# U.S. Fabrications: Learning Strategy Playbook



Developed for Manufacturing Company by McKinnon-Mulherin Consulting May 15, 2020

## **Contents**

Executive Summary	1
Learning Strategy	
Audience	
Learning Context	
Tone	
Branding	
Instructional Approach	4
Learning Objectives	
Training Roadmap	
Before Day One	7
Training Shift Logistics	7
Day One	
Week One (Tuesday-Friday)	7
Week Two	7
Weeks Three-Five	
Training Roadmap Spreadsheet	
Ongoing Training Topics and Cadence	8
Thoughts on Phase II Role-Specific Training	
Supplemental Training	
Skill Development	
Course Content Details	
Assessment Strategy	
Level 1: Assess Learner Reaction	
Level 2: Assess What Participants Learned (Mastery)	12
Level 3: Assess Application of Learning	
Level 4: Assess Impact on Business Metrics	
Reporting Plan	
Phased Implementation Plan	
Phase I: Analysis	
Phase II: Design	
Phase III: Development	
Phase III: Implementation	
Phase IV: Evaluation and Finalization	16

## **Executive Summary**

To help ensure the success of its US-based fabrication plants, Manufacturing Company needs a cohesive new hire training plan that can be replicated as the company grows globally. To this end, you engaged a learning and development (L&D) firm to develop a learning strategy.

Over the past three weeks, McKinnon-Mulherin Consulting (MMC) has conducted core data-gathering efforts, including content review, a fabrications employee survey, and an on-site visit in which interviews, meetings, and a focus group were conducted to gain varied perspectives from your team. This process has yielded an understanding of your business objectives, learning audience, existing content status, branding, success metrics, and learning/information technology infrastructure.

This playbook communicates our resulting recommendations for a comprehensive blended-training program to meet the following project goals:

[Details omitted]

The Learning
Strategy Playbook
identifies immediate
training priorities, as
well as long-term
opportunities for
continuity, refresh,
and improvement.

This playbook is meant to be used by your leadership team as follows:

- Align your understanding of the business case for training and then communicate it up the organization as needed to support budget and time allocation
- Review and agree to key decision points:
  - Overarching instructional approach (how the learning will be designed and why)
  - Learning objectives (what employees will be able to do upon completion of training)
  - Training roadmap (what will be taught, when, and by whom)
- Provide a starting point for course content development (although the playbook treats content at a high level, we have documented some specifics we captured to help save time during development)
- Execute an assessment strategy and reporting plan, including gathering necessary benchmarks
- Agree to a phased implementation plan
- Prepare for and manage the steps required for development, including immediate priorities, plus mid-

- term and long-term opportunities for continuity, refresh, and improvement
- Consider associated challenges that may affect training success

Role-specific new hire training will be designed and developed in Phase II, and it is outside the scope of this playbook. However, where Phase II concepts or needs surfaced, they have been captured here.

## **Learning Strategy**

The learning needs of the Manufacturing Company's diverse employees will be best met with a multifaceted new hire training program that blends several learning methods to both optimize and minimize time spent in training. This section of the playbook articulates the needs of your audience and learning context and includes recommendations in each of the following areas:

- Tone
- Branding
- Instructional Approach

### **Audience**

Although the current pool of fabrication employees is very experienced, we anticipate a very different audience in the future—especially once an apprentice model is established.

[Details omitted]

## **Learning Context**

All training must take place during an employee's normal shift, but at the same time, we all know that this will be difficult. Time away from core duties is rare and precious.

[Details omitted]

### **Tone**

The tone of the program will be direct, casual, and pragmatic. Scenarios and examples will reflect authentic manufacturing situations.

[Details omitted]

## **Branding**

We recommend branding the new hire training program so that it is recognizable to learners, their supervisors, and the wider corporation—and so that it is seen as a discrete program with a clear learning path that culminates in a certificate and appropriate recognition.

[Details omitted]

**Figure 1: Color Guidelines.** Use these RGB values to match Fabrication Onboarding training materials to other company documents.

# Instructional Approach

This multifaceted program will include a blend of these learning methods:

- Classroom training
- Hands-on training
- Huddle-based learning moments
- eLearning
- Document review

Each method is described below along with standards for length, interactivity, and delivery.

### **Classroom Training**

Classroom training will be the Fabrication Onboarding program's primary learning method. It is the fastest to develop, easiest to alter, and allows you to train the greatest number of new hires in the most engaging manner.

### Length

[Details omitted]

#### Interactivity

Courses will minimize lecture and emphasize action and [Details omitted]

### Materials

[Details omitted]

### **Delivery**

[Details omitted]

## **Hands-On Training**

Hands-on training should be a hallmark of Phase II, where learners shadow certified trainers on the plant floor to watch and then demonstrate tasks.

