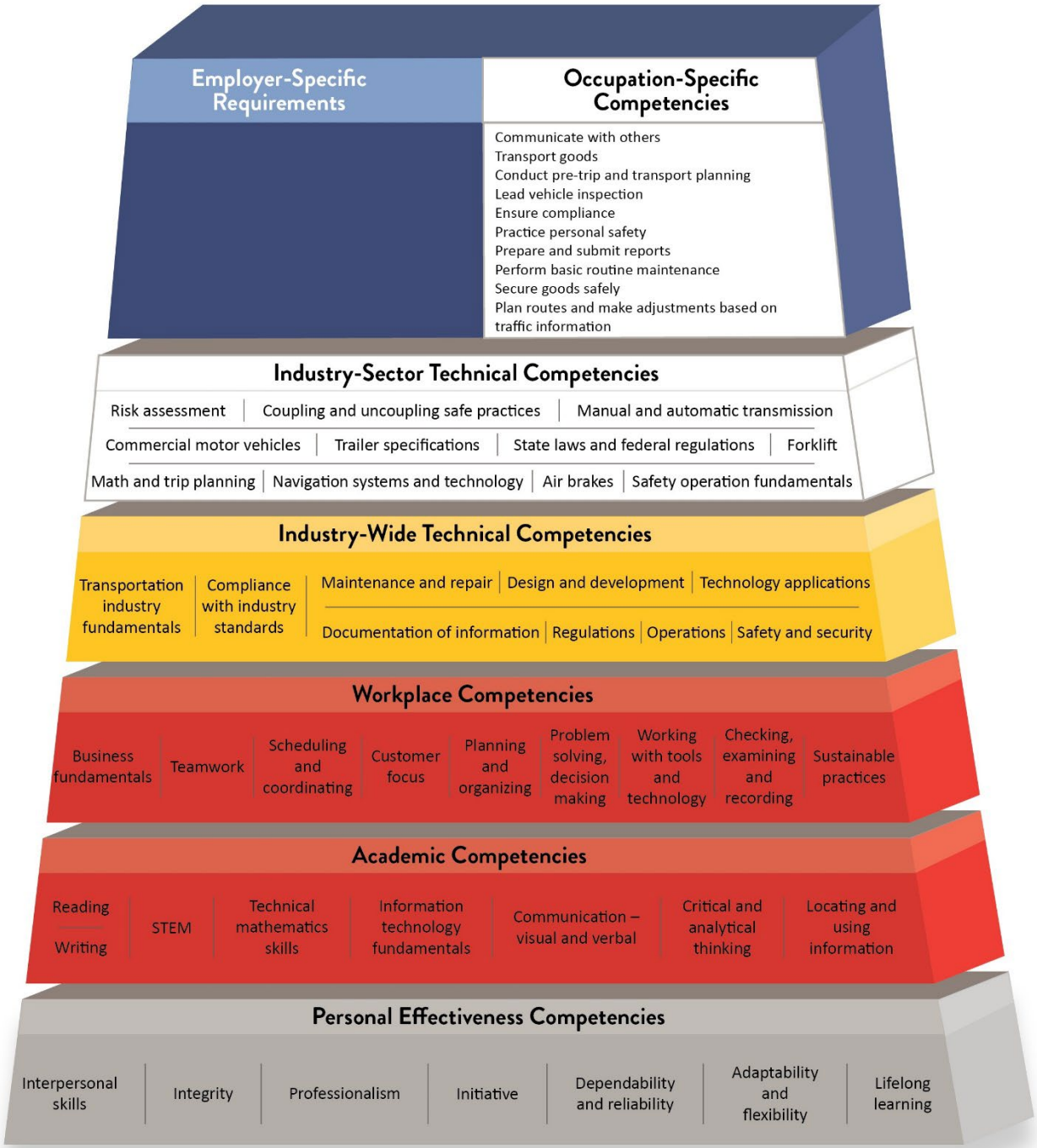
Minnesota Dual-Training Pipeline
Competency Model for Transportation
Occupation: Heavy and Tractor-Trailer Truck Driver



Based on: Transportation, Distribution and Logistics Competency Model, Employment and Training Administration, United States Department of Labor, August 2018

Pipeline recommends the Industry-Sector Technical Competencies as formal training opportunities (provided through related instruction) and the Occupation-Specific Competencies as on-the-job training opportunities.

