
9.	Conduct post-sales follow-up activities to foster ongoing relationships with customers			

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Merch	nandising Unit		rating of 2 for heck Rating	
		1	2	3
1.	Employ product-mix strategies to meet customer expectations			
2.	Plan product/service management activities to facilitate product development			
3.	Assist to develop merchandise plans (budgets) to guide selection of retail products			
4.	Employ visual merchandising techniques to increase interest in product offerings			
5.	Implement display techniques to attract customers and increase sales potential			
6.	Follow merchandise security procedures to minimize inventory loss			
7.	Follow inventory control and management methods to maintain appropriate levels of stock/supplies			
8.	Prepare register/terminal for sales operations			
9.	Utilize stock-handling procedures to process incoming inventory			

#### Rating Scale:

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Marketin	ng Communications Unit		rating of 2 for the ck Rating	
		1	2	3
	Jtilize promotional channels used to communicate with targeted audiences			
	Execute an advertising campaign to achieve marketing objectives vithin budget			
	Describe design principles to be able to communicate needs to designers			
	Jse information-technology tools to manage and perform narketing communications responsibilities			
	Manage media planning and placement to enhance return on narketing investment			
	Jse publicity/public-relations activities to create goodwill with stakeholders			
	Employ sales-promotion activities to inform or remind customers of business/product			
8. N	Manage communications efforts to protect brand viability			
	Maintain technology security to protect customer information and company image			
	Develop content for use in marketing communications to create nterest in product/business/idea			

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Marke	ting Research/Competitive Intelligence Unit		rating of 2 for heck Rating	
		1	2	3
1.	Monitor business data that impact business decision-making			
2.	Evaluate the need for analytics based marketing research			
3.	Analyze who and how many respondents are needed for marketing research			
4.	Select method to obtain needed data to address general business problem			
5.	Facilitate data-collection process			
6.	Collect marketing-research data from variety of sources			
7.	Process analytical data to translate marketing information			
8.	Apply statistical methods and software systems to aid in competitive intelligence			
9.	Report findings to communicate research information to others			
10	. Assess quality of marketing-research activities to determine needed improvements			

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Marketing Youth Apprenticeship Skill Standards Checklist

Marke	eting Management/Leadership Unit		rating of 2 for heck Rating	
		1	2	3
1.	Understand human-resource laws and regulations to facilitate business operations			
2.	Develop personal organizational skills to lead others			
3.	Supervise and train fundamental work skills			
4.	Use teamwork to increase workplace efficiency and effectiveness			
5.	Use information-technology tools to manage work and customer relationships			
6.	Maintain business records to facilitate business operations			
7.	Assist with strategic planning to guide business decision-making			
8.	Identify potential business threats and opportunities to protect a business's financial well-being			
9.	Use project-management skills to improve return on investment			
10	. Manage business relationships to foster positive interactions			

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

### Additional Required Skills/Units Comments:

Core Skills -
Safety and Security -
Marketing Core Foundations -
Professional Sales Unit -
Merchandising Unit -
Marketing Communications Unit -
Marketing Research/Competitive Intelligence Unit -
Marketing Management/Leadership Unit -

## Additional Certifications, Training, Seminars and Projects

Please list in detail any additional certifications earned, any training and seminars attended, and/or any projects completed during the course of the Marketing Youth Apprenticeship.

Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
		1
Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		
Description		
Notoo/Commonto		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Other Notes or Comments –		

### **APPENDIX P**



#### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: Marketing—YAP Level 2

Request: ⊠ New Course □ New Course Name □ Course Revision □ Remove Course

Credits: .5 each semester Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

The Youth Apprenticeship Program is a two-year program, and there are currently no second year courses in the course book.

Proposed Course Description: In three or four sentences, write a course overview.

The Marketing Youth Apprenticeship Program is a one- or two-year apprenticeship. Students earn credit and get paid for working for a local business. Students will receive a certificate from the state upon successful completion of the program.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: 50	A.	Teaching Staff:	\$0
-----------------------	----	-----------------	-----

D. Facilities/Space: \$0

E. Professional Learning: \$0

- B. Textbooks/Kits: \$0
- C. Supplementary: \$0



# Marketing Skill Standards Checklist

Student Name		YA Student ID Numbe	er	
YA Coordinator		YA Consortium		
School District		High School Graduati	ion Date	
Required Skills Check ✓ comp □ Core Ski □ Safety a □ Marketin	lls nd Security g Core Foundations	Level One Requirements:         Students must complete ALL listed below         Check ✓ completed areas         □ Required Skills         □ Minimum of 1 pathway unit         □ Minimum of 2 semesters related instruction         □ Minimum of 450 work hours		
	areer Pathway			
Professional Sales Unit		Level Two Requirements: Students must complete ALL listed below Check ✓ completed areas □ Required Skills □ Minimum of 2 pathway units		
Merchandising Unit				
Marketing Communication Unit				
Marketing Research / Competitive     Intelligence Unit		<ul> <li>Minimum of 4 semesters related instruction</li> <li>Minimum of 900 work hours</li> </ul>		
Marketing N	Ianagement / Leadership Unit			
Total Hours				
Employed	Company Name		Telephone Number	
			( )	
			( )	
			( )	
			( )	

Instructions for the Worksite Mentor(s) and Instructor(s)

The Skill Standards Checklist is a list of the competencies (tasks) to be achieved through mentoring at the worksite.

- The worksite mentor should rate each competency as the student acquires and demonstrates the skill according to the performance criteria.
- A competency may be revisited and the score raised as the student becomes more proficient at the worksite.
- The mentor and student should go over this checklist together on a regular basis to record progress and plan future steps to complete the required competencies.

**I certify** that this student has successfully completed the competencies required in my department. Circle your YA role, sign and print your name, and complete with the date signed and the department name.

#### SIGN this page IF you have been a mentor, trainer, or instructor of this student

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Company/Department	Company/Department
Date Signed	Date Signed

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
inenter, rianer, neuterer eignature	
Printed Name	Printed Name
Company/Department	Company/Department
Company/Department	Company/Department
Data Cimeral	Data Cimeral
Date Signed	Date Signed

	-
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Company/Department	Company/Department
Date Signed	Date Signed

Marketing Youth Apprenticeship Skill Standards Checklist

## Operational Program Notes for Skill Standards Checklist

## 1. Marketing Youth Apprenticeship Curriculum

- Definitions:
  - Competency- The worksite skill to be performed.
  - Performance Standards- How the worksite will assess skill performance.
  - Learning Objectives- Content knowledge to learn these skills; may be taught by the employer, school district and/or technical college.
  - Skill Standards Checklist- The documented list of competencies completed by the YA student.
  - Performance Standards & Learning Objectives are located in the **Program Guide for this Youth Apprenticeship**.

2. **ALL** Youth Apprentices **MUST** complete the Required Skills (Core Skills, Safety & Security, and Marketing Core Foundations) competencies.

- The Required Skills competencies may be completed concurrently with the Marketing, Sales and Service technical competencies.
- The Required Skills are common skills specific to all Marketing pathways. These skills are aligned with the National States' Career Clusters Foundations standards for Marketing, Sales and Service Career Cluster.

### 3. Youth Apprenticeship Requirements

- Specific technical skill pathway units are also aligned with the MBA Research & Curriculum Center as well as the Assessment of Skills and Knowledge for Business (A\*S\*K) Institute industry certification.
- Competencies have been reviewed by the DWD for Child Labor Laws. Contact the Department of Workforce Development's Equal Rights Division/Labor Standards Bureau at 608-266- 6860 for questions regarding child labor laws. (See Appendix A for Special Child Labor Law considerations in this YA program.)
- Students will complete a MINIMUM of one pathway for each Level ONE Marketing YA and a MINIMUM of two pathways for a Level TWO Marketing YA. Units can be chosen from different pathways in any combination.
- The Department of Workforce Development Occupational Certificate will indicate "Marketing" when the program is completed.

### 4. Competency Ratings

- Rate the student on the competencies regularly and revisit the competencies with the student periodically to offer the opportunity for an improved rating.
- Arrangements must be made to ensure that the student learns, practices, AND performs each competency even if that competency is not part of their regular job function.
- "Entry Level" criteria should be interpreted to mean "able to do the task satisfactorily."

## Required Skills-Required of ALL Marketing YA Students

CORE SKILLS		rating of 2 for the characteristic content of the characteristic c	
	1	2	3
1. Defend decisions by employing critical thinking skills			
2. Communicate effectively using verbal and non-verbal language			
3. Use interpersonal skills to resolve conflicts with others in an ethical manner			
4. Demonstrate effective decision-making, problem solving and goal setting			
5. Demonstrate positive work behaviors and personal qualities			
6. Develop positive relationships with others			
7. Exhibit professional traits for retaining employment			
8. Work effectively with diverse individuals and adapt to company culture			
<ol> <li>Apply data and information to communicate ideas and create new opportunities</li> </ol>			
10. Adopt workplace tools to increase personal and organizational productivity			
11. Employ teamwork skills to achieve collective goals			
SAFETY AND SECURITY	Minimum	rating of 2 for	or EACH
		heck Rating	
	1	2	3
1. Maintain a safe and healthful work environment			
2. Follow risk management procedures			
3. Demonstrate professional role in an emergency			
4. Follow security procedures			
MARKETING CORE FOUNDATIONS		rating of 2 for the characteristic contracter in the characteristic contracter in the characteristic contracter in the characteristic contracter is the character is	
	1	2	3
1. Facilitate business to customer relationships/interactions			
2. Identify a company's unique selling proposition			
3. Analyze cost/profit relationships to guide business decision making			
4. Apply marketing information to meet customer needs			
5. Use order-fulfillment processes to move product through the supply chain			
6. Position products/services to acquire business image			
7. Understand pricing strategies to determine products optimal price			
8. Manage promotional activities to maximize return on promotional			
efforts			

### Rating Scale:

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Professional Sales Unit		Minimum rating of 2 for EACH Check Rating		
		1	2	3
1.	Reinforce company's image to exhibit the company's brand promise			
2.	Apply customer relationship management to show its contributions to the company			
3.	Utilize digital communication in the selling process			
4.	Plan sales activities to increase sales efficiency and effectiveness			
5.	Acquire product knowledge to communicate product features and benefits to ensure customer satisfaction			
6.	Perform pre-sales activities to facilitate sales presentations			
	Employ sales processes and techniques to enhance customer relationships and to increase the likelihood of making sales			
8.	Process the sale and collect payment to complete the exchange			
	Conduct post-sales follow-up activities to foster ongoing relationships with customers			

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Merchandising Unit		Minimum rating of 2 for EACH Check Rating		
		1	2	3
1.	Employ product-mix strategies to meet customer expectations			
2.	Plan product/service management activities to facilitate product development			
3.	Assist to develop merchandise plans (budgets) to guide selection of retail products			
4.	Employ visual merchandising techniques to increase interest in product offerings			
5.	Implement display techniques to attract customers and increase sales potential			
6.	Follow merchandise security procedures to minimize inventory loss			
7.	Follow inventory control and management methods to maintain appropriate levels of stock/supplies			
8.	Prepare register/terminal for sales operations			
9.	Utilize stock-handling procedures to process incoming inventory			

#### Rating Scale:

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior
Marketin	ng Communications Unit		rating of 2 for the ck Rating	
		1	2	3
	Jtilize promotional channels used to communicate with targeted audiences			
	Execute an advertising campaign to achieve marketing objectives vithin budget			
	Describe design principles to be able to communicate needs to designers			
	Jse information-technology tools to manage and perform narketing communications responsibilities			
	Manage media planning and placement to enhance return on narketing investment			
	Jse publicity/public-relations activities to create goodwill with stakeholders			
	Employ sales-promotion activities to inform or remind customers of business/product			
8. N	Manage communications efforts to protect brand viability			
	Maintain technology security to protect customer information and company image			
	Develop content for use in marketing communications to create nterest in product/business/idea			

#### Rating Scale:

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Marke	eting Research/Competitive Intelligence Unit		rating of 2 for heck Rating	
		1	2	3
1.	Monitor business data that impact business decision-making			
2.	Evaluate the need for analytics based marketing research			
3.	Analyze who and how many respondents are needed for marketing research			
4.	Select method to obtain needed data to address general business problem			
5.	Facilitate data-collection process			
6.	Collect marketing-research data from variety of sources			
7.	Process analytical data to translate marketing information			
8.	Apply statistical methods and software systems to aid in competitive intelligence			
9.	Report findings to communicate research information to others			
10	. Assess quality of marketing-research activities to determine needed improvements			

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Marketing Youth Apprenticeship Skill Standards Checklist

Marke	ting Management/Leadership Unit		rating of 2 for the characteristic for the ch	
		1	2	3
1.	Understand human-resource laws and regulations to facilitate business operations			
2.	Develop personal organizational skills to lead others			
3.	Supervise and train fundamental work skills			
4.	Use teamwork to increase workplace efficiency and effectiveness			
5.	Use information-technology tools to manage work and customer relationships			
6.	Maintain business records to facilitate business operations			
7.	Assist with strategic planning to guide business decision-making			
8.	Identify potential business threats and opportunities to protect a business's financial well-being			
9.	Use project-management skills to improve return on investment			
10	. Manage business relationships to foster positive interactions			

#### Rating Scale:

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

### Additional Required Skills/Units Comments:

Core Skills -
Safety and Security -
Marketing Core Foundations -
Professional Sales Unit -
Merchandising Unit -
Marketing Communications Unit -
Marketing Research/Competitive Intelligence Unit -
Marketing Management/Leadership Unit -

## Additional Certifications, Training, Seminars and Projects

Please list in detail any additional certifications earned, any training and seminars attended, and/or any projects completed during the course of the Marketing Youth Apprenticeship.

Description		
Notes/Comments		
Dete Oerenleted	Mandan/Taninan/Instances Oliverations	Data Olara d
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Other Notes or Comments –		1



#### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: Science, Technology, Engineering & Math (STEM)-YAP Level 2

Request: ⊠ New Course □ New Course Name □ Course Revision □ Remove Course

Credits: .5 each semester Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

The Youth Apprenticeship Program is a two-year program, and there are currently no second year courses in the course book.