[Details omitted]

#### Materials

[Details omitted]

### **Delivery**

[Details omitted]

## **Huddle-Based Learning Moments**

Huddles represent the perfect opportunity to deliver short bursts of learning and to reinforce more complex training topics. This form of training will be relevant not only in the first 60 days of new hire training, but also over time as training support for continuous improvement.

[Details omitted]

### Length

[Details omitted]

### Interactivity

[Details omitted]

#### Materials

[Details omitted]

### Delivery

[Details omitted]

### **eLearning**

We do not recommend using self-paced eLearning for the pilot unless during development we identify an off-the-shelf course that is ideal for the Manufacturing Company needs or can easily be customized. We do, however, anticipate the possibility of converting classroom courses to self-paced eLearning after the immediate training need has been met.

#### **Document Review**

Ideally, we recommend that the Manufacturing Company move away from your current practice of requiring employees to read (and in some cases be tested on) a batch of standard operating procedures (SOP). At the same time, we recognize ....

[Details omitted]

## **Learning Objectives**

The ultimate objective of the Fabrication Onboarding curriculum is to enable manufacturing excellence. While the nuts and bolts of team member performance will be taught in job-specific training (Phase II), Fabrication Onboarding lays a critical foundation by serving three purposes for all new hires, regardless of their role:

[Details omitted]

Each module and activity within the curriculum will have a unique set of learning objectives, but at the highest level, the curriculum is designed to ensure that learners can do the following:

[Details omitted]

Throughout the curriculum, we will tie objectives, activities, and content back to the Manufacturing Company's mission: "[Details omitted]"

## **Training Roadmap**

This section of the playbook provides a high-level vision of the Fabrication Onboarding curriculum from hire date through competency. The focus is on Fabrication-specific training, but topics covered by the Human Resources and Learning and Development teams are also captured here to create a full picture of the new hire learning experience and to uncover any potential misunderstanding between functional areas.

## **Before Day One**

After receiving a verbal offer from a recruiter...

[Details omitted]

In the week before they arrive on site...

[Details omitted]

# Training Shift Logistics

[Details omitted]

## Day One

Fabrication Training/Orientation	Other Training/Orientation
Manager Welcome and Tour	Badging and Security
• [Details omitted]	Benefits     Orientation
Day One Wrap-Up	

## Week One (Tuesday-Friday)

Fabrication	HR & Corporate	
Training/Orientation	Training/Orientation	
• [Details omitted]	• [Details omitted]	

## **Week Two**

Fabrication	HR & Corporate
Training/Orientation	Training/Orientation
<ul><li> [Details omitted]</li><li> Capstone Activity</li></ul>	• [Details omitted]

### Weeks Three-Five

### **Fabrication Training/Orientation**

- [Details omitted]
- Assessment
- Program Wrap-Up

## Training Roadmap Spreadsheet

Accompanying this overview is an Excel file that can be used as a tool to document and plan training development.

	FABR	CICATION ONBOARDING TRAIL	NING AND	O ORIENTAT	ION ROA	DMAP	
Domain	Timeframe	Course Title/Activity	Method	Owner	Duration	Assessment	Frequency
Corporate	Day 1	Badging and Security	Hands-on	[Detail omitted]	30 minutes	N/A	One Time
Culture	Day 1	Manager Welcome and Tour	Hands-on	[Detail omitted]	1 hour	N/A	One Time
Culture	Day 1	[Detail omitted]	Classroom	[Detail omitted]	1 hour	Completion	One Time
Fab Core	Day 1	[Detail omitted]	Blend	[Detail omitted]	1.5 hours	Level 2	One Time
Fab Core	Day 1	[Detail omitted]	Hands-on	[Detail omitted]	.5 hours	Level 3	One Time
Safety	Day 1	[Detail omitted]	Classroom	[Detail omitted]	.75 hours	Level 2	Quarterly
Corporate	Day 1	[Detail omitted]	Hands-on	[Detail omitted]	.5 hours	Level 3	One Time
Fab Core	Day 1	[Detail omitted]	eLearning	[Detail omitted]	.75 hours	Level 2	One Time
						Completion/	
Safety	Day 1	[Detail omitted]	Documents	[Detail omitted]	Varies	Level 2	Ongoing
						L2	
Quality	Day 2	[Detail omitted]	Classroom	[Detail omitted]	1 hour	Certification	Ongoing
						L2	
Quality	Day 2	[Detail omitted]	Classroom	[Detail omitted]	1 hour	Certification	Ongoing
						L2	
Quality	Day 2	[Detail omitted]	Blend	[Detail omitted]	1 hour	Certification	One Time
Job Specific	Day 2	TBD Phase II			4 hours		
						Completion/	
Quality	Day 2	[Detail omitted]	Documents	[Detail omitted]	Varies	Level 2	Ongoing
						Level 2	
Quality	Day 3	[Detail omitted]	Blend	Mfg Leaders	1.5 hours	Certification	Ongoing

**Figure 2: Onboarding Training and Orientation Roadmap.** This Excel document will help Manufacturing Company plan and manage learning activity development.

