

Activities/ Resources for Outcomes

Activities/ Resources for Outcome #1

Contextualized Social Studies Module Outcome #1

Student uses Internet resources to research world and U.S. history of transportation.

- DHL: Historical Development of Logistics
Use: PDF file “Historical Development of Logistics” [see note in references]
- History of Logistics and SCM
<http://www.manufacturing.net/articles/2012/05/history-of-logistics-and-supply-chain-management>
- Logistics History <http://www.slideshare.net/barvie/logistic-history>

Student creates a timeline showing the three categories of air, land, and water transportation, then chooses five major events in history and explains how those events contributed to changes in transportation technology.

Activities/ Resources for Outcome #2

Contextualized Social Studies Module Outcome #2

Student skims and scans the article “Managing Weather’s Impact on Transportation Capacity and Costs” and read “How Severe Weather Impacts the Trucking Industry.” <http://appian.tmwsystems.com/industry-news/how-severe-weather-events-impact-trucking-industry> Use File **“Managing Weather’s Impact on Transportation Capacity and Costs”**

Consider forming groups to discuss and answer questions presented in the article.

Student creates a chart that highlights the ways seasonal variations can affect the TDL industry.

Managing Weather's Impact on Transportation Capacity and Costs by Mark Derks

Empty shelves at the grocery store, higher priced retail items, just-in-time deliveries, and extra-long transit times are all becoming normal occurrences thanks to the inundation of recent winter storms. If your job involves transportation or the supply chain, you've probably been impacted particularly hard—namely, in the form of transportation delays and rising costs. These unexpected transportation changes this early in the year make satisfying customers and staying on budget particularly challenging.

Weather is one very unpredictable factor that can quickly affect transportation and drive an imbalance of supply and demand throughout the marketplace. Trucks, trains, and airplanes can't navigate the massive influx of winter weather fast enough to support demand. Snow and ice make it impossible for planes to safely take off and land; trucks are slowed by congested, unplowed highways; and railroads can't clear the tracks fast enough to get through. Like a domino effect, these delays lead to other, often costly, problems for supply chains.

Capacity constraints. As all types of equipment are finding it difficult to reach their destinations on time — especially in certain parts of the country — shippers have a more difficult time finding the capacity to move even their normal volumes.

Tight lead times. As volumes start to stack up, available lead time starts to decrease. Even with the best possible planning, winter conditions make it difficult to predict when conditions are good enough for your providers to get through. Research suggests that the more lead time you give when procuring transportation, the lower the costs. As weather impedes the ability to provide better lead time, costs go up.

Routing Guide Depth. Higher demand for weather-constrained capacity pushes carriers to reject loads at rates formerly agreed to during procurement events. This leads to routing guide substitution as shippers go deeper into their routing guides and higher rates, which in turn raises overall transportation spending.

Accessorials. Truck orders not used, longer demurrage, deeper consumption of fuel, more pick-ups and stop-offs, etc. all increase during times of poor weather conditions. Higher accessorials means higher costs. Most budgets can handle these increases in a one-time weather event. However, ongoing weather events drive these costs deeper and deeper into the budget as time goes on and can have a real impact on total landed costs.

Inbound delays. These challenges also affect inbound transportation. Goods coming from areas affected by recent storms could be delayed due to facility shutdowns due to power outages. And that's on top of any transportation capacity constraints.

Quality Service and Competitive Advantage. Regardless of any weather conditions, customers thrive and grow by supplying products and increasing sales. They expect freight to be delivered with a high quality of service through thick and thin. Only those with a strategy and plan, who can deliver through inclement weather conditions, truly have a competitive advantage in the marketplace.

So, the real question is, “As a shipper with customer commitments, what can I do in an environment like this?” First off, understand service providers will likely only pick up extra volumes at higher rates. As demand skyrockets, it may be more important to choose providers that deliver the level of service you expect to ensure your products arrive as they should, giving your customers a competitive advantage despite higher costs. Timing is critical when it comes to looking at your strategy. Look to reorganize and reprioritize freight flows and customer requirements as needed to adapt quickly to the current market. Ask yourself these questions:

1. Do you have consolidation opportunities that weren't previously there or that you wouldn't normally take advantage of?
2. What types of transportation providers are you using? Do they have the ability to move additional freight volumes? Do they have the size and scale to help you weather the storm? Can they help you, storm after storm after storm?
3. Can you restructure your freight and service strategy to take advantage of multimodal offerings to secure more capacity?
4. Is there a link between your inbound and outbound transportation strategy that wasn't there before? Can providers delivering inbound raw materials supplement outbound transport needs?
5. Do you have other suppliers you can rely on temporarily that weren't affected by storms?
6. Does your budget account for the unexpected or the unexpected that lasts for an extended period? How can you plan for the future?
7. Are you getting creative? Have you engaged others in your organization to brainstorm supply chain solutions? Marketing, customer service, business analytics, sales, IT, finance, engineering, etc., are all groups you may not think can help your supply chain, but if put together creatively, they could yield some innovation for serving customers.

