

## FINAL DESIGN DOCUMENT

# WEARING A MASK AT WORK: PANDEMIC SAFETY TRAINING FOR FOODSERVICE WORKERS

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16 August 2020

## Project Overview

During the COVID-19 pandemic, businesses in the foodservice industry have been forced to adapt policies on all levels to remain open. Many permanent shifts in the industry have been identified by industry leaders, but the full impact of COVID-19 on foodservice is still developing (Reinstein & Hand, 2020). While each unique foodservice business likely faces unique challenges, the business I work at has changed almost every procedure to transition to curbside and takeaway service. Everything from how we package our product to our basic assigned roles on shift has shifted as a result of the current pandemic.

While foodservice workers have always followed a detailed set of practices for food safety, adapting to constantly evolving local and national government regulations and recommendations for enhanced sanitation has placed a large cognitive load on food service workers. In particular, the practice of safely wearing masks has been hard to become accustomed to. While experienced foodservice workers have had ample practice and training in handwashing and utilizing hairnets and gloves as PPE, the introduction of cloth face masks and the enforcement of CDC guidelines for wearing cloth face coverings has proved to be challenging at my workplace (see figure 1 – gap analysis). Discomfort from wearing an item that touches one's face can lead to accidental unhygienic mask handling.

Figure 1 – Gap analysis

DESIRED STATUS	-	ACTUAL STATUS	=	NEED
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Food service workers at Company X <b>recall</b> the CDC guidelines for utilizing cloth face coverings, <b>recognize</b> the risks of violating the guidelines, and effectively <b>demonstrate</b> adherence the guidelines at all times.	-	Food service workers at Company X do not consistently follow CDC guidelines for wearing cloth face coverings, which may both increase their own risk of contracting COVID-19 and spread COVID-19 and other pathogens to coworkers and customers.	=	To bridge the knowledge/performance gap between desired (optimal) and actual (current) status, a training intervention is needed to train employees of Company X on CDC guidelines for mask usage to enhance performance and to protect the health of all food service workers and patrons.
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While disposable masks are provided for coworkers at Company X, they are welcome to utilize their own as well. While disposable masks are uncomfortable for some, the option to choose their own face coverings rules mask style out as a pain point. Since Company X's cafes are understaffed at this time, a system of consequences would not be a productive solution to this gap in desired and actual status; a training intervention is needed. This module will teach food service workers the CDC guidelines for safely utilizing cloth face coverings and how violating the guidelines can be dangerous to their own health and the health of others which will motivate them to adhere to the guidelines at all times while working. This module will be developed based on my observation of problems in my workplace, therefore it can be considered an example of the human performance technology approach to instructional interventions.

## Identification of Instructional Goal

Food service workers at work during the COVID-19 pandemic utilize required cloth face coverings and hand washing stations to effectively **demonstrate** adherence to the CDC guidelines for wearing cloth face coverings at all times.

## Goal Analysis Diagram

My goal analysis diagram includes main steps required to achieve my main goal. Two entry skills learners should have are listed below the dotted line. Step 3 in the following goal analysis diagram was created based on the CDC's guidelines for wearing cloth face coverings (Centers for Disease Control and Prevention, 2020)



## Learner Analysis

This module is designed for café workers at regional coffee roasting Company X. I have worked at company X for 11 years at multiple locations and in multiple different leadership positions; **much of the information in this table is gathered from my personal experience**, direct observation, and conversations with coworkers. Our HR team kindly provided me with some demographic data. I have also drawn demographic information from a study conducted by the Specialty Coffee Association of America (2014).

A substantial portion of café workers at Company X are between the ages of 19 and 26, but many workers fall outside this category. Education levels vary greatly among the café coworker population, but the majority have obtained a high school diploma. Learners have experienced drastic changes to their workplace due to the COVID-19 pandemic. Café workers at Company X are accustomed to attending work-related training as most coworkers go through a long, multi-step process to obtain barista certification. This training will be mandatory for all coworkers while masks are mandated for food service workers in the region during the COVID-19 pandemic.

