Appendix C

RECOMMENDATIONS FOR RELATED TECHNICAL CLASSROOM INSTRUCTION FOR TRANSPORTATION, DISTRIBUTION AND LOGISTICS YA

These recommendations are intended to be used by the YA Consortiums when determining appropriate related technical instruction for Transportation, Distribution and Logistics (TDL) YA. It is not all inclusive but should be used to assist the partnership with identification and/or development of course work that supports the work-based competencies as identified in the Skill Standards Checklist. As with all YA programs the consortium must ensure that the related instruction meets with the approval of their administration and school board.

OPERATIONAL NOTES

Related Technical Classroom Instruction maybe offered by the employer, within the school district, at another school district, at a Wisconsin Technical College, and/or at a Community College or University by instructors qualified according to the *Youth Apprenticeship Program Operations Manual*.

Learning Objectives are the foundation of related technical classroom instruction. Consortiums may teach using locally developed coursework; however, it is recommended that agreements with the local technical college be pursued to obtain post-secondary credit for YA worksite and classroom experiences.

A minimum of 180 hours (2 semesters) of related technical instruction is required for each one year YA program with 250 of the **work** hours coinciding with the instruction. The student must also receive high school credit towards graduation for this instruction, no matter the provider.

It is suggested that the following courses or learning experiences be provided as a pre-requisite OR concurrently for students interested in this youth apprenticeship:

- Introduction to Transportation, Distribution & Logistics Careers
- Computer Applications
- Additionally, students should complete a job shadow prior to enrollment in the TDL YA program.

If applicable and available at the worksite, efforts should be made with the employer to offer the student a continuing Registered Adult Apprenticeship upon high school graduation.

Commercial programs or Employer provided classroom certification programs are also appropriate provided that the student receives high school credit towards graduation for the class work.

A variety of **Transportation Maintenance** courses are highlighted here. It is well known by **TDL maintenance** industry leaders that the national standards are the NATEF (National Automotive Technicians Education Foundation) standards which provide the educational base for the ASE (Automotive Service Excellence) certification tests. While YA does not require ASE certification or even taking NATEF certified courses, we recognize the importance of alignment to these industry recognized standards.

NOTE: Taking NATEF certified courses does NOT require sitting for the ASE tests.

- **Local HS classes-**
  - Most common form of related technical training. Courses and curriculum are not standardized statewide for Transportation Maintenance programs.
- **Local Technical College classes** http://www.wtcsystem.edu/colleges.htm -
  - Common form of related technical instruction training. NATEF certified Transportation Maintenance courses are available at all 16 technical colleges.
- **AYES (Automotive Youth Educational Systems)** https://www.ayes.org/ -
  - High school based NATEF certified automotive instruction is available through some regional high schools or consortiums. At this time, the curriculum is only available to HS programs willing to become NATEF certified.
  - Contact the Wisconsin Automotive and Truck Dealers Association to find out more about the criteria for NATEF Accreditation of Secondary Auto Programs.
- **Manufacturer post-secondary training programs-**
  - Some specific dealer programs exist if a student is placed through a dealership. These include programs such as the Toyota T-Ten (http://www.toyota.com/about/tten/) program. While geared towards technical colleges and associate degree earners, these classes may be appropriate for students if programs are available near you.
- **Online coursework**- A small sampling of online programs include
  - ADAMM (Automobile Dealers Association of Metro Milwaukee) http://www.adamm.com/education.asp
  - I-CAR (Collision Repair Training) http://www.i-car.com/index_us.shtml
- While medium/heavy truck driving is prohibited by Child Labor Laws, it is recommended that students in the Diesel Technician program for Medium/Heavy Trucks earn their CDL (Commercial Driver's License) once they turn 18. Driving is a very important diagnostic tool for mechanics.

Crosswalks of the YA Curriculum to the NATEF skill standards in Auto/Light Truck (2012), Medium/Heavy Truck (2007), and Collision Repair and Refinish (2009) are available upon request.

Recommendations for this Appendix were obtained from Employers, the Wisconsin Department of Public Instruction, Wisconsin Technical College Faculty, YA Consortium/School District Coordinators during the Production Agriculture YA Survey, August 2008 & 2012, and through the National Association of State Directors of Career Technical Education Consortium (NASDCTEc) recommendations at http://www.careertech.org/- Funded in part by the U.S. Department of Education.