Proposed Course Description: In three or four sentences, write a course overview.

The Science, Technology, Engineering & Math Youth Apprenticeship Program is a one- or two-year apprenticeship. Students earn credit and get paid for working for a local business. Students will receive a certificate from the State upon successful completion of the program.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$0

D. Facilities/Space: \$0

E. Professional Learning: \$0

- B. Textbooks/Kits: \$0
- C. Supplementary: \$0

Department of Workforce Development Division of Employment and Training



# Science, Technology, Engineering, and Math (STEM) Skill Standards Checklist

Student Name.	School District
YA Coordinator	YA Consortium
High School Graduation Date	
Certification Areas Completed: Required Skills - For EACH Pathway Check ✓ completed areas ☐ Core Skills ☐ Safety Engineering & Technology Pathway ☐ Engineering Drafting Unit- REQUIRED	Level One Requirements: Students must complete ALL listed below Check ✓ completed areas □ Required Skills □ Minimum of ONE Pathway Unit □ Minimum of 2 semesters related instruction □ Minimum of 450 work hours
FIRST Mechanical/Electrical Engineering Unit Civil Engineering Unit Science & Math Pathway Bioscience Lab Foundations Unit- REQUIRED FIRST Bioscience Applications Unit	Level Two Requirements: Students must complete ALL listed below Check ✓ completed areas □ Required Skills for EACH pathway □ Minimum of TWO Pathway Units □ Minimum of 4 semesters related instruction □ Minimum of 900 work hours

Total Hours Employed	Company Name	Telephone Number
		( )
		( )

# Instructions for the Worksite Mentor(s) and Instructor(s)

The Skill Standards Checklist is a list of the competencies (tasks) to be achieved through mentoring and training at the worksite.

- The worksite mentor should rate each competency as the student acquires and demonstrates the skill *according to the performance criteria.*
- A competency may be revisited and the score raised as the student becomes more proficient at the worksite.
- The mentor and student should go over this checklist together on a regular basis to record progress and plan future steps to complete the required competencies.

I certify that this student has successfully completed the competencies required in my department. Circle your YA role, sign and print your name, and complete with the date signed and the department name.

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Marchan The in a director of a set of	Martin Taria anti-atan Olarata an

#### SIGN this page IF you have been a mentor, trainer, or instructor of this student

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed
Bate olyneu	Date olghed

## **Operational Program Notes for Skill Standards Checklist**

## 1. Science, Technology, Engineering, and Math Youth Apprenticeship Curriculum

- Definitions:
  - o Competency- The worksite skill to be performed
  - o Performance Standards- How to assess skill performance as applicable to worksite
  - Learning Objectives- Content knowledge recommended to learn these skills; may be taught by the employer, school district and/or technical college.
  - Skill Standards Checklist- The documented list of competencies completed by the YA student
  - W/S- Listed after a skill indicates that skill performance may be learned and assessed at the worksite OR in the classroom in a simulated setting. However, a simulated setting should ONLY be used IF there is no possibility of skill performance at the worksite.
- Performance Standards & Learning Objectives are located in applicable Appendices of the **Program Guide for this Youth Apprenticeship.**
- 2. ALL Youth Apprentices MUST complete the Required Skills (Core Skills and Safety) competencies for each Pathway they are enrolled in.
  - The Required Skills competencies may be completed concurrently with the specific Pathway process technical competencies.
  - The Required Skills are common skills specific to all Science, Technology, Engineering, and Math sub-sectors. These skills are *aligned with* the National States' Career Clusters standards for the Science, Technology, Engineering, and Math Career Cluster.

### 3. Youth Apprenticeship choices (depending on job placement)

- Competencies have been reviewed by the Department of Workforce Development for Child Labor Laws. Contact the Department of Workforce Development's Equal Rights Division/Labor Standards Bureau at 608-266-6860 for questions regarding child labor laws. SEE Appendix A for special Child Labor Law considerations in this YA Program.
- Students will complete a **Minimum Rating** in the Required Skills and in one pathway unit for a Level One Science, Technology, Engineering, and Math YA and a **Minimum Rating** in the Required Skills and two pathway units for a Level TWO Science, Technology, Engineering, and Math YA.
- Units within each Pathway are unique to that Pathway. Therefore, switching between pathways, after the successful completion of the first year, is not allowable.
- The Department of Workforce Development Occupational Certificate will indicate "Science, Technology, Engineering, and Math" attained when the program is completed.

## 4. Competency Ratings

- Rate the student on the competencies regularly and revisit the competencies with the student periodically to offer the opportunity for an improved rating
- Arrangements must be made to ensure that the student learns, practices, AND performs each competency even if that competency is not part of their regular job function
- "Entry Level" criteria should be interpreted to mean "able to do the task satisfactorily."
- "Assist" in front of a skill indicates that the student should perform the skill as indicated in the curriculum "while assisting a worksite professional." Training should go beyond "observation only" for these skills. It will be up to the employer to determine the criticality of each specific task, training completed, and the actual level of supervision required. See curriculum details for requirements.

## **Required Skills**

**Required** of **ALL** Science, Technology, Engineering, and Math YA Students *Copy this page* **FOR EACH** pathway to be completed

CORE SKILLS	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Apply academic knowledge			
2. Apply career knowledge			
3. Communicate effectively			
4. Act professionally			
5. Demonstrate customer service skills			
6. Cooperate with others in a team setting			
7. Think critically			
8. Exhibit regulatory and ethical responsibilities			
9. Use basic technology			
10. Use resources wisely			

SAFETY	TY Minimum rating of 2 for EA Check Rating		
	1	2	3
1. Follow personal safety requirements			
2. Maintain a safe work environment			
3. Demonstrate professional role to be used in an emergency			

**Rating Scale:** 

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

## **Engineering and Technology Pathway**

En	neering Drafting Unit – REQUIRED FIRST Minimum rating of 2 for EAC Check Rating			
		1	2	3
1.	Apply engineering principles			
2.	Interpret technical drawings			
3.	Use measuring devices accurately			
4.	Organize databases, files, & drawings			
5.	Reproduce documents & plans			
6.	Use engineering drafting software			
7.	Develop one-view drawings			
8.	Develop 2D (orthographic) view drawings			
9.	Develop 3D view models			
10.	Prepare auxiliary views			
11.	Prepare section views			
12.	Dimension drawings			
13.	Apply lettering & basic annotation to drawings			
14.	Check, revise, & record drawings			
15.	Participate on an engineering project			

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

# **Engineering and Technology Pathway**

Mec	Mechanical/Electrical Engineering Unit		Minimum rating of 2 for EACH Check Rating		
		1	2	3	
1. /	Apply manufacturing & mechanical/electrical systems principles				
2.	Interpret mechanical/electrical technical drawings				
3.	Develop the engineering problem & plan with team				
4.	Research physical limitations				
5.	Research required materials properties				
6.	Research manufacturing/assembly process & limitations				
7.	Design prototype with team				
8.	Prepare prototype technical drawings				
9. /	Assist to build prototype				
10. /	Assist to test & revise prototype				
11. /	Assist to calculate & analyze prototype test results				
12.	Finalize part/process technical drawings				
13. /	Apply quality concepts to project				

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

# **Engineering and Technology Pathway**

Civil Engineering Unit		Minimum rating of 2 for EACH Check Rating	
	1	2	3
1. Apply structural & building principles			
2. Interpret civil engineering technical drawings			
3. Research codes & site requirements			
4. Conduct site analyses with team			
5. Assist to compile & analyze site measurements & other data			
6. Research structural requirements			
7. Assist to create materials specifications			
8. Design site structure(s)			
9. Draw a working site plan			
10. Construct a Bill of Materials			
11. Assist to create a project plan			
12. Assist to coordinate project activities			
13. Apply quality concepts to project			

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

## **Science and Math Pathway**

Bioscience Lab Foundations Unit		Minimum rating of 2 for EACH Check Rating		
	1	2	3	
1. Apply Bioscience Lab knowledge				
2. Use aseptic technique				
3. Clean & prepare glassware & instruments				
4. Prepare reagents, solutions, and/or buffers				
5. Perform calculations and conversions				
6. Weigh and measure accurately				
7. Operate lab equipment properly				
8. Conduct testing according to protocol				
9. Record results of testing accurately				
10. Maintain accurate records				
11. Monitor & maintain lab &/or personal inventory				

#### **Rating Scale:**

**3** = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

## **Science and Math Pathway**

Bioscience Applications Unit – Required Competencies		Minimum rating of 2 for EACH Check Rating	
	1	2	3
1. Assist to organize & analyze data			
2. Prepare a Bioscience presentation (W/S)			

Bioscience Applications Unit – Additional Competencies			Minimum rating of 2 for EACH Check Rating		
		1	2	3	
	Choose at least 6 from 22 below				
1.	Grow &/or care for plants &/or lab animals				
2.	Collect plant or animal tissues from source				
3.	Isolate &/or purify cells, microbes, nucleic acids, &/or proteins				
4.	Quantify &/or identify cells, microbes, nucleic acids, &/or proteins				
5.	Culture cells &/or microbes				
6.	Harvest cells &/or microbes				
7.	Perform spectroscopy (light, uv, IR, mass, fluorescence)				
8.	Perform chromatography (gas, TLC, HPLC)				
9.	Perform flow cytometry				
10.	Perform microscopy				
11.	Perform restriction digests				
12.	Hybridize nucleic acids				
13.	Perform gel electrophoresis				
14.	Perform amplification (PCR, RT-PCR)				
15.	Perform blot assays (Southern, Western, Northern)				
16.	Perform nucleic acid sequencing				
17.	Perform cellular assays				
18.	Perform immunoassays (ELISA)				
19.	Perform protein assays (Bradford, Lowry)				
20.	Perform transfection/transformation				
21.	Perform basic cloning				
22.	Run expression cloning tests				

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

# Additional Certifications, Training, Seminars and Projects

Please list in detail any additional certifications earned, any training and seminars attended, and/or any projects completed during the course of the Science, Technology, Engineering, and Math Youth Apprenticeship.

Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
	-	
Description		
Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		
	Mentor/Trainer/Instructor Signature	Date Signed

Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed

Other Notes or Comments		

#### **APPENDIX R**



#### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: Transportation, Distribution & Logistics-YAP Level 2

Request: ⊠ New Course □ New Course Name □ Course Revision □ Remove Course

Credits: .5 each semester Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

The Youth Apprenticeship Program is a two-year program, and there are currently no second year courses in the course book.

Proposed Course Description: In three or four sentences, write a course overview.

The Transportation, Distribution & Logistics Youth Apprenticeship Program is a one- or two-year apprenticeship. Students earn credit and get paid for working for a local business. Students will receive a certificate from the state upon successful completion of the program.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A.	Teaching Staff:	\$0	
----	-----------------	-----	--

D. Facilities/Space: \$0

B. Textbooks/Kits: \$0

E. Professional Learning: \$0

C. Supplementary: \$0

Department of Workforce Development Division of Employment and Training



# Transportation, Distribution & Logistics Skill Standards Checklist

Student Name	YA Student ID Number
YA Coordinator	YA Consortium
School District	High School Graduation Date
Certification Areas Completed:	
Required Skills - For EACH Unit         Check ✓ completed areas (p. 4)         Core Skills         Safety         Logistics/Supply Chain Management         (SCM) Pathway- 2 Units per Year (p. 5-9)         Planning & Purchasing Unit         Inventory Management & Production Unit         Storage & Warehousing Unit         Distribution & Transportation Operations Unit	Mobile Equipment Maintenance Pathway         Auto Collision- 2 Units per Year (p. 10-14)         Collision Repair Basics Unit – REQUIRED FIRST         Non-structural Analysis & Repair Unit         Painting & Refinishing Unit         Damage Analysis & Electrical Repair Unit         Auto Technician- 1 Unit per Year (p. 15-19)         General Auto Service Unit – REQUIRED FIRST         Auto/Light Truck Systems Unit         Diesel Technician- 1 or 2 year program as indicated on Unit Page 20-22         Diesel Technician Unit
Level One Requirements: Students must complete ALL listed below Check ✓ completed areas Required Skills SEE Pathway for Unit Requirements Minimum of 2 semesters related instruction Minimum of 450 work hours	Level Two Requirements: Students must complete ALL listed below Check ✓ completed areas □ Required Skills for EACH Pathway □ SEE Pathway for Unit Requirements □ Minimum of 4 semesters related instruction □ Minimum of 900 work hours
Total Hours	

Total Hours Employed	Company Name	Telephone Number
		( )
		( )

DETW-16545-E (R. 07/2013)

## Instructions for the Worksite Mentor(s) and Instructor(s)

The Skill Standards Checklist is a list of the competencies (tasks) to be achieved through mentoring and training at the worksite.

- The worksite mentor should rate each competency as the student acquires and demonstrates the skill *according to the performance standard criteria.*
- A competency may be revisited and the score raised as the student becomes more proficient at the worksite.
- The mentor and student should go over this checklist together on a regular basis to record progress and plan future steps to complete the required competencies.

I certify that this student has successfully completed the competencies required in my department. Circle your YA role, sign and print your name, and complete with the date signed and the department name.