Information Categories	Data Sources	Learner Characteristics
Entry Skills	Observation  Research into existing training content	Learners are experienced washing their hands according to CDC guidelines. Learners clean/care for reusable masks outside of the workplace if not using provided disposable masks.
Prior Knowledge	Observation  Interviews – with my immediate coworkers	Some learners have researched CDC guidelines for cloth face coverings on their own. Coworkers returning to work after furlough have been given verbal instructions for mask handling by leadership team members. Some learners have chosen to read instructions provided by the HR department via email.
Attitudes Toward Content	Observation  Interviews – with my immediate coworkers	Learners have widely varying attitudes. Some learners consider mask wearing and hygiene important. Some learners do not believe that masks can effectively protect them from disease. The majority of learners find masks uncomfortable. Regardless, cloth face coverings were required for coworkers by Company X

		starting in April 2020 when cafes were relaunched, moreover, they were recently mandated for all individuals inside buildings open to the public by local governments in all areas with Company X cafes.
Attitudes Toward Delivery System	SCAA study and Data provided by HR team  Interviews – with my immediate coworkers	According to the Specialty Coffee Association of America (2014), the average age of a barista in the US is 20. The majority of Company X's café workers are between 19-26. People in this age range are generally comfortable with technology. The majority of learners I spoke to have experience with online learning. Many learners, especially in leadership positions, have successfully completed online courses to obtain alcohol server's and food safety licenses.
Motivation for Instruction	Observation  Interviews – with my immediate coworkers	Learners are looking for more clear guidance during this unpredictable time. Many feel that they have to deal with situations that they have been given no clear guidelines on handling every day.
Education and Ability Levels	Observation  Interviews – with my immediate coworkers	Learners vary greatly in education levels. Learners are used to learning and applying psychomotor skills in the workplace.
General Learning Preferences	Observation  Interviews – with my immediate coworkers	Learners prefer quick instruction that they are able to apply to their work right away.
Attitudes Toward Training Organization	Interviews – with my immediate coworkers	This training will be rolled out by the HR department. Learners have been accustomed to hearing from this team during the pandemic, and

		have expressed that they are interested in more communication from this team.
General Group Characteristics	Observation  Data provided by HR team	<p>This group of learners – composed of around 400 people – is heterogenous. Although learners generally fall into the 19-26 age range, there are learners that are much older and younger. They come from a wide variety of backgrounds, education levels, and tenures at company X.</p> <p>Overall: instruction should be easy and quick to complete. Learners attitudes will be most effectively changed if they feel listened to and cared for/about throughout the module.</p>

## Performance Context

This training will take place very close to the performance context. Learners will complete the training in the same social and supervisory environment they work in daily. Each performance context consists of cafe areas in public view (behind the counter area, kitchen, and dining area), and hidden areas (a small office area, and various storage areas).

I have worked at company X for 11 years at multiple locations and in multiple different leadership positions; **much of the information in this table is gathered from my personal experience**, observation, and conversations with coworkers.

Information Categories	Data Sources	Performance Site Characteristics
Managerial Support	Observation / Experience	<p>This training will require minimal participation from managers and leadership team members. Managers feel this training will reduce their workload by reducing the instances when coworkers violate guidelines. The minimal required workload and the benefit of clarified expectations for their staff will result in managerial support for this training module.</p>

Physical Aspects of the Site	Observation	This training will occur in the stock room or office of the learner's home café. using the learner's device (smartphone, tablet, PC), or on the café computer if no personal device is available. Learners will perform the training at the beginning of a scheduled shift. Disposable masks and a hand washing sink will be provided.
Social Aspects of the Site	Observation	A leadership team member will introduce the training and lead the final assessment. Each café unit is a small, tight knit team consisting of a general manager, 3-7 shift leaders, and 10-35 total employees. Learners depend on one another for behavioral cues. From direct observation, attitudes toward and adherence to company policies and procedures are highly dependent on individual team buy-in.
Relevance of the Skills to the Workplace	Observation / Experience	Learners will utilize the performance skills covered in the module each day at work for the protection of their own health and the health of their coworkers and customers.

## Learning Context

Each cafe unit context consists of cafe areas in public view (behind the counter area, kitchen, and dining area), and hidden areas (a small office area, and various storage areas). The in-person portion of this training will take place in the work environment. Introduction, practice, and assessment will be conducted in the office and/or the kitchen area (near a hand washing sink) depending on the setup of the cafe.

The online portion of this training will be completed either synchronously or asynchronously on the learner's personal mobile device or computer. If the learner does not have a personal mobile device or computer, the online interactive module may be completed using their home café's computer at a scheduled time.

I have worked at company X for 11 years at multiple locations and in multiple different leadership positions **much of the information in this table is gathered from my personal experience**, observation, and conversations with coworkers. I have worked at every one of the sites where this training will take place.