## Ongoing Training Topics and Cadence

Many of the topics covered in new hire training should be refreshed regularly. The training roadmap indicates whether content is considered one-time only or requires quarterly, annual, or as-needed refreshers. Refresher training can occur in many contexts and modalities, including team meetings, huddles, and off-site sessions.

## Thoughts on Phase II Role-Specific Training

Although the focus of this playbook is high-level, crossfunctional training, our data-gathering activities uncovered preferences and topics for job-specific training in Phase II.

In general, job-specific training should be as scenario-based, hands-on, and work-embedded as possible. We recommend that the following topics be included for all applicable roles:

• [Details omitted]

# Supplemental Training

As you consider the ongoing learning needs of your team, we recommend partnering with your corporate Learning and Development department to offer supplemental computer literacy and English-as-a-second-language courses for valuable team members who would benefit from them. These and other offerings could be provided outside of the normal workday or in a lunch-and-learn setting.

## **Skill Development**

In Phase III, the Manufacturing Company will add skills training to enable employees to progress in their careers (e.g., [Details omitted]), develop their leadership skills (as managers, supervisors, or team leads), and enhance soft skills (e.g., such as coaching conversations). For this phase, close collaboration with Learning and Development and other corporate divisions will prevent duplication of efforts.

## **Course Content Details**

Although a full description of all training content is outside the scope of this project phase, this section of the playbook shows content detail for sample courses to help ensure our aligned vision.

Please note that these tables cover content and topics, so they could easily be misunderstood to represent a lecture format. During course development, these topics will be transformed into engagement activities that hold employees' attention and help them remember and apply what they learn.

Welcome/Overview: One-Hour Classroom Session			
Topics	Purpose	Resources	
Welcome	Establish why the training matters and "what's in it" for learners.	[Details omitted]	
[Details omitted]	[Details omitted]	[Details omitted]	
[Details omitted]	[Details omitted]	[Details omitted]	
[Details omitted]	[Details omitted]	[Details omitted]	
[Details omitted]	[Details omitted]	[Details omitted]	
Wrap-Up	Evaluate success,		
	communicate next steps, and		
	direct learners to related		
	resources.		

#### **Additional Notes:**

- Use this session to connect employees to the Manufacturing Company's mission.
- Help employees see this as a career opportunity and not just a job. They will learn and grow here.
- [Details omitted]

[Tables for other courses omitted]

## **Assessment Strategy**

The Fabrication Onboarding assessment strategy includes evaluating the training according to Kirkpatrick's Four Levels of Training Evaluation:

Level 1: Satisfaction Level 2: Mastery Level 3: Application Level 4: Impact

## Level 1: Assess Learner Reaction to the Training (Satisfaction)

This is typically accomplished with a short survey (often called a "smile sheet"). We recommend using such at the end of each classroom and eLearning course (as applicable) and at the completion of Week Two. This can be managed with brief surveys that include both Likert Scale and open-ended questions that ask about the quality and value of the course and the learner's confidence that they can apply what they learned. Figure 3 provides sample questions.

### Sample Likert Scale Questions (must answer)

- 1. I understood the course objectives.
- 2. I felt that the content related to my job.
- 3. I will be able to apply what I learned to the work I do.
- 4. My learning was enhanced by the knowledge and skills of the facilitator.
- 5. I was well engaged during the course.
- 6. I had ample opportunity to get answers to my questions.
- 7. I was given ample time to practice what I learned.
- 8. I found the room atmosphere to be comfortable.
- 9. I would recommend this course to others.

#### **Rating Scale**

- 1. Strongly agree
- 2. Agree
- 3. Neither agree nor disagree
- 4. Disagree
- 5. Strongly disagree

## Sample Open-Ended Questions (optional)

- 1. What was the most important thing you learned?
- 2. From what you learned, what are you most likely to apply on the job?
- 3. What kind of help might you need to apply what you learned?
- 4. What ultimate impact do you think you might contribute to patients or the company, based on what you learned?
- 5. What else would you like us to know about your experience during this course?

**Figure 3: Sample Level 1 Evaluation.** These questions apply to classroom learning. Level 1 Evaluations for eLearning typically include questions about course usability and navigation.