SIGN this page IF you have been a mentor, trainer, or instructor of this student

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

Transportation, Distribution & Logistics Youth Apprenticeship Skill Standards Checklist

## **Operational Program Notes for Skill Standards Checklist**

## 1. Transportation, Distribution & Logistics Youth Apprenticeship Curriculum

- Definitions:
  - Competency- The worksite skill to be performed.
  - Performance Standards- HOW to assess skill performance as applicable to worksite.
  - Learning Objectives- Content knowledge recommended to learn these skills; may be taught by the employer, school district, and/or technical college.
  - Skill Standards Checklist- The documented list of competencies completed by the YA student.
  - **W/S** Listed after a skill indicates that skill performance may be learned and assessed at the worksite OR in the classroom in a simulated setting. However, a simulated setting should ONLY be used IF there is no possibility of skill performance at the worksite.
- Performance Standards and Learning Objectives are located in the applicable Appendices of the **Program Guide for this Youth Apprenticeship.**
- 2. ALL Youth Apprentices MUST complete the Required Skills (Core Skills and Safety) competencies for EACH Pathway they are enrolled in.
  - The Required Skills competencies may be completed concurrently with the Technical Skills competencies.
  - The Required Skills are common skills specific to all transportation, distribution and logistics subsectors. These skills are *aligned with* the National States' Career Clusters standards for Transportation, Distribution and Logistics and the National Automotive Technicians Education Foundation (NATEF) - Automotive Service Excellence (ASE) certification standards where applicable.

## 3. Youth Apprenticeship Skills

- Competencies have been reviewed by the Department of Workforce Development for Child Labor Laws. Contact the Department of Workforce Development's Equal Rights Division/Labor Standards Bureau at 608-266-6860 for questions regarding child labor laws.
- Students will complete a **Minimum Rating** in the Required Skills and one or two technical units, depending on pathway, for a Level One Transportation, Distribution & Logistics (TDL) YA and a **Minimum Rating** in the Required Skills and two or four technical units, depending on pathway and sector, for a Level TWO Transportation, Distribution & Logistics YA.
- See Appendix C in the TDL Program Guide for a cross-walk of YA and NATEF tasks.
- The Department of Workforce Development Occupational Certificate will indicate "Transportation, Distribution and Logistics" attained when the program is completed.

## 4. Competency Ratings

- Rate the student on the competencies regularly and revisit the competencies with the student periodically to offer the opportunity for an improved rating.
- Arrangements must be made to ensure that the student learns, practices, AND performs each competency **even if** that competency is not part of their regular job function.
- "Entry Level" criteria should be interpreted to mean "able to do the task satisfactorily."
- "Assist" in front of a skill indicates that the student should perform the skill as indicated in the *curriculum* "while assisting a worksite professional." Training should go beyond "observation only" for these skills. It will be up to the employer to determine criticality of each specific task, training completed, and the actual level of supervision required. See curriculum details for requirements.

## **Required Skills**

**Required** of **ALL** Transportation, Distribution & Logistics YA Students *Copy this page* **FOR EACH** pathway to be completed

CORE SKILLS	Minimu	Minimum rating of 2 for EACH Check Rating	
	1	2	3
1. Apply academic knowledge			
2. Apply career knowledge			
<ol> <li>Apply Transportation, Distribution &amp; Logistics industry knowledge</li> </ol>			
4. Communicate effectively			
5. Act professionally			
6. Demonstrate customer service skills			
7. Cooperate with others in a team setting			
8. Think critically			
9. Exhibit regulatory & ethical responsibilities			
10. Use resources wisely			
11. Use basic technology			

SAFETY	Minimum rating of 2 for EACH Check Rating		
	1	3	
1. Follow personal safety requirements			
2. Maintain a safe work environment			
3. Demonstrate professional role to be used in an emergency			

#### Rating Scale:

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Pla	nning & Purchasing Unit		n rating of 2 fo Check Rating	
		1	2	3
1.	Respond to customer inquiries			
2.	Provide product and service information			
3.	Assist to process claims			
4.	Collect and maintain data & files			
5.	Process documentation & prepare reports			
Cus	stomer Order			
6.	Compile customer & order information			
7.	Process customer sales order			
8.	Assist to plan for customer order using production and logistics			
	documents			
Pur	chasing			
9.	Purchase raw materials/services			
10.	Track and maintain order and receipt schedules			
11.	Review requisition orders			
12.	Prepare purchase orders			
13.	Contact suppliers to verify shipment details			
14.	Process supplier invoices			
15.	Monitor customer order status			
16.	Inform internal & external customers of order status			
17.	Compile purchasing, production, & shipping information for status reports			

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Inv	entory Management & Production Unit		n rating of 2 fo Check Rating	
		1	2	3
1.	Respond to customer inquiries			
2.	Collect and maintain data & files			
3.	Process documentation & prepare reports			
Sup	opliers			
4.	Gather qualified supplier information for materials to be ordered			
5.	Assist to determine prices, specifications, and delivery dates from potential suppliers			
Inve	entory Planning			
6.	Gather and organize data for demand forecasting			
7.	Assist to develop forecasts			
8.	Assist to develop production & inventory solutions based on production and logistics plan			
9.	Assist to develop packaging and material handling requirements based on production and logistics plan			
Inve	entory Movement			
10.	Verify receipt of goods/services			
11.	Complete inventory transfer forms for bookkeeping purposes			
12.	Assist to coordinate schedules for materials/product/services movement			
13.	Assist to perform physical inventory			
14.	Report inventory shortage			
15.	Assist with inventory inaccuracies investigations			

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Storage & Warehousing Unit		Minimum rating of 2 for EACH Check Rating	
	1	2	3
1. Operate tools and equipment safely			
<ol> <li>Assist to plan for customer order using production and logistics documents</li> </ol>			
Receive materials			
3. Unload materials			
4. Inspect package for integrity, damage, quality specifications			
5. Check order accuracy against packing slip/purchase order			
6. Deliver materials to staging/storage location			
7. Store or discard packaging materials as required			
Fill orders			
8. Pull items from warehouse storage location			
9. Store orders for transporting			
Package orders			
10. Check container and packing materials for labeling			
11. Verify contents match order and description			
12. Isolate defective contents prior to packing			
13. Load orders			

### Continued on next page

#### Rating Scale:

- 3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Storage & Warehousing Unit (continued)	Minimum rating of 2 for EACH Check Rating		
	1	2	3
Monitor inventory			
14. Perform cycle counts			
15. Check stock for outdated or damaged supplies			
16. Rotate raw materials and stock to minimize old and outdated inventory			
<ol> <li>Respond to recall procedures by removing and discarding inventory according to regulations</li> </ol>			
Warehouse Utilization			
18. Assist to examine loss, damage & returns reports for trends			

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Distribution & Transportation Operations Unit		n rating of 2 fo Check Rating	
	1	2	3
Transportation Requirements			
1. Assist to plan distribution of products			
2. Compile transportation documentation			
Schedule & dispatch deliveries			
3. Assist to schedule transportation of products and materials			
4. Ensure product is shipped on time			
5. Prepare invoice for products and shipment			
Ship products			
6. Operate tools and equipment safely			
7. Inspect outgoing product packaging and labeling			
8. Verify packing list against actual shipment			
9. Load vehicles OR stage for courier transportation			
10. Complete required shipping documents			
Traffic Functions			
11. Assist to plan and route shipments			
12. Assist to coordinate and schedule drivers, pickups, deliveries			
Monitor shipments			
13. Determine shipment status			
14. Maintain shipping and customs records/documentation			
15. Follow up with customer regarding shipment receipt			

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Collision Repair Basics Unit – REQUIRED FIRST		n rating of 2 fe Check Rating	
	1	2	3
1. Obtain and apply basic vehicle and collision repair knowledge			
2. Obtain required tools, equipment and materials before work			
3. Maintain work area			
4. Operate tools and equipment safely			
5. Clean and store tools after use			
6. Dispose of parts, garbage, and recyclables properly			
7. Locate & record vehicle information			
8. Maintain service & repair records			
Detail a surface			
9. Remove old decals, stripes, emblems & moldings			
10. Apply decals, tapes, stripes, emblems & moldings			
Surface Preparation			
11. Remove exterior dirt, grease, wax, and coatings from surfaces			
12. Clean interior, exterior, body openings and glass			
13. Mask exterior/interior panels & parts adjacent to repair areas			
14. Remove over-spray			
Corrosion Protection			
15. Apply anti-corrosion primers			
16. Apply corrosion protection to surfaces			
17. Apply corrosion protection to joints, seams & weld areas			
Buff and polish finish			
18. Sand and buff polish with appropriate compounds			

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

No	n-Structural Analysis & Repair Unit		rating of 2 for heck Rating	EACH
		1	2	3
Rei	nove vehicle components			
1.	Remove undamaged body panels and components			
2.	Remove mechanical and electrical components			
Bo	dy Panels			
3.	Rough straighten damaged metal panels			
4.	Remove damaged sections of metal body panels			
Do	ors			
5.	Remove door and all components			
6.	Check door fit & function			
7.	Remove & install door lock and handle components			
8.	Assist to diagnose and repair water leaks, dust leaks and wind noise			
Но	ods			
9.	Remove, replace, and align hood, hood hinges, and hood latch/lock			
10.	Remove, replace, and align deck lid, lid hinges, and lid latch/lock			
Fer	nders			
11.	Remove, replace, and align bumpers, reinforcements, guards, absorbers, isolators, and mounting hardware			
12.	Check and adjust clearances of front fenders, headlight mounting panel, and other panels			
Inte	erior Trim, Hardware & Moldings			
13.	Remove and reinstall interior door trim panels			
14.	Remove and reinstall headliners and other interior panels			
15.	Remove and install upholstery and related items			

### Continued on next page

#### **Rating Scale:**

- 3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Non-Structural Analysis & Repair Unit (continued)	Minimum rating of 2 for EACH Check Rating		EACH
	1	2	3
Moveable Glass			
16. Remove & install door glass & lower channel from door glass			
17. Remove & install window regulator			
18. Align door glass			
Hinged Glass			
19. Remove & install vent & hinged window assembly & glass			
Plastics			
20. Assist to repair plastic parts			
21. Assist to reshape and shrink flexible exterior plastic parts			
Welding			
22. Clean metal to be welded			
23. Assist to weld metal			

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Pai	nting & Refinishing Unit	Minimum rating of 2 for EACH Check Rating		
		1	2	3
Sur	face Preparation			
1.	Sand area to be painted/refinished			
2.	Strip finish or other protective coatings			
3.	Featheredge adjacent areas for blending			
Und	lercoating			
4.	Prepare undercoating			
5.	Apply undercoating			
6.	Smooth undercoating			
Pai	nt Preparation			
7.	Prepare painting and drying areas			
8.	Prepare paint mixing area			
9.	Prepare air supply equipment			
10.	Clean spray guns			
11.	Test spray guns			
Pai	nt/Finish			
12.	Assist to determine type, color & formula of paint			
13.	Assist to mix and strain paint or primer			
14.	Assist to apply paint on test panel or let-down panel			
15.	Assist to check color match; tint as necessary			

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Damage Analysis & Electrical Repair Unit		Minimum rating of 2 for EACH Check Rating	
	1	2	3
Analyze damage			
1. Prepare vehicle for inspection			
2. Assist to determine structural damage			
3. Assist to determine suspension, mechanical, and electrical damage	je 🗌		
4. Assist to determine if refinishing is required			
5. Assist to plan repair work			
General Electrical			
6. Inspect, clean, and replace battery			
7. Perform battery state-of-charge test			
8. Perform battery charge			
9. Retrieve codes and settings and disconnect the battery if needed			
10. Assist to diagnose electrical circuits, wiring, and connectors			
11. Assist to inspect, test, and replace fusible links, circuit breakers, a fuses	nd 🗌		
Electrical Systems			
12. Assist to check & repair exterior lighting & wires			
13. Aim headlamp assemblies and fog/driving lamps			
14. Check & replace horn			
15. Check & replace wiper/washer system motors & pumps			
16. Check & replace power window system switches & motors			
17. Check operation of electrically heated mirrors, windshields, back lights, panels, etc.			
18. Inspect, remove and replace components of power antenna circuit	ts 🗌		

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Level One (one year program) = General Auto Service Unit

Level Two (two year program) = General Auto Service Unit + 25 Additional Skills from the Auto/Light Truck Systems Unit (*pages 17-19*)

General Auto Service Unit – REQUIRED FIRST	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Obtain & apply basic vehicle & servicing knowledge			
2. Operate tools & equipment safely			
3. Maintain work area			
4. Assist to process work order			
5. Research information			
6. Acquire parts			
7. Assist to diagnose common concerns & determine action			
Engine			
8. Perform engine oil & filter change			
9. Replace fuel filter			
10. Check, drain, recover, flush, refill cooling system			
11. Assist to inspect engine assembly for leaks			
12. Inspect, replace air filter			
13. Retrieve, record, interpret diagnostic codes			
Manual Drive Trains & Axles			
14. Check for leaks & fluid conditions			
15. Check & adjust differential housing fluid level			
Automatic Transmission & Transaxle			
16. Check fluid level in a transmission/transaxle			
17. Inspect, replace, flush transmission fluid & filters			
Brakes			
18. Test brake fluid for contamination			

### Continued on next page

#### **Rating Scale:**

- 3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

General Auto Service Unit – REQUIRED FIRST - continued	nued Minimum Cl			
	1	2	3	
Suspension & Steering				
19. Inspect power steering fluid level & condition				
20. Flush, fill, bleed power steering system				
21. Inspect for power steering fluid leakage				
22. Lubricate suspension & steering systems				
23. Inspect tire condition & adjust air pressure				
24. Rotate tires				
Electrical/Electronic	1	1		
25. Verify, replace, refill wiper & washer operation				
26. Check brake lights				
27. Test, replace, aim lights				
28. Inspect, check, replace battery				
29. Perform battery capacity test				
30. Perform slow/fast battery charge				
31. Perform battery state-of-charge test				
32. Verify panel gauges & lights; reset maintenance indicators				
33. Jump start a vehicle				
Heating & A/C				
34. Replace cabin filter				
35. Inspect engine cooling & heater systems hoses, ducts, doors, filters				