Questions like these can help you get into the mindset of making the best out of a flawed, extended situation. Re-evaluating your provider and carrier base can help ensure you have capacity in place that you trust to help you manage the next irrepressible circumstance.

The weather always plays a role in transportation. Sometimes it allows for smooth sailing from origin to destination. At other times, it has the power to stop everything in its tracks. Without taking a step back and reevaluating your supply chain strategy now, you may end up being left out in the cold.

<http://logisticsviewpoints.com/2014/03/04/managing-weathers-impact-transportation-capacity-costs/>

Activities/ Resources for Outcome #3

Contextualized Social Studies Module Outcome #3

Student investigates the various parts of local state where useable natural resources are found.

- Illinois Department of Transportation: Environment/Links
<http://www.dot.state.il.us/environment.html>
- Natural Resources Defense Council: Renewable Energy for America
<http://www.nrdc.org/energy/renewables/wind.asp>

Student writes a report that highlights available natural resources in Illinois, the technology that has been developed to make use of natural resources, and strategies to extract and process these raw materials to fuel the modes of transportation.

Activities/ Resources for Outcome #4

Contextualized Social Studies Module Outcome #4

Student investigates factors affecting interstate travel, including state laws, weight limits, height restrictions, logbook requirements, and trucker rest laws.

- New Hours of Service Rules—The Trucker's Report.
www.thetruckersreport.com/hours/new_hours_of_service_rules_for_truckers.shtml
- Rules for Truckers Intend to Make Roads Safer.
www.roadandtravel.com/safetyandsecurity/newrulesfortruckers.htm.
- Travel Centers of America Trip Planner. <http://www.tatravelcenters.com/trip-planner>.
- Travelers, Truck Drivers, Safety, and the Laws.
www.quazen.com/recreation/autos/travelers-truck-drivers-safety-and-the-laws/
- Truck Miles
www.truckmiles.com

Student creates a travel plan, including a chart that identifies each state traveled through, each state's pertinent transportation laws, identifying roads with weight or height restrictions, and locations of rest areas or truck stops for drivers. The plan should include departure times, daily number of miles traveled, and arrival times.

**Activities/
Resources
for
Outcome #5**

Contextualized Social Studies Module Outcome #5

Students form groups. Each small group is assigned a section from the website listed below, to read and discuss (consider assigning by various decades).

Each small group gives a presentation to the class on what they learned about the Teamsters Union.

- Teamster History Visual Timeline <http://teamster.org/content/teamster-history-visual-timeline>

As each group presents, students write down main idea from each presentation

Activities/ Resources for Outcome #6

Contextualized Social Studies Module Outcome #6

Instructor divides students into two groups in an imaginary TDL facility—management and union members.

Each group is asked to discuss upcoming contract negotiations. Each group then presents its proposal concerning wages, benefits, working conditions, etc., to the other group for discussion.

Activities/ Resources for Outcome #7

Contextualized Social Studies Module Outcome #7

Student reads article “Organized Labor Union and Politics.” **Use Word file: “Organized Labor Union and Politics.”**

As a class, students may view all or part of the video “Labor and Politics.” <http://www.c-span.org/video/?75687-1/class-politics-labor-movement>

Student writes or gives an oral summary of his or her opinion of the effects of labor unions on the next election.

Organized Labor Unions and Politics

Organized labor unions often take part in assisting political campaigns during presidential campaign years. Often, they do not favor strictly one political party but rather a pro-worker candidate who they think will best favor a political stance that promotes workers' rights and the role of the labor union in working America. Often, this stance causes the unions in the U.S. to move together and organize in a movement called the Change to Win coalition, which was active throughout the country during the recent 2008 presidential campaign. How do labor unions help politics?

Labor unions often donate a large amount of time and money to support the candidates they have chosen. They will often use some of their own employees as a small independent group to help join the candidate's campaign and send them out on assignment to help campaign with other volunteers.

These people are getting paid their regular wages, but instead of their regular job duties they are calling people, knocking on doors, and distributing campaign literature. They might even help out at rallies and recruit other volunteers.

In addition to putting people in motion, they stage rallies of their own in addition to the campaign to make people aware of campaign issues and they also circulate literature to their own employees, either through the mail, via email, or through worksite visits. Unions create their own small, mobilized army of voices in support of the candidates they think will best help them and working America.