Information Categories	Data Sources	Learning Site Characteristics
Number / Nature of Sites	Observation Site visits	<p>Each of the 22 cafes that this instruction will occur at has a different layout, but every unit does have a quiet stock room or office. Each unit has Wi-Fi for accessing the online content.</p> <p>Constraints – most units have enough space for 3 learners to work through the module at a time – some will be limited to 1. Coworkers frequently enter / exit the stock room or office and hold conversations there..</p>
Site Compatibility with Instructional Needs	Observation	<p>Limited space and time make a learner-guided online module the best option for this training. Majority of learners possess a mobile device. Each café unit has a computer that can be utilized by coworkers that cannot complete online training on their own device.</p>
Site Compatibility with Learner Needs	Observation / Experience	<p>This site is familiar and comfortable to the learners. Leadership team members will be at hand to assist if needed.</p>
Feasibility for Simulating Workplace Site	Observation / Experience	<p>The learning context and performance context are adjacent. As learning will take place at the beginning of a scheduled shift, learners will begin performing the learned behaviors immediately after completing the module.</p>

## Assessment Plan

### Entry Skills

Entry skills will not be tested.

### Pretest

A pretest will be given as a formative evaluation. Learners will be asked to describe what they already know about the CDC guidelines for using cloth face masks. Learners



will also be asked to rate their attitude towards masks with an emphasis on their attitude toward mask safety and hygiene. This pretest will be compared to the posttest to measure the success of the attitudinal goals associated with the module. This pretest will include entry skills.

### Practice Tests

The online module will include practice tests to address subordinate objectives 1.1, 1.2, 1.3, and 2.. Learners will do matching, multiple choice, and ordering exercises for 1.1, 1.2, and 1.3. For objective 2, learners will view scenario videos, identify how the video represents incorrect behavior; then the module will reveal the correct answers.

### Post Tests

Learners will complete a post-test identical to the pretest describing their knowledge about the CDC guidelines for using cloth face masks as well as their attitudes toward mask safety and hygiene.

Learners will also complete an in-person post-test of both psychomotor skills and verbal skills learned during the module.

### Performance Objectives

Main Instructional Goal	Terminal Objective
Food service workers at work during the COVID-19 pandemic utilize required cloth face coverings and hand washing stations to effectively <b>demonstrate</b> adherence to the CDC guidelines for wearing cloth face coverings at all times.	While working during the COVID-19 pandemic utilizing the CDC guidelines for wearing cloth face coverings (CN), food service workers effectively <b>practice</b> hygienic mask behaviors (B) at all times to prevent the spread of COVID-19 and other pathogens without being reminded (CR)
Main Step in Instructional Goal	Performance Objective for Main Step
1. <b>Recall</b> the CDC guidelines for wearing cloth face coverings	1. When asked (CN), food service workers can <b>recall</b> the CDC guidelines for wearing face coverings (B) with complete accuracy (CR).
	Subordinate Objectives
	1.1 When asked (CN), food service workers <b>arrange</b> the steps of putting on a mask safely and hygienically in order (B) by

	<p>placing the steps in the correct order based on the CDC guidelines for wearing cloth face coverings (CR).</p> <p>1.2 When asked (CN), food service workers <b>repeat</b> the steps of maintaining mask hygiene (B) in order based on the CDC guidelines for wearing cloth face coverings (CR).</p> <p>1.3 When shown images of people wearing masks (CN), food service workers <b>identify</b> improperly worn masks (B) with complete accuracy (CR).</p>
Main Step in Instructional Goal	Performance Objective for Main Step
2. <b>Describe</b> the consequences of violating the CDC guidelines for wearing cloth face coverings	2. When prompted by a short answer question (CN), food service workers <b>describe</b> the possible consequences of practicing improper mask handling (B) by using their own words to <b>discuss</b> possible dangers to themselves and others (CR).
	Subordinate Objectives
	2.1 When given examples of behavior that breaks the CDC guidelines for cloth face coverings (CN), food service workers <b>explain</b> in writing how the behavior can lead to the spread of pathogens (B) in short answer format (CR).
Main Step in Instructional Goal	Performance Objective for Main Step
3. <b>Execute</b> the guidelines at all times	3. Given required cloth face coverings and a workplace that is up to local health code regulations (CN), food service workers <b>execute</b> the steps for utilizing masks (B) in accordance with the CDC guidelines for cloth face coverings (CR).