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Auto/Light Truck Systems Unit CHOOSE 25 Skills MINIMUM	Minimum rating of 2 for EACH Check Rating		
	1	2	3
Engine Repair & Performance (NATEF A1 & A8)			
1. Install engine covers using gaskets, seals, & sealers			
2. Assist to remove & replace timing belt, verify camshaft timing			
3. Perform cooling system pressure tests to identify leaks			
4. Inspect, replace, adjust drive belts, tensioners, & pulleys			
5. Remove, inspect, replace thermostat & gasket/seal			
6. Inspect, remove, replace water pump			
7. Perform cylinder cranking & running compression tests			
8. Perform cylinder leakage tests			
9. Remove, replace spark plugs			
<ol> <li>Inspect exhaust manifold, pipes, muffler, catalytic converter, resonator, &amp; heat shields</li> </ol>			
11. Remove, replace radiator			
Automatic Transmission & Transaxle (NATEF A2)			
12. Inspect, replace external seals, gaskets, bushings			
13. Inspect powertrain mounts			
Manual Drive Trains & Axles (NATEF A3)			
14. Drain/refill differential or transfer case housings			
15. Remove & replace drive axle shafts			

## Continued on next page

#### **Rating Scale:**

- 3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Auto/Light Truck Systems Unit – continued CHOOSE 25 Skills MINIMUM		Minimum rating of 2 for EACH Check Rating		
	1	2	3	
Suspension & Steering (NATEF A4)				
16. Assist to disable & enable supplemental restraint system (SRS)				
17. Assist to remove, inspect, replace, adjust power steering pump drive belt				
18. Assist to remove, reinstall power steering pump				
19. Inspect, replace, adjust tie rod ends (sockets), tie rod sleeves, & clamps				
20. Assist to inspect, remove, install upper &/or lower ball joints				
21. Inspect, remove, install front stabilizer bar bushings, brackets, links				
22. Assist to inspect, remove, install strut cartridge or assembly, strut coil spring, insulators, & upper strut bearing mount				
<ol> <li>Inspect rear suspension system leaf springs, bushings, center pins/bolts, &amp; mounts</li> </ol>				
24. Perform pre-alignment inspection & measure vehicle ride height				
25. Dismount, inspect, balance, remount tire on wheel				
26. Inspect tire for air loss; Repair tire using internal patch				
27. Assist to test & calibrate pressure monitoring system for operation				
Brakes (NATEF A5)				
28. Inspect brake lines, hoses, fittings for leaks, kinks, rust, cracks, bulging, wear, loose fittings				
29. Select, handle, store, fill brake fluids				
30. Bleed &/or flush brake system				
31. Measure brake pedal height, travel, free play				
32. Check master cylinder for leaks & operation				
33. Remove, clean, inspect, measure brake drum diameter				
34. Assist to remove, clean, inspect, lubricate, reassemble brake shoes, springs, pins, clips, levers, adjusters, etc.				
35. Remove, clean, inspect, caliper assembly				
36. Clean, inspect caliper mounting & slides/pins				

#### Continued on next page

#### **Rating Scale:**

- 3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Auto/Light Truck Systems Unit – continued CHOOSE 25 Skills MINIMUM	ntinued Minimu		or EACH g
	1	2	3
Brakes (NATEF A5) - continued			
37. Remove, inspect, replace pads & retaining hardware			
38. Lubricate, reinstall caliper, pads, & related hardware			
39. Clean, inspect, measure rotor, rotor thickness, variation, & lateral run-out			
40. Remove, reinstall rotor			
41. Check brake pad wear indicator			
42. Remove, clean, inspect, repack, install wheel bearings, seals, hub			
43. Check parking brake cables & components			
44. Check parking brake operation & indicator lights			
45. Assist to replace wheel bearing & race			
Electrical & Electronic Systems (NATEF A6)			
46. Properly use a digital multimeter (DMM)			
47. Use wiring diagrams			
48. Inspect, test fusible links, breakers, fuses			
49. Replace electrical connectors & terminal ends			
50. Perform starter current draw tests			
51. Perform starter circuit voltage drop tests			
52. Remove, install starter			
53. Remove, inspect, reinstall generator (alternator)			
54. Remove, reinstall door panel			

### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Types of Engines Serviced:

Level One (one year program) = General Skills + 3 Systems Level Two (two year program) = General Skills + ALL 6 Systems PM = Preventive Maintenance

Diesel Technician Unit	Minimum rating of 2 for EACH Check Rating		
General Skills	1	2	3
1. Obtain & apply basic diesel servicing knowledge			
2. Operate tools & equipment safely			
3. Maintain work area			
4. Assist to process work order			
5. Research information			
6. Acquire parts			
7. Assist to diagnose common concerns & determine action			
8. Assist to retrieve, record, interpret diagnostic codes			
Diesel Engine System	1	2	3
9. Perform engine lubrication PM			
10. Perform oil & filter change			
11. Perform fuel system checks			
12. Perform air induction & exhaust PM			
13. Perform cooling system PM			
14. Pressure test cooling system			
15. Assist to bleed cooling system			
16. Assist to perform engine brake PM			

### Continued on next page

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Diesel Technician Unit- continued		Minimum rating of 2 for EACH Check Rating		
Cab & Hood System	1	2	3	
17. Perform instrument checks				
18. Perform safety equipment checks				
19. Perform hardware checks				
20. Check HVAC operation				
21. Lubricate grease fittings				
Drive Train System	1	2	3	
22. Perform transmission PM				
23. Change transmission oil & filter				
24. Perform clutch PM				
25. Perform drive axle PM				
26. Change drive axle oil & filter				
27. Inspect driveshaft				
Electrical/Electronics System	1	2	3	
28. Use wiring diagrams				
29. Properly use a digital mulimeter (DMM)				
30. Perform battery PM				
31. Perform battery load test				
32. Determine battery state of charge test				
33. Jump start a vehicle				
34. Engage starter				
35. Perform charging system PM				
36. Assist to remove & replace alternator				
37. Perform lighting system PM				

### Continued on next page

#### **Rating Scale:**

- 3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior
# Mobile Equipment Maintenance Pathway- Diesel Technician

Diesel Technician Unit- continued         Minimum rating of 2 for Check Rating			
Brakes & Hydraulics System	1	2	3
38. Perform air brake PM			
39. Perform hydraulic brake PM			
40. Check ABS & ATC warning lights			
41. Read & interpret hydraulic system diagrams			
42. Service filtration/reservoirs (tanks)			
43. Check hoses, fittings, connections			
Suspension & Steering System	1	2	3
44. Perform suspension & steering PM			
45. Perform steering linkage PM			
46. Perform tire checks			
47. Assist to remove & install steering & drive axle wheel/tire assemblies			
48. Perform fifth wheel, frame, trailer PM			

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

## **Additional Comments -**

# Additional Certifications, Training, Seminars and Projects

Please list in detail any additional certifications earned, any training and seminars attended, and/or any projects completed during the course of this Youth Apprenticeship.

Description	<u></u>	
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Other Notes or Comm	nents	

#### **APPENDIX S**



#### **COURSE CHANGE PROPOSAL**

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 9/17/18 Administrator Name: Cheryl Kothe

Department and School: Career and Technical Education—Bradford, Indian Trail, Tremper, LakeView, and Reuther

Course Name: Information Technology—YAP Level 2

Request: ⊠ New Course □ New Course Name □ Course Revision □ Remove Course

Credits: .5 each semester Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Corequisite—Student must be enrolled in course within related pathway.

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

The Youth Apprenticeship Program is a two-year program, and there are currently no second year courses in the course book.

Proposed Course Description: In three or four sentences, write a course overview.

The Information Technology Youth Apprenticeship Program is a one- or two-year apprenticeship. Students earn credit and get paid for working for a local business. Students will receive a certificate from the state upon successful completion of the program.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Please see the skill standards checklist provided from the Wisconsin Department of Workforce Development.

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$0
------------------------

D. Facilities/Space: \$0

E. Professional Learning: \$0

- B. Textbooks/Kits: \$0
- C. Supplementary: \$0



# Information Technology (IT) Skill Standards Checklist

onsortium
evel One Requirements: udents must complete ALL listed below heck ✓ completed areas ☐ Required Skills ☐ Minimum of ONE Pathway Unit ☐ Minimum of 2 semesters related instruction ☐ Minimum of 450 work hours
evel Two Requirements: udents must complete all listed below neck ✓ completed areas ☐ Required Skills ☐ Minimum of TWO Pathway Units
<ul> <li>Minimum of 4 semesters related instruction</li> <li>Minimum of 900 work hours</li> </ul>

Total Hours Employed	Company Name	Telephone Number
		( )
		( )

DETW-16812 (R. 07/2011)

# Instructions for the Worksite Mentor(s) and Instructor(s)

The Skill Standards Checklist is a list of the competencies (tasks) to be achieved through mentoring at the worksite.

- The worksite mentor should rate each competency as the student acquires and demonstrates the skill *according to the performance criteria.*
- A competency may be revisited and the score raised as the student becomes more proficient at the worksite.
- The mentor and student should go over this checklist together on a regular basis to record progress and plan future steps to complete the required competencies.

**I certify** that this student has successfully completed the competencies required in my department. Circle your YA role, sign and print your name, and complete with the date and the department name.

SIGN this page IF you have been a mentor, trainer, or instructor of this student		
Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature	
Printed Name	Printed Name	
Department	Department	
•	•	
Date Signed	Date Signed	
<b>U</b>	0	

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

# **Operational Program Notes for Skill Standards Checklist**

# 1. Information Technology Youth Apprenticeship Curriculum

- Definitions:
  - o Competency- The worksite skill to be performed
  - Performance Standards- How to assess skill performance as applicable to worksite
  - Learning Objectives- Content knowledge recommended to learn these skills; may be taught by the employer, school district and/or technical college
  - Skill Standards Checklist- The documented list of competencies completed by the YA student
  - W/S- Listed after a skill indicates that skill performance may be learned and assessed at the worksite OR in the classroom in a simulated setting. However, a simulated setting should ONLY be used IF there is no possibility of skill performance at the worksite.
- Performance Standards & Learning Objectives are located in applicable Appendices of the **Program Guide for this Youth Apprenticeship**
- 2. ALL Youth Apprentices MUST complete the Core Skills and Safety & Security competencies for EACH UNIT they are enrolled in
  - The competencies may be completed concurrently with the specific unit technical competencies
  - These competencies are common skills specific to all Information Technology (IT) sub-sectors. These skills are *aligned with* the National States' Career Clusters standards for Information Technology.

## 3. Youth Apprenticeship choices (depending on job placement)

- Competencies have been reviewed by the Department of Workforce Development for Child Labor Laws. Contact the Department of Workforce Development's Equal Rights Division/Labor Standards Bureau at 608-266-6860 for questions regarding child labor laws. SEE Appendix A for special Child Labor Law considerations in this YA Program.
- Students will complete a **Minimum Rating** in the Required Skills and one additional pathway unit for a Level ONE Information Technology (IT) YA and a **Minimum Rating** in the Required Skills and two additional pathway units for a Level TWO Information Technology (IT) YA
- Virtualization in server test environments or similar at the worksite is allowable in order to practice and master more critical worksite competencies
- The Department of Workforce Development Occupational Certificate will indicate "Information Technology (IT)" attained when the program is completed

# 4. Competency Ratings

- Rate the student on the competencies regularly and revisit the competencies with the student periodically to offer the opportunity for an improved rating
- Arrangements must be made to ensure that the student learns, practices, AND performs each competency **even if** that competency is not part of their regular job function
- "Entry Level" criteria should be interpreted to mean "able to do the task satisfactorily"
- "Assist" in front of a skill indicates that the student should perform the skill as *indicated in the curriculum* "while assisting a worksite professional." Training should go beyond "observation only" for these skills. It will be up to the employer to determine the criticality of each specific task, training completed, and the actual level of supervision required. See actual curriculum details for requirements.

# **Required Skills**

**Required** of **ALL** Information Technology (IT) YA Students Copy this page **FOR EACH PATHWAY** to be completed

CORE SKILLS		Minimum rating of 2 for EACH Check Rating	
	1	2	3
1. Apply applicable academic knowledge			
2. Apply applicable career knowledge			
3. Communicate effectively			
4. Communicate effectively on the phone			
5. Act professionally			
6. Demonstrate customer service skills			
7. Cooperate with others in a team setting			
8. Think critically			
9. Exhibit regulatory and ethical responsibilities			
10. Use basic technology			
11. Use resources wisely			

SAFETY & SECURITY	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Follow personal safety requirements			
2. Maintain a safe work environment			
3. Demonstrate professional role in an emergency			
4. Follow security procedures			
5. Maintain confidentiality			

#### Rating Scale:

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

## Additional Comments -

# **General IT Pathway**

The IT Essentials Unit allows for the *choice* of FOUR competencies ONLY to be completed in classroom simulation; however, a simulated setting should ONLY be used IF there is no possibility of skill performance at the worksite.

Note: The multiple classroom options were added to facilitate use by the Cooperative Education (Coop) programs through collaboration with the Department of Public Instruction.