While it is not easy to get involved in one of these paid campaign jobs, if you are already a member of a labor union it is something to keep in mind when the next election year comes around. Some unions are more forceful and do more work than others, but all have some degree of involvement in the political arena. Each union typically has a political director who selects the people that are taken out on assignment for this kind of work. Contacting either the political director or the union president and letting them know that you are interested in helping is a great start toward getting involved.

There often is a short list of people they have considered to be excellent, vocal workers who could be assets to the campaign. Letting them know you are interested may not get you on that list for the entire project, but may for at least some of it. They often have a limited number of positions available and they select them early.

<http://www.cvtips.com/career-choice/organized-labor-unions-and-politics.html>

Activities/ Resources for Outcome #8

Contextualized Social Studies Module Outcome #8

Instructor divides students into two groups based on “Workplace Health Hazards” and “Workplace Safety Hazards” within the manual *Workplace Safety and Health Guidelines: Service Allied to the Transport of Goods*.

<https://www.wshc.sg/wps/themes/html/upload/cms/file/wsh%20transport2.pdf>

Student groups summarize safety guidelines for each.

Activities/ Resources for Outcome #9

Contextualized Social Studies Module Outcome #9

Student chooses one topic of interest from the following websites to read. **Use Word files: “Occupational Safety and Health Administration” and “Safety Codes.”**

Occupational Safety and Health Administration

http://en.wikipedia.org/wiki/Occupational_Safety_and_Health_Administration

Safety codes

http://en.wikipedia.org/wiki/Category:Safety_codes

Student summarizes what he/she learned with others in small groups.

Occupational Safety and Health Administration

The United States **Occupational Safety and Health Administration (OSHA)** is an agency of the United States Department of Labor. It was created by the Congress of the United States under the Occupational Safety and Health Act, signed by President Richard M. Nixon, on December 30, 1970. Its mission is to prevent work-related injuries, illnesses, and occupational fatalities by issuing and enforcing standards for workplace safety and health. The agency is headed by a Deputy Assistant Secretary of Labor.

The OSH Act which created OSHA also created the National Institute for Occupational Safety and Health (NIOSH) as a research agency focusing on occupational health and safety. NIOSH is not a part of the U.S. Department of Labor.

OSHA federal regulations cover most private sector workplaces. The OSH Act permits states to develop approved plans as long as they cover public sector employees and provide protection equivalent to that provided under Federal OSHA regulations. In return, a portion of the cost of the approved state program is paid by the federal government. Twenty-two states and territories operate plans covering both the public and private sectors and five — Connecticut, Illinois, New Jersey, New York and the U.S. Virgin Islands — operate public employee-only plans. In those five states, private sector employment remains under Federal OSHA jurisdiction.

In 2000, the United States Postal Act made the U.S. Postal Service the only quasi-governmental entity to fall under the purview of OSHA jurisdiction.

History

OSHA was widely criticized after its inception for confusing, burdensome regulations. A good deal of the early conflict came about because of inconsistent enforcement during OSHA's early years. In addition, businesses were expected to retrofit safety devices on existing equipment and to implement other hazard controls, which often led to considerable expense. Other requirements like mandated training, communication, and extensive documentation were seen as even more burdensome and expensive.

With time, manufacturers of industrial equipment began to include OSHA-compliant safety features on new machinery. Enforcement has become more consistent across jurisdictions, and some of the more outdated or irrelevant rules have been repealed or are not enforced.

University of Cincinnati toxicologist Eula Bingham was appointed as the agency's administrator during the Carter administration. Under Bingham, OSHA began to concentrate more on health hazards like toxic chemicals. Bingham also launched the "New Directions" program, OSHA's first worker training grant program.

The Reagan and Bush administrations saw efforts to weaken OSHA enforcement and rulemaking through Reagan's "deregulation" campaign. However, several of OSHA's most important rules were issued at the same time, including hazard communication (workers' right to know about chemical exposures) and blood-borne pathogens (regulations to protect workers against illnesses such as hepatitis and AIDS). The Reagan administration also launched OSHA's Voluntary Protection Program (VPP). VPP was OSHA's first foray into voluntary programs and partnerships with industry: management, labor, and OSHA establish cooperative relationships at workplaces that have implemented a comprehensive safety and health management system. Approval into VPP is OSHA's official recognition of the outstanding efforts of employers and employees who have achieved exemplary occupational safety and health.^[1]

In 2000, OSHA issued an ergonomics standard after ten years of study and debate with business associations such as the Chamber of Commerce and National Association of Manufacturers, who were unconvinced that additional regulation was needed. Ergonomic injuries such as carpal tunnel syndrome account for one third of all serious injuries suffered by American workers. In March 2001, the Republican-controlled Congress voted to repeal the standard, and the repeal was one of the first major pieces of legislation signed by President George W. Bush. Since the repeal of the ergonomics standard, OSHA has issued three ergonomics guidelines, and only a small handful of ergonomic citations under the Act's "general duty" clause.