	<b>Subordinate Objectives</b>
	<p>3.1 Given a clean mask before beginning work and after washing hands (CN), food service workers <b>apply</b> the steps for putting on their mask properly and hygienically (B) by securing the mask snugly over nose and under chin while only touching the strings (CR).</p> <p>3.2 Once mask is properly worn after beginning work (CN), food service workers will continue to <b>operate</b> hygienically mask becomes uncomfortable (B) by choosing not to adjust their mask or washing their hands before and after adjusting their mask (CR).</p>

## Design Evaluation Chart

Goals	Objectives	Parallel Test Items
Main Goal	Terminal Objective	
Food service workers at work during the COVID-19 pandemic utilize required cloth face coverings and hand washing stations to effectively <b>demonstrate</b> adherence to the CDC guidelines for wearing cloth face coverings at all times.	While working during the COVID-19 pandemic utilizing the CDC guidelines for wearing cloth face coverings (CN), food service workers effectively <b>practice</b> hygienic mask behaviors (B) at all times to prevent the spread of COVID-19 and other pathogens without being reminded (CR)	Learners will complete a face to face summative assessment. A leadership team member will prompt them as follows: 1. Demonstrate putting on a mask hygienically. 2. Adjust your mask.
Step	Performance Objective	

1. <b>Recall</b> the CDC guidelines for wearing cloth face coverings	1. When asked (CN), food service workers can <b>recall</b> the CDC guidelines for wearing face coverings (B) with complete accuracy (CR).	Summative written short answer test: 1. Imagine a customer has asked you how to properly put on a mask; explain the full process as you would to them. 2. Explain what steps you should take when you need to adjust your mask.
Subordinate Skills	Subordinate Objectives	
1.1 <b>Recognize</b> a properly worn face covering	1.1 When asked (CN), food service workers <b>arrange</b> the steps of putting on a mask safely and hygienically in order (B) by placing the steps in the correct order based on the CDC guidelines for wearing cloth face coverings (CR).	Practice tests: 1. Place the steps for putting on a mask in the correct order. 2. In the following photos, are masks worn correctly? If not, why not?
1.2 <b>Repeat</b> steps for maintaining mask hygiene	1.2 When asked (CN), food service workers <b>repeat</b> the steps of maintaining mask hygiene (B) in order based on the CDC guidelines for wearing cloth face coverings (CR).	Practice test: 1. Place the steps of adjusting your mask in the correct order Written short answer test: 1. Describe the steps you should take to keep your mask clean. 2. How will you keep your hands clean while wearing your mask?
1.3 <b>Identify</b> examples of improper mask handling	1.3 When shown images of people wearing masks	Practice Test:

	(CN), food service workers <b>identify</b> improperly worn masks (B) with complete accuracy (CR).	1. In the following photos, are masks worn correctly? If not, why not?
1.4 Food service workers can <b>list</b> the CDC guidelines for wearing cloth face coverings	2. 1.4 When asked (CN), food service workers can <b>repeat</b> the CDC guidelines for wearing face coverings (B) with complete accuracy (CR).	Practice short answer test: 1. Imagine a customer has asked you how to properly put on a mask; explain the full process as you would to them. 2. Explain what steps you should take when you need to adjust your mask
Step	Performance Objective	
2. <b>Describe</b> the consequences of violating the CDC guidelines for wearing cloth face coverings	2. When prompted by a short answer question (CN), food service workers <b>describe</b> the possible consequences of practicing improper mask handling (B) by using their own words to <b>discuss</b> possible dangers to themselves and others (CR).	Summative short answer test: 1. How can improper mask handling affect you? 2. How can you affect others by handling your mask without washing your hands?
Subordinate Skills	Subordinate Objectives	
2.1 <b>Discuss</b> the importance of mask hygiene 2.2 <b>Recognize</b> examples of unhygienic behavior 2.3 <b>Identify</b> how guidelines are violated	2.1 When given examples of behavior that breaks the CDC guidelines for cloth face coverings (CN), food service workers <b>explain</b> in writing how the behavior can lead to the spread of pathogens (B) in short answer format (CR).	

Step	Performance Objective	
3. <b>Execute</b> the guidelines at all times	3. Given required cloth face coverings and a workplace that is up to local health code regulations (CN), food service workers <b>execute</b> the steps for utilizing masks (B) in accordance with the CDC guidelines for cloth face coverings (CR).	
Subordinate Skills	Subordinate Objectives	
3.1 [Entry Skill] Know and consistently <b>execute</b> CDC recommended procedure for proper handwashing	N/A	N/A
3.2 Put on mask 3.2.1 Wash hands 3.2.2 Hold mask by strings 3.2.3 Secure strings behind head or over ears 3.2.4 Ensure mask fits tight over entire nose and under chin 3.2.5 Wash hands	3.1 Given a clean mask before beginning work and after washing hands (CN), food service workers <b>apply</b> the steps for putting on their mask properly and hygienically (B) by securing the mask snugly over nose and under chin while only touching the strings (CR).	Learners will complete a face to face summative assessment. A leadership team member will prompt them as follows: 1. Demonstrate putting on a mask hygienically.
3.3 [Entry Skill] Utilize new disposable mask or freshly cleaned reusable mask	N/A	N/A
3.4 Begin or resume work 3.4.1 Mask becomes uncomfortable 3.4.2 Choose not to adjust mask 3.4.3 Choose to adjust mask 3.4.4 Wash hands 3.4.5 Adjust mask 3.4.6 Wash hands	3.2 Once mask is properly worn after beginning work (CN), food service workers will continue to <b>operate</b> hygienically mask becomes uncomfortable (B) by choosing not to adjust their mask or washing their hands before and after adjusting their mask (CR).	Learners will complete a face to face summative assessment. A leadership team member will prompt them as follows: 1. Adjust your mask.