IT I	ESSENTIALS UNIT		n rating of 2 fe Check Rating	
		1	2	3
1.	Apply applicable IT industry knowledge			
2.	Schedule appointments			
3.	Process customer requests			
4.	Query, view, and extract data			
5.	Perform common technical requests			
6.	Assist to resolve customer problems			
7.	Perform basic back up procedures			
8.	Monitor systems to ensure optimal functioning			
9.	Prepare required reports			
10.	Install a desktop system and peripheral equipment			
11.	Install & configure an operating system (O/S) and/or drivers			
12.	Upgrade an operating system (O/S)			
13.	Install and uninstall an application			
14.	Install operating system (O/S) service packs and security patches			
15.	Ghost a computer			
16.	Participate on a system project team			

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

**2** = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

## Additional Comments -

# Network Systems and Information Support & Services Pathway

Hardware Unit		Minimum rating of 2 for EACH Check Rating		
	1	2	3	
1. Maintain network records				
2. Communicate with vendors				
3. Perform basic technical network support duties				
4. Assist to monitor network performance				
5. Perform routine network system maintenance				
6. Assist to apply network upgrades, service packs, and patches				
7. Upgrade portable devices				
8. Replace inoperable computer components				
<ol> <li>Assist to troubleshoot network system and data communication problems</li> </ol>				
10. Assist to install or upgrade network equipment				
11. Participate on a networking systems evaluation project team				

#### **Rating Scale:**

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

## Additional Comments –

# Programming & Software Development and Information Support & Services Pathway

Software Unit		Minimum rating of 2 for EACH Check Rating		
		1	2	3
1. U	se basic office software applications			
2. A	ssist to maintain database security measures			
3. M	lonitor and maintain data integrity			
4. A	ssist to troubleshoot application and database problems			
5. C	reate a database			
6. A	cquire and install new software			
7. A	ssist to test software programming changes or modifications			
8. E <sup>,</sup>	valuate application software packages (W/S)			
9. Write code (W/S)				
	articipate on a software development or customization project			

#### Rating Scale:

- **3** = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2 = Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

#### Additional Comments –

# Web & Digital Communications Pathway

Web & Digital Media Unit		Minimum rating of 2 for EACH Check Rating		
		1	2	3
1.	Maintain web/digital media production and progress records			
2.	Assist to outline structural content			
3.	Assist to create verbal content			
4.	Create or edit images and graphics for website/digital media use			
5.	Create templates for website layout			
6.	Write program code for a website (W/S)			
7.	Assist to create specialized scripts/motion graphics			
8.	Perform user testing			
9.	Assist to finalize a website			
10.	Assist to maintain a website			
11.	Participate on website/digital media project team			

#### Rating Scale:

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

## Additional Comments –

# Additional Certifications, Training, Seminars and Projects

Please list in detail any additional certifications earned, any training and seminars attended, and/or any projects completed during the course of the Information Technology (IT) Youth Apprenticeship.

Description	<u><u> </u></u>	, II I
Notes/Comments		
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		
Description		
Notes/Comments		
Data Camalatad		Data Cirrad
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Description		
Docomption		
Notes/Comments		
Date Completed	Manta (Train an/la atmostan Oismatura	Date Signed
Date Completed	Mentor/Trainer/Instructor Signature	Date Signed
Other Notes or Comm	nents —	

## Kenosha Unified School District Kenosha, Wisconsin

#### November 27, 2018

## COURSE CHANGE PROPOSALS: FAMILY AND CONSUMER SCIENCE

#### **Background**

Five Course Change Proposals are being submitted to remove two courses and add three new courses in the family and consumer sciences area to align with career pathways that prepare students for career readiness.

## **Course Change Requests**

COURSE NAME	ACTION	SCHOOLS	APPENDIX
Building Relationships	Removal	Tremper, Bradford, Indian Trail,	А
		Reuther	
Parenting	Removal	Tremper, Bradford, Indian Trail,	В
		Reuther	
Global Cuisine	Addition	Tremper, Bradford, Indian Trail,	С
		Reuther	
Early Childhood Educator	Addition	Tremper, Bradford, Indian Trail,	D
		Reuther	
Life Skills and Relationships	Addition	Tremper, Bradford, Indian Trail,	Е
		Reuther	

#### **Recommendation**

At its November 13, 2018, meeting, the Curriculum/Program Standing Committee voted to forward this report to the Board of Education for consideration. It is recommended that the Board of Education approve this request to approve the following course changes beginning in the 2019-20 school year:

REMOVE COURSES	NEW COURSES
Building Relationships	Global Cuisine
Parenting	Early Childhood Education
	Life Skills and Relationships

Dr. Sue Savaglio-Jarvis Superintendent of Schools

Ms. Julie Housaman Chief Academic Officer

Ms. Cheryl Kothe Coordinator of Career and Technical Education





#### **COURSE CHANGE PROPOSAL**

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 10/1/2018 Administrator Name: Cheryl Kothe

Department and School: Family and Consumer Science-Tremper, Bradford, Indian Trail, Reuther

Course Name: Building Relationships

Request:  $\Box$  New Course  $\Box$  New Course Name  $\Box$  Course Revision  $\boxtimes$  Remove Course

Credits: Quarter, Semester <sup>1</sup>/<sub>2</sub> credit Check if honors:

Recommended Prerequisites (if any):

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

Parenting and Building Relationships will be combined into our second level child development course (Individual and Family Development). The realignment of courses will fit more of a human service career cluster.

Proposed Course Description: In three or four sentences, write a course overview.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$

D. Facilities/Space: \$

B. Textbooks/Kits: \$

E. Professional Learning: \$

C. Supplementary: \$

#### **APPENDIX B**



#### **COURSE CHANGE PROPOSAL**

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 10/1/2018 Administrator Name: Cheryl Kothe

Department and School: Family and Consumer Science-Tremper, Bradford, Indian Trail, Reuther

Course Name:ParentingRequest:□New Course□Course Revision⊠Remove Course

Credits: Quarter, Semester ½ credit Check if honors: □

Recommended Prerequisites (if any):

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

Parenting and Building Relationships will be combined into our second level child development course (Individual and Family Development). The realignment of courses will fit more of a human service career cluster.

Proposed Course Description: In three or four sentences, write a course overview.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$

D. Facilities/Space: \$

B. Textbooks/Kits: \$

E. Professional Learning: \$

C. Supplementary: \$





#### **COURSE CHANGE PROPOSAL**

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 10/1/2018 Administrator Name: Cheryl Kothe

Department and School: Family and Consumer Science-Tremper, Bradford, Indian Trail, Reuther

Course Name: Global Cuisine

Credits: Quarter, Semester <sup>1</sup>/<sub>2</sub> credit Check if honors:

Recommended Prerequisites (if any):

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

As our lives become more global through mobility, advancements in technology, and expanded international relations, the need for understanding and acceptance of cultural diversity becomes ever more important and a part of our daily lives. Food choices are among the first cultural elements to be accepted by other cultures. We often accept another person's foods even if their customs, beliefs, and political views clash. Sharing food is a natural bridge builder, and the meal table may be the best place to begin to appreciate cultural diversity. Students will, at some point in their lives, visit, do business in, relocate to a foreign country, or entertain people of other ethnic backgrounds. Knowledge of food customs can prepare them for these experiences.

Proposed Course Description: In three or four sentences, write a course overview.

Discover the unique flavors and tastes from around the world. In Global Cuisine you will explore the traditional foods and flavors of Asia, Mediterranean countries, Italy, Mexico, and the U.S. You will be able to identify the differing cooking methods, equipment, ingredients, and influences from cultures across the globe. Expand your knowledge base and take home some great new recipes to add to your collection.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

- FPS1.b: Demonstrate food safety and sanitation procedures.
- FPS1.a.9.h: Analyze the effects of food production and services occupations on local, state, national, and global economics.

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

- Global cuisine (must be taken BEFORE culinary skills)
- Prep for sanitation I (preparation to take the sanitation test in the third level) (5 days)
- United States and Canada (Chapter 28) (15 days)
- New England

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$0

D. Facilities/Space: \$0

B. Textbooks/Kits: \$0

E. Professional Learning: \$0

C. Supplementary: \$0

2

#### **APPENDIX D**



#### **COURSE CHANGE PROPOSAL**

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 10/1/2018 Administrator Name: Cheryl Kothe

Department and School: Family and Consumer Science-Tremper, Bradford, Indian Trail, Reuther

Course Name: Early Childhood Educator

Request:  $\square$  New Course  $\square$  New Course Name  $\square$  Course Revision  $\square$  Remove Course

Credits: Quarter, Semester  $\frac{1}{2}$  credit Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Developing Child

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

This is the second and the capstone class in the series of classes in the Early Childhood Development and Services Career Pathway. This course will allow the students to earn a transcripted credit from Gateway Technical College.

Proposed Course Description: In three or four sentences, write a course overview.

This course will prepare students to work as teacher caregivers in early childhood settings. It combines hands-on work with related academic work. Students will learn how to create a safe and healthy play environment, guide behavior, plan and implement learning activities, and work cooperatively with staff and parents. This course is transcripted with Gateway Technical College.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

- EC1.b: Apply theories of developmentally appropriate practice to classroom situations.
- EC1.d: Guide children in appropriate behaviors.
- EC1.g: Adhere to current United States Department of Agriculture Dietary Guidelines and Wisconsin State Licensing Regulations.
- EC1.e: Create and facilitate developmentally appropriate activities for a variety of child care curricular areas.

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

- Unit 1: Childcare Options and Careers
- Unit 2: Preschool to Middle Childhood Development
- Unit 3: Theorists and Theories
- Unit 4: Creating a Safe and Healthful Environment
- Unit 5: Behavior Modifications
- Unit 6: Learning Experiences for Children
- Unit 7: Guiding Children with Special Needs

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$0

D. Facilities/Space: \$0

B. Textbooks/Kits: \$0

E. Professional Learning: \$0

C. Supplementary: \$0

2

#### **APPENDIX E**



#### **COURSE CHANGE PROPOSAL**

Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.

Date Initiated: 10/1/2018 Administrator Name: Cheryl Kothe

Department and School: Family and Consumer Science-Tremper, Bradford, Indian Trail, Reuther

Course Name: Life Skills and Relationships

Request: 🛛 New Course	□ New Course Name	□ Course Revision	□ Remove Course
-----------------------	-------------------	-------------------	-----------------

Credits: Quarter, Semester <sup>1</sup>/<sub>2</sub> credit Check if honors:

Recommended Prerequisites (if any):

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

This course is combining our Building Relationships and Parenting course. The new course will benefit students who are pursuing a career in the Human Service Pathway and will help any student prepare for careher and college.

Proposed Course Description: In three or four sentences, write a course overview.

The students in this course will examine topics including communication skills; leadership; teamwork; collaboration; conflict prevention, resolution, and management; building and maintaining relationships; and individual needs and characteristics and their impacts on career, family, and community relationships. This course is excellent for any student pursuing a career in the Human Service Career Pathway.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

- F1.a: Analyze the effects of family as a system on individuals and society.
- P1.d: Analyze factors related to preparing for parenthood.
- HD1.a.9.h: Analyze current and emerging research about human growth and development, including research on brain development.
- P1.d.7.h: Analyze biological processes related to prenatal development, birth, and health of child and mother.
- HD1.a.7.h: Distinguish between physical, emotional, social, spiritual, and intellectual development.

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

- Unit 1: Personal Readiness (2 weeks)
- Unit 2: Goal Planning (1 week)
- Unit 3: Communication (2 weeks)
- Unit 4: Media Relationships (2 weeks)

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$0

D. Facilities/Space: \$0

B. Textbooks/Kits: \$0

E. Professional Learning: \$0

C. Supplementary: \$No change

2

#### Kenosha Unified School District Kenosha, Wisconsin

#### November 27, 2018

### COURSE CHANGE PROPOSAL: INDIAN TRAIL BUSINESS ACADEMY

#### Background

One Course Change Proposal is being submitted to update the name of one course in the business academy at Indian Trail High School and Academy. The proposal is for a change of name for this course from Introduction to Business to World of Business. The proposed name change will allow Indian Trail to differentiate this academy course from the comprehensive course Introduction to Business, thus allowing both courses to be offered to better serve students.

#### **Course Name Change Requests**

CURRENT COURSE NAME	NEW COURSE TITLE	SCHOOLS	APPENDIX
Introduction to Business	World of Business	Indian Trail	А

#### **Recommendation**

At its November 13, 2018, meeting, the Curriculum/Program Standing Committee voted to forward this report to the Board of Education for consideration. It is recommended that the Board of Education approve the following changes within the Indian Trail Business Academy beginning in the 2019-20 school year:

CURRENT COURSE NAME	NEW COURSE TITLE
Introduction to Business	World of Business

Dr. Sue Savaglio-Jarvis Superintendent of Schools

Ms. Julie Housaman Chief Academic Officer

Ms. Cheryl Kothe Coordinator of Career and Technical Education



#### COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by October 1 to be considered for board approval.

Date Initiated: 9/23/18 Administrator Name: Cheryl Kothe

Department and School: Business Department, Indian Trail High School and Academy, Business Academy

Course Name: Current: Introduction to Business Proposed: World of Business

Request:  $\Box$  New Course  $\boxtimes$  New Course Name  $\Box$  Course Revision  $\Box$  Remove Course

Credits: Current: .50 Proposed: .50 Check if honors:

Recommended Prerequisites (if any): NA

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or *name change*, only fill out this section.)

The proposal is for a change of name for this course from Introduction to Business to World of Business. The proposed name change will allow Indian Trail to differentiate this academy course from the comprehensive course, Introduction to Business, thus allowing us to offer both courses to better serve our students.

Proposed Course Description: In three or four sentences, write a course overview.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction.

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: \$0

D. Facilities/Space: \$0

B. Textbooks/Kits: \$0

E. Professional Learning: \$0

C. Supplementary: \$0

#### Kenosha Unified School District Kenosha, Wisconsin

#### November 27, 2018

#### NEW COURSE PROPOSALS: CAREER AND TECHNICAL EDUCATION

#### **Background**

Two new course proposals are being submitted in the area of career and technical education. The proposals will continue to support the introduction of Industry 4.0 manufacturing certification to Kenosha high schools. Introduction to Industrial Robotics and Introduction to Industrial Internet of Things (IIoT) courses will provide students an opportunity to explore, develop knowledge, and build upon the skills needed in advanced manufacturing.

In the Introduction to Industrial Robotics course, students will be introduced to programming techniques for industrial robots. The learner examines teach pendant programming including input and output, routines, decision making, six frames of positional operation, and robot communication.

The Introduction to IIoT course introduces the theoretical and practical topics of IIoT. The learner investigates the range of sensor and actuator devices available, ways in which they communicate and compute, methods for getting information to and from IIoT-enabled devices, and ways of visualizing and processing data acquired from the IIoT.

A budget assumption request to purchase the equipment essential to the instruction of both courses is provided in Appendix A.