The Bush administration largely replaced the process of issuing mandatory regulations with voluntary guidelines and put additional resources into other, previously existing voluntary programs, as well as a new "Alliance" program.^[1] In 2004, the General Accounting Office issued a report recommending that the Agency collect more data from participants in order to better ascertain the benefits of the program. A GAO report released in 1992 concluded that employers participating in the program benefited from significant cost reductions in workers' compensation premiums while improving labor productivity. The number of inspections conducted by OSHA improved during the Bush Administration compared to the Clinton years.

It is sometimes believed that the Agency promotes "voluntary compliance." In fact, all employers are required by law to comply with all final published rules promulgated under the Occupational Safety and Health Act of 1970.

In June 2009, David Michaels was nominated by President Obama and later confirmed by the senate as the head of OSHA.

Controversy

Much of the debate about OSHA regulations and enforcement policies revolves around the cost of regulations and enforcement, versus the actual benefit in reduced worker injury, illness and death. A 1995 study of several OSHA standards by the Office of Technology Assessment (OTA)^[2] found that regulated industries, as well as OSHA, typically overestimate the expected cost of proposed OSHA standards.

OSHA has come under considerable criticism for the ineffectiveness of its penalties, particularly its criminal penalties. OSHA is only able to pursue a criminal penalty when a willful violation of an OSHA standard results in the death of a worker.^[2] The maximum penalty is a misdemeanor with a maximum of six months in jail.^[2] In response to the criticism, OSHA, in conjunction with the Department of Justice, has pursued several high-profile criminal prosecutions for violations under the Act, and has announced a joint enforcement initiative between OSHA and the United States Environmental Protection Agency (EPA) which has the ability to issue much higher fines than OSHA. Meanwhile, Congressional Democrats, labor unions and community safety and health advocates are attempting to revise the OSH Act to make it a felony with much higher penalties to commit a willful violation that results in the death of a worker. Some local prosecutors are charging company executives with manslaughter and other felonies when criminal negligence leads to the death of a worker.

During its more than 30 years of existence, OSHA has secured only 12 criminal convictions.^[3]

OSHA has been accused of being more devoted to the numbers of inspections than to actual safety. Industry associations and unions have resorted to court action to force OSHA to promulgate new standards such as the Hexavalent Chromium standard. OSHA has also been criticized for taking decades to develop new regulations. Speaking about OSHA on the specific issue of combustible dust explosions: "[Carolyn] Merritt was appointed to the Chemical Safety Board by President Bush. Asked what her experience has been with regard to safety regulations in the Bush administration, Merritt says, 'The basic disappointment has been this attitude of no new regulation. They don't want industry to be pestered. In some instances, industry has to be pestered in order to comply.'"^[4]

Regulatory impact

Here are some of the changes in industrial safety regulation brought about by OSHA:

1. **Guards on all moving parts** - By 1970, there were guards to prevent inadvertent contact with most moving parts that were accessible in the normal course of operation. With OSHA, use of guards was expanded to cover essentially all parts where contact is possible.
2. **Permissible exposure limits (PEL)** - Maximum concentrations of chemicals stipulated by regulation for chemicals and dusts. They cover around 600 chemicals. Most are based on standards issued by other organizations in 1968 or before.
3. **Personal protective equipment (PPE)** - broader use of respirators, gloves, coveralls, and other protective equipment when handling hazardous chemicals; goggles, face shields, ear protection in typical industrial environments.

4. **Lockout/tagout** - In the 1980s, requirements for locking out energy sources (securing them in an "off" condition) when performing repairs or maintenance.
5. **Confined space** - In the 1990s, specific requirements for air sampling and use of a "buddy system" when working inside tanks, manholes, pits, bins, and similar enclosed areas.
6. **Hazard Communication** (HazCom ^[5]) - Also known as the "Right to Know" standard, was issued as 29CFR1910.1200 on November 25, 1983 (48 FR 53280), requires developing and communicating information on the hazards of chemical products used in the workplace.
7. **Process Safety Management** (PSM ^[6]) - Issued in 1992 as 29CFR1910.119 in an attempt to reduce large scale industrial accidents. Although enforcement of the standard has been spotty, its principles have long been widely accepted by the petrochemical industry.
8. **Blood borne Pathogens** (BBP ^[7]) - In 1990, OSHA issued a standard designed to prevent health care (and other) workers from being exposed to blood borne pathogens such as hepatitis B and HIV.
9. **Excavations and Trenches** - OSHA regulations^[8] specify that trenches and excavations wherein workers are working 5 feet or more down must be provided with safeguards in addition to proper sloping and storage of excavated material in order to prevent collapses/cave-ins.^[9]
10. **Exposure to asbestos** - OSHA has established requirements in 29 CFR 1910.1001 for occupational exposure to asbestos. These requirements apply to most workplaces - most notably excepted is construction work. "Construction work" means work for construction, alteration and/or repair including painting and decorating. Occupational exposure requirements for asbestos in construction work can be found in 29 CFR 1926.1101.