Transportation, Distribution and Logistics Youth Apprenticeship (YA) Plan of Study

NAME: _____ **DATE:** _____

The Related Technical Instruction course selection and delivery are entirely within local consortium control. The recommendations listed below are only a suggested path of YA career planning and should be individualized to meet each learner's educational and career goals. All plans should meet high school graduation requirements, as well as, college entrance requirements if applicable.

HIGHLY Recommended for **ALL TDL** YA students

Educational Level	Grade	**English/ Language Arts** 4 required	**Social Studies Social Sciences** 3 Required	**Math** 2 Required	**Science** 2 Required	**Career Pathway Courses** **(Electives)**	**Recommended Enhancement Electives or Activities**
Secondary	**9**	Oral Communications (Speech) Technical Writing		Algebra	Physical Science	Computer Applications Energy, Power, Transportation Systems	Skills USA DECA or FBLA
	10				Chemistry	Computer Applications	Skills USA DECA or FBLA Job-Shadowing
	11				Physics	**TDL Youth Apprenticeship - Level One or Two** Employability Skills Customer Service <u>Transportation Maintenance</u> Electronics/Electricity Small Engines/Automotive/Diesel Classes Welding NATEF Certification programs such as AYES <u>Distribution & Logistics</u> Business & Marketing	
	12		Economics				

Post-Secondary Occupational Opportunities

The chart below shows examples of career ladders organized by pathway.
For additional career cluster information, visit www.careertech.org
For additional career information on a specific occupation, visit http://wicareerpathways.org/ or http://worknet.wisconsin.gov/worknet/default.aspx

		High School Diploma, On-the-Job Training	Certificate, Licensing, and/or Associate's Degree (1-2 years college)	Bachelor's/Master's Degree (4 year college)
Transportation, Distribution & Logistics Pathways	**Transportation Operations**	Truck/Bus/ Taxi Terminal support services Bus Driver Ships Mate Chauffeur Taxi Driver Delivery Drivers	Transportation Dispatchers Flight Attendant Rail Yard Conductors & Yardmasters Heavy Truck Drivers Port/Harbor/Marina operations Cargo Handling Supervisors Locomotive Engineer	Air Traffic Controller Traffic Manager Transportation Managers Pilot
	Logistics Planning & Management Services	Operations Clerk	Logistics Analysts Supply Chain Technicians & Supervisors Global Business Specialist	Logistics Managers Logistics Engineers
	Warehousing & Distribution Center	Material Movers Packers Car, Truck & Ship Loaders Traffic, Shipping & Receiving Clerks Production Clerks	Production, Planning & Expediting Supervisors Line Supervisors	Warehouse Managers Storage & Distribution Managers Industrial & Packaging Engineers

		High School Diploma, On-the-Job Training	Certificate, Licensing, and/or Associate's Degree (1-2 years college)	Bachelor's/Master's Degree (4 year college)
	Mobile Equipment Maintenance	Bicycle Repairers Small Engine Repairers Tire Repairers and Changers	Aircraft Mechanics Auto Collision Technicians Auto Service Technicians Electrical/Electronic Installers & Repairers Heavy Equipment Mechanics Master Mechanics Diesel Mechanics Ship Mechanics & Repairers Signal & Switch Repairers	Mobile Equipment Maintenance Managers Aerospace Engineers
	Transport Systems Infrastructure, Management & Regulation		Surveying & Mapping Technicians Aviation Inspectors Motor Vehicle Inspectors Freight Inspectors Railroad Inspectors Marine Cargo Inspectors Vessel Traffic Control Specialists	Air Traffic Controllers Urban & Regional Planners Civil Engineers Traffic Engineers
	Health, Safety & Environmental Management		Compliance Officers Environmental Science and Protection Technicians, Including Health Environmental Engineering Technicians	Environmental Managers & Engineers Environmental Scientists & Specialists, Including Health Occupational Health &Safety Specialists Industrial Health & Safety Technicians
	Sales & Service	Customer Order & Billing Clerks Cashiers Counter & Rental Clerks	Sales Representatives Cargo & Freight Agents	Marketing Managers Sales Managers Customer Service Managers

SOURCES: National Association of State Directors of CTE Consortium, 2009 & 2013, www.careertech.org; Wisconsin's Worknet, http://worknet.wisconsin.gov; Waukesha County Technical College (WCTC), Susan Maresh, Waukesha County School-to-Work, 2007.