COURSE	SCHOOL	APPENDIX
Introduction to Industrial	Bradford, Indian Trail, LakeView, and	В
Robotics	Tremper	
Industrial Internet of Things	Bradford, Indian Trail, LakeView, and	С
	Tremper	

#### Courses

#### **Recommendation**

At its November 13, 2018, meeting, the Curriculum/Program Standing Committee voted to forward this report to the Board of Education for consideration. It is recommended that the Board of Education approve the request to add Introduction to Industrial Robotics and Industrial Internet of Things to the 2019-20 course catalogue.

Dr. Sue Savaglio-Jarvis Superintendent of Schools

Mrs. Julie Housaman Chief Academic Officer

Mrs. Cheryl Kothe Coordinator of Career and Technical Education



# **BUDGET ASSUMPTION SUMMARY - EXPENDITURE**

Title:

Equipment for Industry 4.0 Courses

Budget Year: 2019-2020

Department:

Career and Technical Education (CTE)

Budget Manager: Che

Cheryl Kothe

# REQUEST

This request is to purchase three classroom sets of equipment for Introduction to Industrial Robotics (\$105,000) and another three sets of equipment for Industrial Internet of Things (IIoT) (\$140,000).

# **RATIONALE/ INSTRUCTIONAL FOCUS**

As the fourth industrial revolution, commonly referred to as Industry 4.0, emerges, the skills required by individuals employed in the industrial sector will change significantly. More than ever before, industrial equipment will be electronically monitored, controlled, interconnected, and networked, creating massive amounts of data to be used in analysis, process control, and improvement. As a result, success in the industrial sector will now require the comprehension of multiple industrial operations, smart sensors, and smart devices used to monitor and control production operations, industrial automation, control systems, networking, network security, mobile and internet data communication, and data analytics.

The advent of Industry 4.0 creates exciting opportunities for students entering a variety of career pathways, including, but not limited to, advanced manufacturing, information technology, industrial design, robotics, industrial maintenance, machining, tool and die, and data and image analytics.

# IMPACT

In this course, students are introduced to programming techniques for industrial robots. Students examine teach pendant programming including input/output, routines, decision making, six frames of positional operation, and robot communication. Upon completion of the course, students will be able to operate and program industrial robots commonly used in Industry 4.0.

In this course, students are introduced to theoretical and practical topics of the Industrial Internet of Things (IIoT). The student investigates the range of sensor and actuator devices available, ways in which they communicate and compute, methods for getting information to and from IIoT-enabled devices, and ways of visualizing and processing data acquired from the IIoT. Upon completion, students will utilize hardware and software to construct a sensor network within an existing system and utilize industry standard tools to visual the data captured.

These are the last two courses in a series of four designed for high school level students. Students who complete all four courses are able to earn an Introduction to Industry 4.0 certificate.

BUDGET ASSUMPTION			
Object Level	Descriptive	Amount	
100's	Salaries	\$0	
200's	Fringes	\$0	
300's	Purchased Services	\$0	
400's	Non-Capital Objects	\$65,000	
500's	Capital Objects	\$180,000	
	TOTAL*	\$245,000.00	
*To re-calculate the	Total Amount, click once in the Total Amount cell th	nen press the F9 key.	
Is this a X	Dne-time or Recurring expenditure?		
	FUNDING SOURCES		
Enter Funding Source	ces		
Request for new fun	ding for the CTE program		
•			

#### **APPENDIX B**



#### **COURSE CHANGE PROPOSAL**

Completed forms must be returned to the chief academic officer by October 1 to be considered for board approval.

Date Initiated: 10/9/18 Administrator Name: Cheryl Kothe

Department and School: Technology and Engineering

Course Name: Introduction to Industrial Robotics

Request:  $\square$  New Course  $\square$  New Course Name  $\square$  Course Revision  $\square$  Remove Course

Credits: Current: 0.50 Check if honors:  $\Box$ 

Recommended Prerequisites (if any): Introduction to Mechatronics and Introduction to Industrial Control Systems

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

As the fourth industrial revolution, commonly referred to as Industry 4.0, emerges, the skills required by individuals employed in the industrial sector will change significantly. More than ever before, industrial equipment will be electronically monitored, controlled, interconnected, and networked, creating massive amounts of data to be used in analysis, process control, and improvement. As a result, success in the industrial sector will now require the comprehension of multiple industrial operations, smart sensors, and smart devices used to monitor and control production operations, industrial automation, control systems, networking, network security, mobile and internet data communication, and data analytics.

The advent of Industry 4.0 creates exciting opportunities for students entering a variety of career pathways, including, but not limited to, advanced manufacturing, information technology, industrial design, robotics, industrial maintenance, machining, tool and die, and data and image analytics.

Proposed Course Description: In three or four sentences, write a course overview.

In this course, students are introduced to programming techniques for industrial robots. The student examines teach pendant programming including input/output, routines, decision making, six frames of positional operation, and robot communication. Upon completion of the course, students will be able to operate and program industrial robots commonly used in Industry 4.0.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

See attached document.

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction.

See attached document.

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

- A. Teaching Staff: \$0
- B. Textbooks/Kits: \$3,500 e-learning (Perkins budget) and \$105,000 (budget assumption request for new funds)
- C. Supplementary: \$2,244 for 40 hours of curriculum planning time (Perkins Grant)
- D. Facilities/Space: \$0
- E. Professional Learning: \$2,244 (Perkins Grant)



Gateway Technical College

# 10-664-105 Introduction to Industrial Robotics

# **Course Outcome Summary**

# **Course Information**

Description	In this course, learners are introduced to programming techniques for industrial robots. The learner examines teach pendant programming including I/O, routines, decision making, six frames of positional operation, and robot communication. Upon completion of the course, learners will be able to operate and program industrial robots commonly used in Industry 4.0.	
Career Cluster	Manufacturing	
Instructional Level	Associate Degree	
<b>Total Credits</b>	2	
Total Hours	54	

## **Pre/Corequisites**

Prerequisite	10-664-100 (Minimum Grade "C")
Prerequisite	10-664-110 (Minimum Grade "C")

# **Core Abilities**

- 1. Act responsibly
- 2. Communicate clearly and effectively
- 3. Demonstrate essential computer skills
- 4. Demonstrate essential mathematical skills
- 5. Develop job-seeking skills
- 6. Respect self and others as members of a diverse society
- 7. Think critically and creatively
- 8. Value Learning
- 9. Work cooperatively

#### **Program Outcomes**

- 1. Apply state and national safety rules to the manufacturing systems environment.
- 2. Analyze automation within a complex manufacturing system.
- 3. Manage advanced manufacturing systems for operational efficiency and cost control.

- 4. Analyze technical specifications for implementation of manufacturing systems, modules, and components.
- 5. Explore a Proportional Integral Derivative (PID) control system to achieve a desired outcome in a manufacturing outcome.
- 6. Integrate industrial control systems into manufacturing processes.
- 7. Apply electronic principles to devices within a complex manufacturing systems.

# **External Standards**

Title	Advanced Manufacturing DACUM
Version/Date	11/1/2017
Association Status	Active
Sponsoring Organization	Gateway Technical College, Milwaukee Area Technical College, Waukesha County Technical College

# Description

## Summary

On October 20, 2017, Nancy Chapko (Gateway Technical College), Pam Holt (Milwaukee Area Technical College), and Mike Shiels (Waukesha County Technical College) collaboratively planned and conducted a DACUM (Design A Curriculum) discussion to explore Advanced Manufacturing with the employers in the represented technical colleges' districts. The DACUM was identified as an essential next step related to an examination of joint programming goals among the represented technical colleges.

The DACUM was used to gather information to create or enhance a system for technical colleges to prepare students for jobs in Advanced Manufacturing. It focused on providing the represented technical colleges with mutual understanding about the present state of Advanced Manufacturing in southeastern Wisconsin and to begin a dialog about how the represented technical colleges can prepare students for jobs in Advanced Manufacturing.

# 1.0 Background

As a result of discussion among academic leaders, faculty experts, and instructional support staff of Gateway Technical College (Gateway), Milwaukee Area Technical College (MATC), and Waukesha County Technical College (WCTC) at the September 1, 2017 Mechatronics/Industry 4.0 Programming Discussion meeting, it was decided that further exploration of Advanced Manufacturing should be conducted. DACUM discussion provided analysis of current Advanced Manufacturing practices and recommendations on ways to ensure a continued supply of skilled employees.

# 1.1 Methodology

The discussion focused on Industry 4.0 production, engineering, and automation aspects of Advanced Manufacturing and was facilitated by Nancy Chapko with support from Pam Holt and Mike Shiels. The objectives of the discussion were as follows.

- Describe the present status of Advanced Manufacturing in the represented colleges' districts.
- Describe the work of Advanced Manufacturing and the workforce who will perform it.
- Begin to identify the knowledge and skills required for entry-level Advanced Manufacturing employees.

The deliverable, a narrative summary of the discussion, was prepared and shared with the represented technical colleges.

Facilitators invited the participation of their respective district employers involved in Advanced Manufacturing. Those individuals who accepted the invitation and participated in the discussion represented seven employers and a suburban K-12 school district with a comprehensive Career and Technical Education (CTE) curriculum. (See Appendix A.) Participants were asked a series of questions that were designed for the following purpose. (See Appendix B.)

•Engagement - Designed to introduce participants to the topic and create a comfortable environment for discussion

• Exploration – Designed to get to core of the topic

• Exit - Designed to determine if any information or perspective was missed during the discussion. The questions were discussed in open forum. Responses were documented and, before the end of the discussion, reviewed with the participants. (See Appendix C.)

To read the complete Summary, click here.

### **Target Standards**

KS.1. Awareness of Advanced Manufacturing jobs

- KS.2. Basic tool skills
- KS.3.d. fabrication techniques
- KS.4. Employability skills (particularly critical and creative thinking)
- KS.6. Specialized IT skills
- KS.8. Basic skills related to: data systems, machine control, databases, and network security
- KS.9. Exposure to interconnectivity (automated assembly lines, connections, interfaces)
- KS.10. Ability to extract, interpret, and effectively use process and product data
- KS.11. Machine equipment programming
- KS.12. Machine interface
- KS.13. Predictive maintenance

## **Course Competencies**

#### 1. Operate an industrial robot system.

Domain Cognitive Level Applying

Linked Core Abilities Act responsibly Demonstrate essential computer skills Demonstrate essential mathematical skills Develop job-seeking skills Respect self and others as members of a diverse society Think critically and creatively

#### **Linked Program Outcomes**

Apply state and national safety rules to the manufacturing systems environment.

Analyze automation within a complex manufacturing system.

Analyze technical specifications for implementation of manufacturing systems, modules, and components. Integrate industrial control systems into manufacturing processes.

Apply electronic principles to devices within a complex manufacturing systems.

#### **Assessment Strategies**

- 1.1. Skill Demonstration
- 1.2. in the lab
- 1.3. Written Product

#### Criteria

#### Learner will be successful when:

- 1.1. learner powers up industrial robot controller safely
- 1.2. learner powers down industrial robot safely
- 1.3. learner activates the emergency stop
- 1.4. learner recovers from an emergency stop event
- 1.5. learner switches between automatic and manual operating modes
- 1.6. learner enables the robot in Manual Operating Mode
- 1.7. learner restarts the controller

- 1.8. learner identifies robot joint numbers
- 1.9. learner identifies teach pendant features

**Learning Objectives** 

- 1.a. Identify robot hazards.
- 1.b. Explain teach pendant features.
- 1.c. Identify robot system components.
- 1.d. Practice operating a robot system.

## 2. Manipulate an industrial robot arm.

Domain Cognitive Level Applying

**Linked Core Abilities** 

Act responsibly Demonstrate essential computer skills Demonstrate essential mathematical skills Respect self and others as members of a diverse society Work cooperatively

Linked Program Outcomes

Apply state and national safety rules to the manufacturing systems environment. Manage advanced manufacturing systems for operational efficiency and cost control. Analyze technical specifications for implementation of manufacturing systems, modules, and components. Integrate industrial control systems into manufacturing processes.

**Assessment Strategies** 

- 2.1. Skill demonstration
- 2.2. In the lab
- 2.3. Written product

Criteria

Learner will be successful when:

- 2.1. learner identifies teach pendant keys specific to jogging
- 2.2. learner identifies Quickset Menu features
- 2.3. learner jogs individual robot joints
- 2.4. learner explains the purpose of Linear Motion Mode
- 2.5. learner explains the purpose of Joint Motion Mode
- 2.6. learner explains the purpose of Reorient Motion Mode
- 2.7. learner explains the different coordinate systems
- 2.8. learner applies the Right Hand Rule for coordinate systems
- 2.9. learner acknowledges Error Messages
- 2.10. learner applies point-to-point programming to move robotic arm

Creating

Learning Objectives

- 2.a. Use a teach pendant to manipulate robot arm position.
- 2.b. Apply Motion Modes (world, joint, tool, user, jog).
- 2.c. Apply Coordinate Systems.
- 2.d. Interpret position information.

#### 3. Develop an industrial robot program with joint motions.

Domain Cognitive Level

Linked Core Abilities Act responsibly Demonstrate essential computer skills Demonstrate essential mathematical skills Value Learning Work cooperatively

Linked Program Outcomes

Analyze automation within a complex manufacturing system.

Analyze technical specifications for implementation of manufacturing systems, modules, and components.

Integrate industrial control systems into manufacturing processes.

#### **Assessment Strategies**

- 3.1. Skill demonstration
- 3.2. In the lab
- 3.3. Written product

#### Criteria

Learner will be successful when:

- 3.1. learner explains robot target data
- 3.2. learner explains joint target data
- 3.3. learner creates a robot program
- 3.4. learner saves a robot program
- 3.5. learner implements absolute joint moves in a program
- 3.6. learner explains benefits of joint moves
- 3.7. learner creates named robot targets
- 3.8. learner applies speed and zone data in joint motion instructions
- 3.9. learner applies tool and work object data in joint motion instructions
- 3.10. learner selects step mode in the Quickset Menu
- 3.11. learner resets the program pointer
- 3.12. learner tests the program in manual and automatic mode

#### Learning Objectives

- 3.a. Create a robot program.
- 3.b. Implement absolute joint motions.
- 3.c. Implement joint motions.
- 3.d. Verify a robot program.