http://en.wikipedia.org/wiki/Occupational_Safety_and_Health_Administration

References

1. Retallick, Phillip (May 2008). "Corporate Commitment, Local Dedication Pave the Way to Success". *Occupational Health & Safety*. http://ohsonline.com/articles/2008/05/corporate-commitment-local-dedication-pave-the-way-to-success.aspx?sc_lang=en.
2. ^{a b} [1]
3. Justice Dept Drops Most Criminal OSHA Referrals

4. Pelley, Scott (2008-06-08). "Is Enough Done To Stop Explosive Dust?". *60 Minutes* (CBSnews.com). <http://www.cbsnews.com/stories/2008/06/05/60minutes/main4157170.shtml>. Retrieved 2008-06-09.
5. OSHA Hazard Communication Standard 29 CFR 1910.1200
6. OSHA Process Safety Management topic page
7. OSHA Bloodborne Pathogens and Needlestick Prevention topic page
8. OSHA Directive CPL 2.87 - Inspection Procedures for Enforcing the Excavation Standard, 29 CFR 1926]
9. OSHA Trench Safety Tips card

List of S-phrases

S-phrases are defined in Annex IV of European Union Directive 67/548/EEC: *Safety advice concerning dangerous substances and preparations*. The list was consolidated and republished in Directive 2001/59/EC, where translations into other EU languages may be found.

These safety phrases are used internationally and not just in Europe, and there is an ongoing effort toward complete international harmonization. (*Note: missing S-number combinations indicate phrases that were deleted or replaced by another phrase.*)

- S1: Keep locked up
- S2: Keep out of the reach of children
- S3: Keep in a cool place
- S4: Keep away from living quarters
- S5: Keep contents under ... (*appropriate liquid to be specified by the manufacturer*)
- S6: Keep under ... (*inert gas to be specified by the manufacturer*)
- S7: Keep container tightly closed
- S8: Keep container dry
- S9: Keep container in a well-ventilated place
- S10: Keep contents wet
- S11: Avoid contact with air
- S12: Do not keep the container sealed
- S13: Keep away from food, drink and animal foodstuffs
- S14: Keep away from ... (*incompatible materials to be indicated by the manufacturer*)
- S15: Keep away from heat
- S16: Keep away from sources of ignition - No smoking
- S17: Keep away from combustible material
- S18: Handle and open container with care
- S20: When using do not eat or drink
- S21: When using do not smoke
- S22: Do not breathe dust
- S23: Do not breathe gas/fumes/vapor/spray (*appropriate wording to be specified by the manufacturer*)
- S24: Avoid contact with skin
- S25: Avoid contact with eyes
- S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- S27: Take off immediately all contaminated clothing
- S28: After contact with skin, wash immediately with plenty of ... (*to be specified by the manufacturer*)
- S29: Do not empty into drains
- S30: Never add water to this product
- S33: Take precautionary measures against static discharges

- S35: This material and its container must be disposed of in a safe way
- S36: Wear suitable protective clothing
- S37: Wear suitable gloves
- S38: In case of insufficient ventilation, wear suitable respiratory equipment
- S39: Wear eye/face protection
- S40: To clean the floor and all objects contaminated by this material, use ... (*to be specified by the manufacturer*)
- S41: In case of fire and/or explosion, do not breathe fumes
- S42: During fumigation/spraying, wear suitable respiratory equipment (*appropriate wording to be specified by the manufacturer*)
- S43: In case of fire use, ... (*indicate in the space the precise type of fire-fighting equipment. If water increases the risk add - **Never use water***)
- S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
- S46: If swallowed, seek medical advice immediately and show this container or label
- S47: Keep at temperature not exceeding ... °C (*to be specified by the manufacturer*)
- S48: Keep wet with ... (*appropriate material to be specified by the manufacturer*)
- S49: Keep only in the original container
- S50: Do not mix with ... (*to be specified by the manufacturer*)
- S51: Use only in well-ventilated areas
- S52: Not recommended for interior use on large surface areas
- S53: Avoid exposure - obtain special instructions before use
- S56: Dispose of this material and its container at hazardous or special waste collection point
- S57: Use appropriate containment to avoid environmental contamination
- S59: Refer to manufacturer/supplier for information on recovery/recycling
- S60: This material and its container must be disposed of as hazardous waste
- S61: Avoid release to the environment. Refer to special instructions/safety data sheet
- S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label
- S63: In case of accident by inhalation: remove casualty to fresh air and keep at rest
- S64: If swallowed, rinse mouth with water (only if the person is conscious)