DUAL-TRAINING PIPELINE

Competency Model for Heavy and Tractor-Trailer Truck Driver

Heavy and Tractor-Trailer Truck Driver – Individuals in this role transport goods from one location to another. The person drives a tractor-trailer combination or a truck with a capacity over 26,000 pounds Gross Vehicle Weight (GVW). Their responsibilities include loading their vehicles, abiding by traffic laws, and ensuring safe unloading and delivery of the goods at their destination. Drivers of heavy and tractor trailer trucks must obtain the necessary Commercial Driver's License (CDL) as required by Minnesota Department of Public Safety to operate in Minnesota.

Industry-Sector Technical Competencies

Related Instruction for dual training means the organized and systematic form of education resulting in the enhancement of skills and competencies related to the dual trainee's current or intended occupation.

- **Forklift** – Familiarity with proper loading and unloading techniques, utilizing lifting devices like forklift and pallet jack to load and unload the truck.

- **Math and trip planning** – Prepare for travel utilizing the more effective and efficient routing between pickup and delivery points.

- **Commercial motor vehicles** – Understand knowledge and operation of straight trucks and various combination vehicles at varying levels of speed, and ability to drive either manual or automatic.

- **Navigation systems and technology** – Know how to operate GPS programs, navigation services, driver assistance technology, and computer systems to plan and adjust routes to maximize fuel efficiency and save time.

- **Trailer specifications** – Understand the different kinds of trailers used for transporting goods and how those differences will impact the overall trip.

- **Safety operation fundamentals** – Understand techniques for driving defensively to prevent accidents, perform safety practices with proper tools, and administer first aid treatment.

- **Risk assessment** – Understand how to identify and address specific behaviors that increase the risk of driving a heavy goods vehicle.

- **State laws and federal regulations** – Know the Minnesota and federal motor vehicle traffic laws and regulations.

- **Air brakes** – Know how to safely use air brakes to stop the truck in a manner that is safe for the driver and the goods being transported.

- **Manual and automatic transmission** – Understand the differences between driving trucks that have manual vs. automatic transmission. While not necessary for all drivers, ideally be able to drive either a manual or automatic transmission truck.

- **Coupling and uncoupling safe practices** –Know how to safely couple the truck to the trailer and vice versa, how to safely uncouple the truck from the trailer.

Occupation-Specific Competencies

On-the-Job Training (OJT) is hands-on instruction completed at work to learn the core competencies necessary to succeed in an occupation. Common types of OJT include job shadowing, mentorship, cohort-based training, assignment-based project evaluation, and discussion-based training.

- **Communicate with others** – Confer with customers and staff to confirm pickup and delivery points, ensure scheduling, and correct materials for transport.

- **Transport goods** – Know how to pick up and drop off assigned cargo.

- **Secure goods safely** – Understand how to secure goods whether that is inside the truck to avoid massive shifting or on the trailer of the truck to ensure the item does not fall off or cause concerns for other drivers on the roadway.

- **Conduct pre-trip and transport planning** – Know how to obtain and review driver itinerary for assigned deliveries, check customer invoices of products that have been loaded, properly secured, and complete vehicle safety check.

- **Lead vehicle inspection** – Understand how to check the condition of a vehicle's tires, brakes, windshield wipers, lights, oil, fuel, water, and safety equipment to ensure that everything is in working order.

- **Ensure compliance** – Know how to comply with traffic regulations to operate vehicles in a safe and courteous manner.

- **Practice personal safety** – Be able to follow safety rules when loading and unloading materials and operating any vehicle.

- **Prepare and submit reports** – Know how to prepare and submit documentation that may include the number of trips, hours worked, mileage, or fuel consumption.

- **Plan routes and make adjustments based on traffic information** – Know how to use computer programs and GPS systems to plan routes and then be able to also use that technology to make adjustments as needed based on traffic incidents, road repair, etc.

- **Perform basic routine maintenance** – Know how to perform basic routine maintenance of the vehicle like making sure it has its oil changed, filling up the gas, changing windshield wipers, ensuring it has washer fluid, fill up air in the tires, etc.

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