#### 4. Calibrate an end-of-arm tool on an industrial robot.

Domain Cognitive Level

Analyzing

Linked Core Abilities Act responsibly Communicate clearly and effectively Demonstrate essential computer skills Demonstrate essential mathematical skills Value Learning

Linked Program Outcomes

Analyze automation within a complex manufacturing system.

Analyze technical specifications for implementation of manufacturing systems, modules, and components. Integrate industrial control systems into manufacturing processes.

Apply electronic principles to devices within a complex manufacturing systems.

#### **Assessment Strategies**

- 4.1. Skill demonstration
- 4.2. In the lab
- 4.3. Written product

#### Criteria

#### Learner will be successful when:

- 4.1. learner explains the concept of a Tool Center Point (TCP)
- 4.2. learner explains tool X, Y, and Z directions
- 4.3. learner identifies tool zero
- 4.4. learner creates tool data
- 4.5. learner explains X, Y, and Z translational offsets relative the default tool
- 4.6. learner calibrates a tool using the TCP & Z method
- 4.7. learner selects a tool using the Quickset Menu or Jogging Menu
- 4.8. learner jogs robot tool using tool coordinates
- 4.9. learner verifies the tool rotates around the TCP
- 4.10. learner verifies Z direction aligns with physical feature of tool

- 4.11. learner saves tool data to a file
- 4.12. learner loads tool data from a file

Learning Objectives

- 4.a. Explain tool concept.
- 4.b. Create tool data.
- 4.c. Calibrate tool TCP and Z direction.
- 4.d. Verify tool calibration.
- 4.e. Modify tool data.

#### 5. Calibrate a user frame work object.

Domain Cognitive Level Analyzing

Linked Core Abilities Demonstrate essential mathematical skills Develop job-seeking skills Respect self and others as members of a diverse society Think critically and creatively

**Linked Program Outcomes** 

Analyze automation within a complex manufacturing system.

Manage advanced manufacturing systems for operational efficiency and cost control.

Analyze technical specifications for implementation of manufacturing systems, modules, and components. Integrate industrial control systems into manufacturing processes.

#### **Assessment Strategies**

- 5.1. Skill demonstration
- 5.2. In the lab
- 5.3. Written product

#### Criteria

#### Learner will be successful when:

- 5.1. learner explains the work object concept
- 5.2. learner identifies work object zero from World
- 5.3. learner explains X, Y, and Z work object directions
- 5.4. learner creates work object data
- 5.5. learner calibrates a work object using the 3-point Object Method
- 5.6. learner selects a work object using the Quickset Menu or Jogging Menu
- 5.7. learner jogs the robot tool using work object coordinates
- 5.8. learner verifies the work object X, Y, and Z directions
- 5.9. learner saves work object data to a file
- 5.10. learner loads work object data from a file

#### Learning Objectives

6.

- 5.a. Explain work object concept.
- 5.b. Create work object data.
- 5.c. Calibrate a work object.
- 5.d. Verify work object calibration.

#### Develop an industrial robot program with linear and circular motions.

Domain Cognitive Level Creating

Linked Core Abilities Act responsibly Communicate clearly and effectively Develop job-seeking skills Think critically and creatively

#### Linked Program Outcomes

Apply state and national safety rules to the manufacturing systems environment.

Manage advanced manufacturing systems for operational efficiency and cost control.

Explore a Proportional Integral Derivative (PID) control system to achieve a desired outcome in a manufacturing
outcome. Integrate industrial control systems into manufacturing processes. Apply electronic principles to devices within a complex manufacturing systems.

**Assessment Strategies** 

- 6.1. Skill demonstration
- 6.2. In the lab
- 6.3. Written product

Criteria

Learner will be successful when:

- 6.1. learner creates a program to trace a pattern
- 6.2. learner explains linear motion
- 6.3. learner implements linear moves in a program
- 6.4. learner applies robot targets in linear motion instructions
- 6.5. learner applies speed and zone data in linear motion instructions
- 6.6. learner applies work object data in linear motion instructions
- 6.7. learner explains circular motion
- 6.8. learner applies speed and zone data in circular motion instructions
- 6.9. learner tests a pattern tracing program in manual and automatic mode
- 6.10. learner modifies a work object to shift a pattern

#### Learning Objectives

- 6.a. Create program to trace a pattern.
- 6.b. Implement linear motion.
- 6.c. Implement circular motion.
- 6.d. Verify a pattern tracing program.

#### 7. Develop a structured program for an industrial robot.

Domain Cognitive Level Creating

**Linked Core Abilities** 

Act responsibly Communicate clearly and effectively Demonstrate essential computer skills Demonstrate essential mathematical skills Respect self and others as members of a diverse society Value Learning

#### Linked Program Outcomes

Apply state and national safety rules to the manufacturing systems environment.

Analyze technical specifications for implementation of manufacturing systems, modules, and components. Explore a Proportional Integral Derivative (PID) control system to achieve a desired outcome in a manufacturing outcome.

Apply electronic principles to devices within a complex manufacturing systems.

#### **Assessment Strategies**

- 7.1. Skill demonstration
- 7.2. In the lab
- 7.3. Written product

#### Criteria

Learner will be successful when:

- 7.1. learner identifies digital inputs and outputs
- 7.2. learner monitors digital inputs and outputs
- 7.3. learner simulates digital inputs and outputs
- 7.4. learner implements set instructions to latch on outputs
- 7.5. learner implements rest instructions to latch off outputs
- 7.6. learner implements invert instructions to toggle outputs
- 7.7. learner implements pulse instructions to turn on outputs for a specified time period
- 7.8. learner implements wait instructions to pause a program until an input conditions are met

- 7.9. learner implements wait instructions to pause a program for specific time period
- 7.10. learner creates routines
- 7.11. learner sets the program pointer at the beginning of a routine
- 7.12. learner tests routines in manual and automatic mode
- 7.13. learner creates a complete material handling program

Learning Objectives

- 7.a. Develop a material handling program.
- 7.b. Manipulate inputs and outputs.
- 7.c. Implement routines in a program.
- 7.d. Verify a material handling program.

### **APPENDIX C**



#### **COURSE CHANGE PROPOSAL**

Completed forms must be returned to the chief academic officer by October 1 to be considered for board approval.

 Date Initiated: 10/9/18
 Administrator Name: Cheryl Kothe

 Department and School: Technology and Engineering

 Course Name: Industrial Internet of Things

 Request: ⊠ New Course
 □ New Course Name
 □ Course Revision
 □ Remove Course

 Credits: Current: 0.50
 Check if honors: □

Recommended Prerequisites (if any): Introduction to Mechatronics and Introduction to Industrial Control Systems

<u>Rationale</u>: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

As the fourth industrial revolution, commonly referred to as Industry 4.0, emerges, the skills required by individuals employed in the industrial sector will change significantly. More than ever before, industrial equipment will be electronically monitored, controlled, interconnected, and networked, creating massive amounts of data to be used in analysis, process control, and improvement. As a result, success in the industrial sector will now require the comprehension of multiple industrial operations, smart sensors, and smart devices used to monitor and control production operations, industrial automation, control systems, networking, network security, mobile and internet data communication, and data analytics.

The advent of Industry 4.0 creates exciting opportunities for students entering a variety of career pathways, including, but not limited to, advanced manufacturing, information technology, industrial design, robotics, industrial maintenance, machining, tool and die, and data and image analytics.

Proposed Course Description: In three or four sentences, write a course overview.

In this course, students are introduced to theoretical and practical topics of the Industrial Internet of Things (IIoT). The student investigates the range of sensor and actuator devices available, ways in which they communicate and compute, methods for getting information to and from IIoT-enabled devices, and ways of visualizing and processing data acquired from the IIoT. Upon completion, students will utilize hardware and software to construct a sensor network within an existing system and utilize industry standard tools to visual the data captured.

<u>Content Standards and Benchmarks</u>: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

See attached document.

<u>Scope and Sequence</u>: Outline the planned structure for the course, including a tentative timeline for instruction.

See attached document.

<u>Cost Associated with the Course</u>: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

- A. Teaching Staff: \$0
- B. Textbooks/Kits: \$3,500 e-learning (Perkins budget)/\$140,000 equipment (budget assumption request for new funds)
- C. Supplementary: \$2,244 for 40 hours of curriculum planning time (Perkins Grant)
- D. Facilities/Space: \$0
- E. Professional Learning: \$2,244 (Perkins Grant)



Gateway Technical College

# 10-664-120 Introduction to Industrial Internet of Things

# **Course Outcome Summary**

# **Course Information**

Description	In this course, learners are introduced to theoretical and practical topics of the Industrial Internet of Things (IIoT). The learner investigates the range of sensor and actuator devices available, ways in which they communicate and compute, methods for getting information to and from IIoT-enabled devices, and ways of visualizing and processing data acquired from the IIoT. Upon completion, learners will utilize hardware and software to construct a sensor network within an existing system and utilize industry standard tools to visual the data captured.
Career Cluster	Manufacturing
Instructional Level	Associate Degree
<b>Total Credits</b>	2

# Pre/Corequisites

Total Hours

Prerequisite	10-664-100 (Minimum Grade "C")
Prerequisite	10-664-110 (Minimum Grade "C")

54

### **Core Abilities**

- 1. Act responsibly
- 2. Communicate clearly and effectively
- 3. Demonstrate essential computer skills
- 4. Demonstrate essential mathematical skills
- 5. Develop job-seeking skills
- 6. Respect self and others as members of a diverse society
- 7. Think critically and creatively
- 8. Value Learning
- 9. Work cooperatively

### **Program Outcomes**

1. Apply state and national safety rules to the manufacturing systems environment.

- 2. Analyze automation within a complex manufacturing system.
- 3. Manage advanced manufacturing systems for operational efficiency and cost control.
- 4. Analyze technical specifications for implementation of manufacturing systems, modules, and components.
- 5. Explore a Proportional Integral Derivative (PID) control system to achieve a desired outcome in a manufacturing outcome.
- 6. Integrate industrial control systems into manufacturing processes.
- 7. Apply electronic principles to devices within a complex manufacturing systems.

# External Standards

Title	Advanced Manufacturing DACUM
Version/Date	11/1/2017
Association Status	Active
Sponsoring Organization	Gateway Technical College, Milwaukee Area Technical College, Waukesha County Technical College

# Description

### Summary

On October 20, 2017, Nancy Chapko (Gateway Technical College), Pam Holt (Milwaukee Area Technical College), and Mike Shiels (Waukesha County Technical College) collaboratively planned and conducted a DACUM (Design A Curriculum) discussion to explore Advanced Manufacturing with the employers in the represented technical colleges' districts. The DACUM was identified as an essential next step related to an examination of joint programming goals among the represented technical colleges.

The DACUM was used to gather information to create or enhance a system for technical colleges to prepare students for jobs in Advanced Manufacturing. It focused on providing the represented technical colleges with mutual understanding about the present state of Advanced Manufacturing in southeastern Wisconsin and to begin a dialog about how the represented technical colleges can prepare students for jobs in Advanced Manufacturing.

### 1.0 Background

As a result of discussion among academic leaders, faculty experts, and instructional support staff of Gateway Technical College (Gateway), Milwaukee Area Technical College (MATC), and Waukesha County Technical College (WCTC) at the September 1, 2017 Mechatronics/Industry 4.0 Programming Discussion meeting, it was decided that further exploration of Advanced Manufacturing should be conducted. DACUM discussion provided analysis of current Advanced Manufacturing practices and recommendations on ways to ensure a continued supply of skilled employees.

### 1.1 Methodology

The discussion focused on Industry 4.0 production, engineering, and automation aspects of Advanced Manufacturing and was facilitated by Nancy Chapko with support from Pam Holt and Mike Shiels. The objectives of the discussion were as follows.

- Describe the present status of Advanced Manufacturing in the represented colleges' districts.
- Describe the work of Advanced Manufacturing and the workforce who will perform it.
- Begin to identify the knowledge and skills required for entry-level Advanced Manufacturing employees. The deliverable, a narrative summary of the discussion, was prepared and shared with the represented technical colleges.

Facilitators invited the participation of their respective district employers involved in Advanced Manufacturing. Those individuals who accepted the invitation and participated in the discussion represented seven employers and a suburban K-12 school district with a comprehensive Career and Technical Education (CTE) curriculum. (See Appendix A.) Participants were asked a series of questions that were designed for the following purpose. (See Appendix B.) •Engagement - Designed to introduce participants to the topic and create a comfortable environment for discussion

- Exploration Designed to get to core of the topic
- Exit Designed to determine if any information or perspective was missed during the discussion. The questions were discussed in open forum. Responses were documented and, before the end of the discussion, reviewed with the participants. (See Appendix C.)

To read the complete Summary, click here.

### **Target Standards**

- KS.1. Awareness of Advanced Manufacturing jobs
- KS.6. Specialized IT skills
- KS.7. Ability to relate processes to systems
- KS.8. Basic skills related to: data systems, machine control, databases, and network security
- KS.9. Exposure to interconnectivity (automated assembly lines, connections, interfaces)
- KS.10. Ability to extract, interpret, and effectively use process and product data
- KS.11. Machine equipment programming
- KS.12. Machine interface
- KS.13. Predictive maintenance
- KS.16. Coordination/Logistics
- KS.17. Tools to connect multiple pieces of software/equipment
- KS.18. Manufacturing technology skills

# **Course Competencies**

### 1. Explore the technology used in the Industrial Internet of Things (IIoT).

Domain Cognitive Level Applying

Linked Core Abilities Act responsibly Communicate clearly and effectively Demonstrate essential computer skills Think critically and creatively Value Learning

Linked Program Outcomes Analyze automation within a complex manufacturing system. Manage advanced manufacturing systems for operational efficiency and cost control. Analyze technical specifications for implementation of manufacturing systems, modules, and components. Explore a Proportional Integral Derivative (PID) control system to achieve a desired outcome in a manufacturing outcome.