Combinations

- S1/2: Keep locked up and out of the reach of children
- S3/7: Keep container tightly closed in a cool place
- S3/7/9: Keep container tightly closed in a cool, well-ventilated place
- S3/9/14: Keep in a cool, well-ventilated place away from ... (*incompatible materials to be indicated by the manufacturer*)
- S3/9/14/49: Keep only in the original container in a cool, well-ventilated place away from ... (*incompatible materials to be indicated by the manufacturer*)

- S3/9/49: Keep only in the original container in a cool, well-ventilated place
- S3/14: Keep in a cool place away from ... (*incompatible materials to be indicated by the manufacturer*)
- S7/8: Keep container tightly closed and dry
- S7/9: Keep container tightly closed and in a well-ventilated place
- S7/47: Keep container tightly closed and at temperature not exceeding ... °C (*to be specified by the manufacturer*)
- S8/10: Keep container wet, but keep the contents dry
- S20/21: When using, do not eat, drink or smoke
- S24/25: Avoid any inhalation, contact with skin and eyes. Wear suitable protective clothing and gloves
- S27/28: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of ... (*to be specified by the manufacturer*)
- S29/35: Do not empty into drains; dispose of this material and its container in a safe way
- S29/56: Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point
- S36/37: Wear suitable protective clothing and gloves
- S36/37/39: Wear suitable protective clothing, gloves and eye/face protection
- S36/39: Wear suitable protective clothing and eye/face protection
- S37/39: Wear suitable gloves and eye/face protection
- S47/49: Keep only in the original container at temperature not exceeding ... °C (*to be specified by the manufacturer*)

http://en.wikipedia.org/wiki/Safety_Codes

Activities/ Resources for Outcome #10

Contextualized Social Studies Module Outcome #10

Student uses a dictionary or other reference tool of his/her choice to find definitions of globalization.

Student shares and discusses his/her definitions with each other in small groups.

Each small group is asked to produce one definition and to write it on the board.

Have the class combine the information from each definition into one.

Activities/ Resources for Outcome #11

Contextualized Social Studies Module Outcome #11

Student uses the Internet to research one cause of globalization and one effect of globalization.

Use Word file: “What Caused Globalization?”

<http://www.economicshelp.org/blog/401/trade/what-caused-globalization/>

What Caused Globalization?

by Tejvan Pettinger on April 6, 2012

Readers Question: Evaluate the significance of the factors which have contributed to globalization.

Globalization is not a new phenomenon. The world economy has become increasingly interdependent for a long time. However, in recent decades, the process of globalization has accelerated. This is due to a variety of factors, but important ones include improved trade, increased labor capital mobility and improved technology.

Main Reasons that have caused Globalization

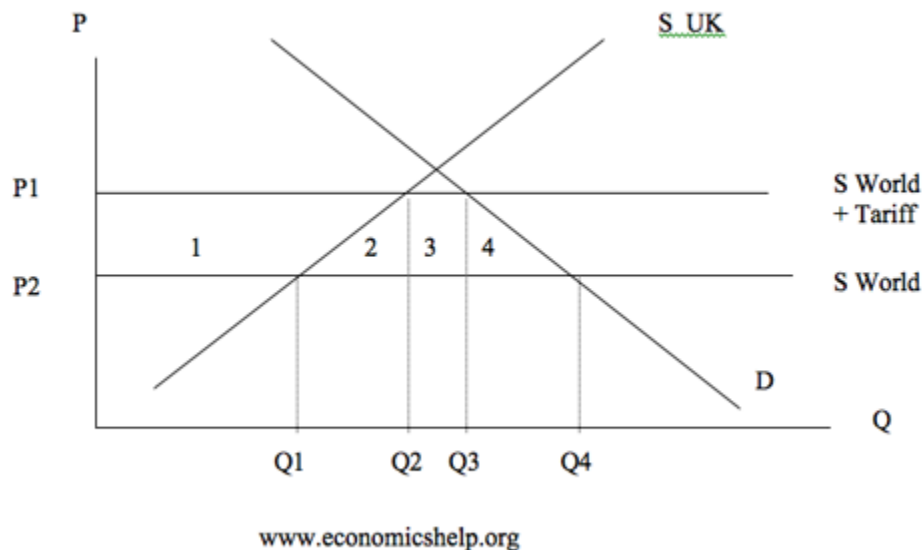
1. Improved transport, making global travel easier. For example, there has been a rapid growth in air travel, enabling greater movement of people and goods across the globe.
2. Containerization. From 1970, there was a rapid adoption of the steel transport container. This reduced the costs of inter-modal transport, making trade cheaper and more efficient.
3. Improved technology, making it easier to communicate and share information around the world. e.g. Internet
4. Growth of multinational companies with a global presence in many different economies.
5. Growth of global trading blocks which have reduced national barriers. (e.g. European Union, NAFTA, ASEAN)
6. Reduced tariff barriers encouraging global trade. Often, this has occurred through the support of the WTO.
7. Firms exploiting gains from economies of scale to gain increased specialization. This is an important feature of new trade theory.
8. Growth of global media.
9. Global Trade Cycle. Economic growth is global in nature. This means countries are increasingly interconnected (e.g. recession in one country affects global trade and invariably causes an economic downturn in major trading partners).
10. Financial system increasingly global in nature. When U.S. banks suffered losses due to sub-prime mortgage crisis, it affected all major banks in other countries who had bought financial derivatives from U.S. banks and mortgage companies.
11. Improved mobility of capital. In the past few decades, there has been a general reduction in capital barriers, making it easier for capital to flow between different economies. This has increased the ability for firms to receive finances. It has also increased the global interconnectedness of global financial markets.
12. Increased mobility of labor. People are more willing to move between different countries in search for work. Global trade remittances now play a large role in transfers from developed countries to developing countries.