## Instructional Strategy Alignment

The online portion of this training module utilizes cognitive approaches to learning such as chunking information, repetition, and Gagne’s events (especially stimulating prior knowledge).

The in-person introduction, practice, and assessment emphasize constructivist learning concepts such as social negotiation and coaching.

Learning Component	Instructional Strategy Plan
<p>Learning the CDC guidelines for wearing cloth face coverings.</p>	<p>Objectives:</p> <ol style="list-style-type: none"> <li>1. When asked (CN), food service workers can <b>recall</b> the CDC guidelines for wearing face coverings (B) with complete accuracy (CR).</li> <li>1.1 When asked (CN), food service workers <b>arrange</b> the steps of putting on a mask safely and hygienically in order (B) by placing the steps in the correct order based on the CDC guidelines for wearing cloth face coverings (CR).</li> <li>1.2 When asked (CN), food service workers <b>repeat</b> the steps of maintaining mask hygiene (B) in order based on the CDC guidelines for wearing cloth face coverings (CR).</li> </ol> <p>Content Presentation: Learners will view videos with text of putting a mask on maintaining mask hygiene (examples)</p> <p>Student Participation: After each video, they will complete a memory exercise based on the content.</p>
<p>Learning the nuances of the CDC guidelines for wearing cloth face coverings</p>	<p>Objectives:</p> <ol style="list-style-type: none"> <li>1.3 When shown images of people wearing masks (CN), food service workers <b>identify</b> improperly worn masks (B) with complete accuracy (CR).</li> </ol>

	<p>Content Presentation: Learners will be shown images and videos of improper mask fit and mask handling (non-examples)</p> <p>Student Participation: Learners will participate in multiple choice activity to identify the improper behavior in each non-example. Learners will participate in a matching activity to correctly identify whether mask is worn properly or not and if not, why.</p>
Proper Mask Hygiene	<p>Objectives: Terminal Objective (attitudinal goal) While working during the COVID-19 pandemic utilizing the CDC guidelines for wearing cloth face coverings (CN), food service workers effectively <b>practice</b> hygienic mask behaviors (B) at all times to prevent the spread of COVID-19 and other pathogens without being reminded (CR)</p> <p>Content Presentation: Learners will learn how mask hygiene relates to a subject matter / term they already understand and associate with the workplace – cross-contamination. Learners will be shown a cartoon demonstrating how mask-related cross-contamination can affect them and those around them.</p> <p>Student Participation: Students will correctly identify examples of how unhygienic behaviors put them at risk. Learners will also describe how unhygienic behavior can affect them in writing.</p>



Execution	<p>Objectives:</p> <p>3. Given required cloth face coverings and a workplace that is up to local health code regulations (CN), food service workers <b>execute</b> the steps for utilizing masks (B) in accordance with the CDC guidelines for cloth face coverings (CR).</p>
	<p>Content Presentation: Students will watch video/text presentations showing coworker executing the guidelines.</p> <p>Student Participation: Students will participate in a coaching session and practice executing the guidelines with trainer feedback.</p>

## Implementation Plan

As a pilot test, I hope to conduct this training with 10 volunteers. Testers will be café coworkers from Company X. Testers will complete a pre-test, complete the online interactive training module, and submit a post-test. I will encourage testers to complete the interactive training on a mobile device in order to test its viability in that format.

If this module is implemented in the future, I will roll the training out at 2 cafes with smaller staff numbers before it becomes mandatory for all café staff. Staff will implement the full training as described in the facilitator's guide including face-to-face introduction, follow-up activity, and in-person evaluation. I will conduct follow-up interviews with the general manager of each beta unit when all staff members complete the training to determine if their performance has improved and whether their attitude toward wearing masks has changed.

## Evaluation Plan

I have prepared a [pre-test](#) and [post-test](#) in Google Forms I will compare pretest and posttest results. The pre-test contains entry skills questions. The post-test contains questions about the user experience. Both tests contain identical questions measuring learner **knowledge, understanding, and attitude** for comparison.

## References

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