Apply electronic principles to devices within a complex manufacturing systems.

### **Assessment Strategies**

- 1.1. Discussion
- 1.2. Written product
- 1.3. Observation
- 1.4. Skill demonstration

#### Criteria

Learner will be successful when:

- 1.1. Learner explains how the Industrial Internet of Things (IIoT) influences manufacturing operations.
- 1.2. Learner relates the components of IIoT to contemporary manufacturing processes.
- 1.3. Learner explains the value added benefits of IIoT to manufacturing applications.

Learning Objectives

- 1.a. Discover the history of IIoT.
- 1.b. Define the Industrial Internet of Things (IIoT).
- 1.c. Describe the benefits of IIoT.
- 1.d. Identify the components of Industrial Internet of Things (IIoT).
- 1.e. Identify industry sector applications of IIoT.
- 1.f. Describe manufacturing applications of Industrial Internet of Things (IIoT).

#### 2. Examine smart sensor technology.

Domain Cognitive Level Analyzing

Linked Core Abilities

Act responsibly Respect self and others as members of a diverse society Think critically and creatively Work cooperatively

Linked Program Outcomes

Apply state and national safety rules to the manufacturing systems environment.

Analyze automation within a complex manufacturing system.

Explore a Proportional Integral Derivative (PID) control system to achieve a desired outcome in a manufacturing outcome.

Integrate industrial control systems into manufacturing processes.

Apply electronic principles to devices within a complex manufacturing systems.

#### **Assessment Strategies**

- 2.1. Discussion
- 2.2. Written product
- 2.3. Observation
- 2.4. Skill demonstration

#### Criteria

Learner will be successful when:

- 2.1. Learner analyzes the configuration of a smart sensor according to instructor-provided scenario
- 2.2. Learner differentiates among photoelectric, distance, proximity, and pressure/vacuum/flow smart sensors

Learning Objectives

- 2.a. Describe the function of a smart sensor.
- 2.b. Describe the operation and configuration of a smart photoelectric sensor.
- 2.c. Describe the operation and configuration of a smart distance sensor.
- 2.d. Describe the operation and configuration of a smart proximity sensor.
- 2.e. Describe the operation and configuration of a smart pressure/vacuum/flow Sensors.

#### 3. Investigate components of the industrial network.

Domain Cognitive Level Analyzing

Linked Core Abilities

Communicate clearly and effectively Demonstrate essential computer skills Demonstrate essential mathematical skills Develop job-seeking skills Think critically and creatively Work cooperatively

**Linked Program Outcomes** 

Analyze automation within a complex manufacturing system.

Manage advanced manufacturing systems for operational efficiency and cost control.

Explore a Proportional Integral Derivative (PID) control system to achieve a desired outcome in a manufacturing

#### outcome.

**Assessment Strategies** 

- 3.1. Discussion
- 3.2. Written product
- 3.3. Observation
- 3.4. Skill demonstration

#### Criteria

Learner will be successful when:

- 3.1. Learner determines IP address to assign communication protocol within the IIoT system
- 3.2. Learner configures Ethernet network switch to enable data communication within the IIoT system
- 3.3. Learner relates the operation of the virtual LAN to data communication within the IIoT system
- 3.4. Learner explains how to keep an industrial network secure within the IIoT system

#### Learning Objectives

- 3.a. Discuss the basic operation of serial communication.
- 3.b. Describe Ethernet network topologies.
- 3.c. Describe the function and operation of a barcode identification system.
- 3.d. Describe the basic operation and configuration of an Ethernet-to-serial interface module.
- 3.e. Describe the function and operation of an RFID system.
- 3.f. Describe the function and operation of IO-Link Master Communications.
- 3.g. Describe types of Ethernet hardware connectors.
- 3.h. Describe the basic operation of an industrial managed Ethernet switch.
- 3.i. Describe DHCP automatic assignment of IP addresses.
- 3.j. Describe the basic operation of a virtual LAN.
- 3.k. Describe the functions and basic components of an industrial network security.
- 3.I. Explain how to configure the port security of an industrial managed Ethernet switch.

#### 4. Use cloud-based technology to collect internal data.

Domain Cognitive Level Applying

Linked Core Abilities

Act responsibly Communicate clearly and effectively Demonstrate essential computer skills Demonstrate essential mathematical skills Develop job-seeking skills Respect self and others as members of a diverse society Work cooperatively

Linked Program Outcomes

Apply state and national safety rules to the manufacturing systems environment. Integrate industrial control systems into manufacturing processes.

#### **Assessment Strategies**

- 4.1. Discussion
- 4.2. Written product
- 4.3. Observation
- 4.4. Skill demonstration

#### Criteria

Learner will be successful when:

- 4.1. Learner collects manufacturing system cloud-based data
- 4.2. Learner organizes collected manufacturing system cloud-based data
- 4.3. Learner operates a manufacturing system using cloud-based data as input to the manufacturing system

Learning Objectives

- 4.a. Discuss cloud computing and its benefits.
- 4.b. Explain edge (fog) computing and its benefits.
- 4.c. Define Supervisory Control and Data Acquisition (SCADA).
- 4.d. Describe the operation and configuration of a cloud-based SCADA system.

4.e. Describe the operation and configuration of a cloud-based maintenance management system.

#### 5. Explore data analytic tools.

Domain Cognitive Level Applying

Linked Core Abilities

Communicate clearly and effectively Demonstrate essential computer skills Demonstrate essential mathematical skills Think critically and creatively Value Learning Work cooperatively

Linked Program Outcomes

Apply state and national safety rules to the manufacturing systems environment.

Analyze automation within a complex manufacturing system.

Analyze technical specifications for implementation of manufacturing systems, modules, and components.

Explore a Proportional Integral Derivative (PID) control system to achieve a desired outcome in a manufacturing outcome.

Apply electronic principles to devices within a complex manufacturing systems.

**Assessment Strategies** 

- 5.1. Discussion
- 5.2. Written product
- 5.3. Observation
- 5.4. Skill demonstration

Criteria

Learner will be successful when:

- 5.1. Learner explains the function of data analytics in an industrial manufacturing system
- 5.2. Learner differentiates among basic database types and structures used in an industrial manufacturing system
- 5.3. Learner creates a database query according to instructor specifications

Learning Objectives

- 5.a. Discuss data analytics.
- 5.b. Explain the benefits of data analytics.
- 5.c. Describe database use for manufacturing applications.
- 5.d. Describe basic database types and structures.
- 5.e. Describe elements of database queries
- 5.f. Differentiate among database queries.

#### 6. Investigate the use of collected data to influence manufacturing processes.

Domain Cognitive Level Analyzing

Linked Core Abilities Act responsibly Communicate clearly and effectively Demonstrate essential computer skills Demonstrate essential mathematical skills Develop job-seeking skills Respect self and others as members of a diverse society Think critically and creatively

Linked Program Outcomes

Manage advanced manufacturing systems for operational efficiency and cost control. Apply electronic principles to devices within a complex manufacturing systems.

#### **Assessment Strategies**

- 6.1. Discussion
- 6.2. Written product
- 6.3. Observation

#### 6.4. Skill demonstration

#### Criteria

#### Learner will be successful when:

- 6.1. Learner identifies manufacturing systems inefficiencies
- 6.2. Learner explains the function of cloud-based data acquisition systems to track OEE
- 6.3. Learner uses exported spreadsheet application data as inputs to modify PLC output instructions according to instructor specifications

#### **Learning Objectives**

- 6.a. Discuss manufacturing operational systems efficiencies.
- 6.b. Define a production bottleneck.
- 6.c. Identify barriers to manufacturing Overall Equipment Effectiveness (OEE).
- 6.d. Discuss how cloud-based data acquisition systems track OEE.
- 6.e. Explain how to export data to a spreadsheet applications.
- 6.f. Explain how PLC instructions feed cloud-based data acquisition systems.

This page intentionally left blank

# Kenosha Unified School District Kenosha, Wisconsin

### November 27, 2018

# REQUEST TO SUBMIT THE JOHN J. AND RUTH F. KLOSS CHARITABLE TRUST TO THE U.S. BANK, FOUNDATION TEAM

# **Type of Project**

The Advisory Board of the John J. and Ruth F. Kloss Charitable Trust has identified Kenosha Unified School District as a possible candidate to receive a grant from the trust in the amount of \$40,000.

The purpose of the John J. and Ruth F. Kloss Charitable Trust recognizes that today's society presents many issues and problems that merit foundation support. The John J. and Ruth F. Kloss Charitable Trust, established in 2006, has very broad areas of interests. These primarily include youth and families, education, and the elderly.

The John J. and Ruth F. Kloss Charitable Trust prefers to focus its funding on Southeastern Wisconsin primarily, but not exclusively, Kenosha County and surrounding areas.

# **Program Description**

The grant will fund four KIDS Lab kits for four elementary schools. Gateway Technical College donated one kit that was divided between Brass School (3D printers and Rokenbok) and Pleasant Prairie School (Rokenbok and LittleBits). Nineteen teachers and library media teachers were trained on the KIDS Lab equipment between April and June of 2018.

Each kit contains the following:

(2) Afinia H400 Printers with Extended Warranty

(2) SketchUp Books

(2) BuildTak Platforms-3pk

(2) Flex Boards

(2) Afinia Nozzle 8mm

(2) Afinia Prem PLA 4pk - Blue, Gray, Green, Natura (2) Afinia Premium ABS Filament 2pk, White

(2) Afinia Premium ABS Filament 2pk, Black

(6) Rokenbok ROK Blocks Mobile STEM Lab

(6) Rokenbok SnapStack Mobile STEM Lab
(3) Rokenbok Rolling Base
(1) LittleBits STEAM Edu Class Pk - 24 Students
(3) LittleBits Purple Tacklebox

SolidWorks Apps for Kids 1 Day On-site Training Access to Professional Learning Community

# **Rationale**

The purpose of the grant is to introduce elementary students to design and STEM skills. First Technologies Inc. will provide four kits. KIDS Lab cultivates excitement in technology by engaging students in creative thinking, problem solving and collaboration through discovery-based learning.

A mobile platform allows the KIDS Lab to be moved from room to room or housed in a dedicated space, depending on the needs and facilities of the school. The mobile platform includes building kits, cloud apps for use on any device (iPad, Chromebook, etc), along with curriculum and training.

KIDS Lab is designed for students in grades K-8 and meets standards for NGSS, Common Core, and Technological Literacy. It also meets the standards teachers expect for fun and engaging curriculum that's easy to implement.

# **Grant Information**

# 2018-19 ANTICIPATED FUNDING

Total amount of grant funds requested: \$40,000.00 (Appendix A)

### TITLE

John J. and Ruth F. Kloss Charitable Trust

### FUNDING SOURCE

John J. and Ruth F. Kloss Charitable Trust, U.S. Bank, Foundation Team

### TIME PERIOD

The project period covered by this application is January 1, 2019, through June 30, 2019.

## **APPLICATION DUE DATE**

December 15, 2018

### **Recommendation**

Administration recommends that the school board approve the application for the John J. and Ruth F. Kloss Charitable Trust in the amount of \$40,000 and to implement the grant if received from the U.S. Bank, Foundation Team.

Dr. Sue Savaglio-Jarvis Superintendent of Schools

Ms. Julie Housaman Chief Academic Officer

Ms. Cheryl Kothe Coordinator of Career and Technic

# APPENDIX A



# SolidWorks Apps for Kids

Afinia 3D Printer Package – (2) H400+ Printers and Materials

(6) Rokenbok ROK Blocks Mobile STEM Labs

(6) Rokenbok SnapStack Mobile STEM Labs

(3) Rokenbok Wheeled Base

Rokenbok Curriculum – Online & Downloadable

Little Bits STEAM Kit

Little Bits Curriculum

**Onsite Staff Development and Product Training** 

Shipping

Brought to you by:



800.787.9717 www.kids-lab.us



# November 27, 2018

# DONATIONS TO THE DISTRICT

The District has received the following donations:

- 1. Irving Polishing donated \$750 to LakeView Technology Academy. The donation is to be used to purchase ROV parts.
- 2. Advanced Disposal donated \$500 to EBSOLA-CA. The donation was used for a kindergarten field trip.
- 3. Romani Contractors, LLC. donated \$250 to LakeView Technology Academy. The donation is to be used to purchase robot parts.
- 4. In memory of his late mother Virginia Moravec, Robert Moravec donated yarn and using that yarn Della Mauser knitted 164 hats for elementary students in need. The value of the donated yarn is \$250.

### Administrative Recommendation

Administration requests the Board of Education approve acceptance of the above listed gift(s), grant(s) or bequest(s) as per Board Policy 1400, to authorize the establishment of appropriate accounts to monitor fiscal activity, to amend the budget to reflect this action and to publish the budget change per Wisconsin Statute 65.90(5)(a).

Dr. Sue Savaglio-Jarvis Superintendent of Schools This page intentionally left blank

KENOSHA UNIFIED SCHOOL DISTRICT Kenosha, Wisconsin

## November 27, 2018

# Tentative Schedule of Reports, Events, and Legal Deadlines for School Board November-December

# November

- November 1, 2018 End of First Quarter/Staff Workday/No Students Report
- November 13, 2018 Special School Board Meeting 6:00 P.M. in ESC Boardroom and Standing Committee Meetings – 6:15 P.M. in ESC Boardroom
- November 21, 2018 Half Day For Students and Instructional Staff
- November 22-23, 2018 Thanksgiving Recess District closed
- November 27, 2018 Regular Board of Education Meeting 7:00 P.M. in ESC Boardroom

# **December**

- December 11, 2018 Canceled: Standing Committee Meetings
- December 11, 2018 Special School Board Meeting 5:30 P.M. and Regular School Board Meeting – 7:00 P.M. in ESC Boardroom
- December 22, 2018 through January 6, 2019 Winter Recess District closed

Bd/ragtsr.doc

This page intentionally left blank