In evaluation, I would make the following points:

- It is hard to precisely define globalization. There are different interpretations about what we actually mean; therefore, there are differing factors that explain it.
- Improved technology is undoubtedly very influential in helping globalization. Without technologies such as the Internet and global communication, it would not have been possible to witness the increased interdependence of companies and countries.
- Increased free trade is important. However, there are various trade barriers still in existence, and this has not stopped the growth of globalization.
- Could there be a backlash against globalization as people look for local alternatives to multinational products? I think this is unlikely as people prefer the security of buying established brand names.

Diagram for Globalization

Below is a diagram for trade creation, showing how the removal of trade barriers increases exports and imports. Also, economies of scale are very important for encouraging increased specialization of global production.



<http://www.economicshelp.org/blog/401/trade/what-caused-globalization/>

**Activities/
Resources
for
Outcome #12**

Contextualized Social Studies Module Outcome #12

Student discusses in class what “lean” is in relation to the sources “What is Lean?” and “What is Lean Logistics?”

What is Lean? <http://www.lean.org/WhatsLean/>

What is Lean Logistics? http://www.aalhysterforklifts.com.au/index.php/about/blog-post/what_is_lean_logistics_understanding_the_concept

Use: Word files “What is Lean?” and “What is Lean Logistics?”

Student role-plays lean logistics. He or she could be asked to move materials in the classroom from one place to another.

Instructor evaluates how the students carried out the task and offers suggestions to make the process more efficient. For example, there could be a pile of books on a table, and each student carries one book to the bookshelf.

The instructor times the students and asks them how the books could be re-shelved in a more efficient manner.



What is Lean?

The core idea is to maximize **customer value** while minimizing waste. Simply, lean means creating more value for customers with fewer resources.

A lean organization understands customer value and focuses its key processes to continuously increase it. The ultimate goal is to provide perfect value to the customer through a perfect value creation process that has zero waste.

To accomplish this, lean thinking changes the focus of management from optimizing separate technologies, assets, and vertical departments to optimizing the flow of products and services through entire value streams that flow horizontally across technologies, assets, and departments to customers.

Eliminating waste along entire value streams, instead of at isolated points, creates processes that need less human effort, less space, less capital, and less time to make products and services at far less costs and with much fewer defects, compared with traditional business systems. Companies are able to respond to changing customer desires with high variety, high quality, low cost, and with very fast throughput times. Also, information management becomes much simpler and more accurate.

Lean for Production *and* Services

A popular misconception is that lean is suited only for manufacturing. Not true. Lean applies in every business and every process. It is not a tactic or a cost reduction program, but a way of thinking and acting for an entire organization.

Businesses in all industries and services, including healthcare and governments, are using lean principles as the way they think and do. Many organizations choose not to use the word lean, but to label what they do as their own system, such as the Toyota Production System or the Danaher Business System. Why? To drive home the point that lean is not a program or short-term cost reduction program, but the way the company operates. The word **transformation or lean transformation** is often used to characterize a company moving from an old way of thinking to lean thinking. It requires a complete transformation on how a company conducts business. This takes a long-term perspective and perseverance.

The term "lean" was coined to describe Toyota's business during the late 1980s by a research team headed by Jim Womack, Ph.D., at MIT's International Motor Vehicle Program.

The characteristics of a lean organization and supply chain are described in *Lean Thinking*, by Womack and Dan Jones, founders of the Lean Enterprise Institute and the Lean Enterprise Academy (UK), respectively. While there are many very good books about lean techniques, *Lean Thinking* remains one of the best resources for understanding "what is lean" because it describes the *thought process*, the overarching key principles that must guide your actions when applying lean techniques and tools.

Purpose, Process, People

Womack and Jones recommend that managers and executives embarked on lean transformations think about three fundamental business issues that should guide the transformation of the *entire organization*:

- Purpose: What customer problems will the enterprise solve to achieve its own purpose of prospering?
- Process: How will the organization assess each major value stream to make sure each step is valuable, capable, available, adequate, flexible, and that all the steps are linked by flow, pull, and leveling?
- People: How can the organization insure that every important process has someone responsible for continually evaluating that value stream in terms of business purpose and lean process? How can everyone touching the value stream be actively engaged in operating it correctly and continually improving it?

"Just as a carpenter needs a vision of what to build in order to get the full benefit of a hammer, Lean Thinkers need a vision before picking up our lean tools," said Womack. "Thinking deeply about purpose, process, people is the key to doing this."

<http://www.lean.org/WhatsLean/>

What is Lean Logistics? – Understanding the Concept

01 February, 2012

Organizations are stuck in a constant cycle that pushes them to improve their business in order to gain a competitive advantage. They consistently feel the stress to reduce costs, time and inventory. One way that has proven to improve an organization substantially is a supply chain process known as Lean Logistics.

What is the importance of Lean Logistics?

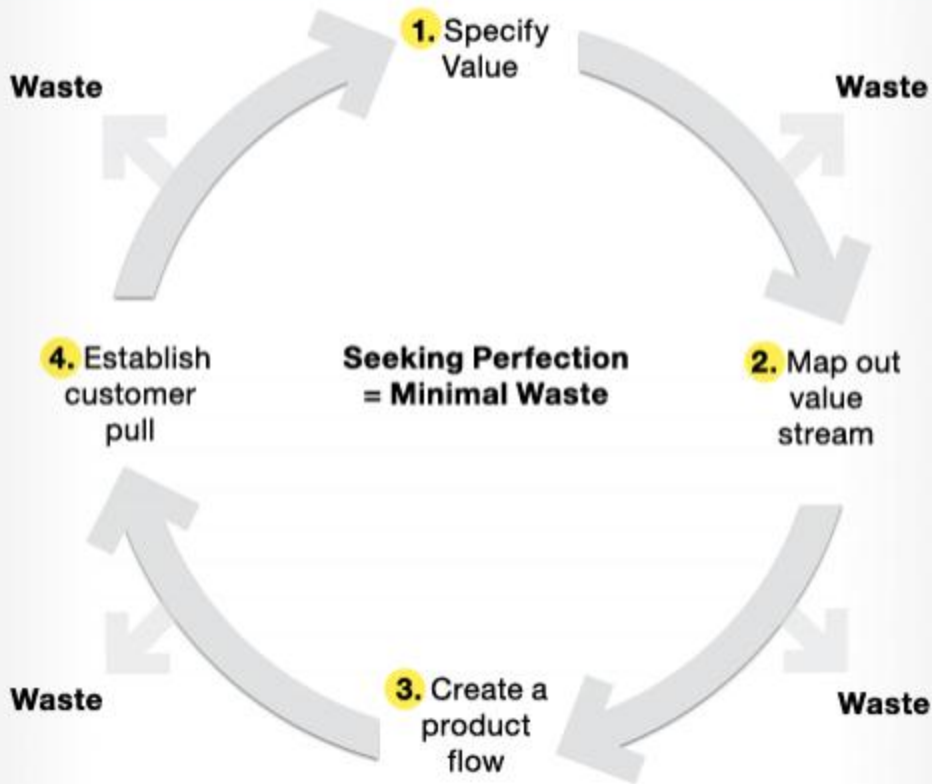
Lean Logistics, simply put, can be described as a way to recognize and eliminate wasteful activities from the supply chain in order to increase product flow and speed. In order to achieve Lean Logistics, organizations need to implement leaner thinking. Organizations that incorporate lean thinking into their supply chain can benefit from improved customer service, reduced environmental impact by reducing waste and even overall corporate citizenship.

What is Lean Thinking?

Lean Thinking originated from manufacturing methods used by Japanese automotive manufacturers. Due to minimal resources and shortages, they employed a production process that worked with minimum waste. This thinking soon spread to all manufacturing areas, new product development and supply chain management. (Krafcik and MacDuffie, 1989)

Lean Thinking involves a constant cycle of seeking perfection by eliminating waste and maximizing product value. This process means that end-customers don't pay for organization inefficiency and waste. Four principles are involved in achieving minimal waste:

Lean Thinking



http://www.aalhysterforklifts.com.au/index.php/about/blog-post/what_is_lean_logistics_understanding_the_concept