### Measuring Impact on Attitudes and Confidence

Although it does not fit neatly into the Kirkpatrick model, we also like to gauge the impact of a training program on learner attitudes toward work and confidence in their ability to perform it. For this reason, we recommended including a brief pre-start survey among the email materials your employees receive upon acceptance of a new position. We would keep this survey shorter and simpler than the standard Level 1 survey above, and in fact it should feel to employees as if you are seeking their opinions up-front so that you can better serve their needs.

The results of the initial survey will prepare leaders in advance to meet the training needs of the upcoming new hire cohort. This will also help create baseline data that will enable you to compare the impact of the Fabrication Onboarding program on employee attitudes and knowledge-confidence over time.

#### [Details omitted]

### [Details offitted]

This level of evaluation is most scientifically handled with preand post-testing. However, we recommend that this approach be used sparingly in this program.

Pre-tests often come with the implication that seasoned learners can opt out if they pass the test. For some courses, this will make sense, especially when it is difficult to take employees off the line for training. However, for other courses, the shared training experience and the Manufacturing Company-specific context is as important as whether an employee is already familiar with the general core content.

### [Details omitted]

All classroom and eLearning activities should have at least some form of quick check to assess whether learners have understood the content. For certification-level courses, the test should be rigorous enough to ensure that all learning objectives have been met. Follow these general guidelines when developing the assessments:

- Multiple-choice or true/false questions (25%)
- Verbal responses to situations posed by a certified trainer or manager (25%)
- Demonstration of skills (50%) (when applicable to the content)

All Level 2 multiple choice tests can be developed, delivered, and tracked in Manufacturing Company's LMS. We recommend that test questions focus on assessing whether you have achieved specific course objectives (what you want the learner to be able to do upon completion) rather than just measuring

## Level 2: Assess What Participants Learned (Mastery)

One of the first steps in program design and development should be to determine which courses should have pretests vs. just post-tests.

their ability to recall minute details. This means writing questions where the content is placed in the context of a real-world situation. The LMS supports this approach, even allowing you to use images as part of the question content in exams.

## Level 3: Assess Application of Learning

This level of training evaluation will be easier in Phase II, where certified trainers or production supervisors can observe and check off skills in a real-world setting. With the kinds of content we are covering in Phase I, opportunities to apply learning will show up more sporadically.

We suggest two approaches for measuring application:

- Performance Checklists. Equip production/shift supervisors and team leads with checklists that clearly identify workplace behaviors that reflect training application. These checklists are not just for identifying and correcting failure to apply learning: They are also for identifying and documenting success. When significant, these application moments should be recognized both in the moment and in team meetings or huddles.
- **Surveys.** Another approach is to survey managers and production/shift supervisors at three-, six-, and twelvemonth intervals to determine whether their employees are applying knowledge and skills on the job.

As you begin designing and developing course content, specific evaluation criteria will become clearer. Please note that it is also helpful to survey learners at these intervals to understand how well *they* think they can apply the training. This data will also inform the need for and direction of refresh training.

## Level 4: Assess Impact on Business Metrics

The best way to assess business impact is for the Manufacturing Company to establish success measures and begin capturing data that will serve as benchmarks for assessment of training impact over time. We have identified the following metrics for determining training success. When possible, we have also included general industry benchmarks to use as a starting point of comparison while you begin tracking your own data.

#### [Details omitted]

Although we feel these metrics are sufficient in breadth, wholistic approach, and perceived relationship to employee training, any of your defined key performance indicators (KPIs) are worthy of consideration for tracking and correlating to training activity. We also have benchmarks for Overall Equipment Effectiveness (OEE) if you would find that of interest.

## **Reporting Plan**

All reporting data should be trackable over time so that you are able to identify trends.

Reporting for the Fabrication Onboarding program should include capturing and tracking the following information over time, filtered by learner, functional group, and new hire cohort:

- Participation in defined activities (courses, huddle-based training moments, etc.)
- Level of completion for self-paced eLearning and document review
- Scores on quick checks, SOP quizzes, and certification exams (including verbal responses to trainers)
- Scores on skills demonstrations and performance checklists

In addition, your reporting plan should capture and track consolidated/anonymized results from any pre-start surveys or Level 1 evaluations (learner reaction to training). These can also be filtered in most cases by new hire cohort.

Although you do not fully exploit its capabilities, your LMS is able to support all these reporting needs. It is also able to register learners for courses and notify them when they are behind in some training activities.

We are not necessarily champions of the LMS. However, we have worked with clients who use it effectively, and it seems like the fastest path to meeting your needs while you investigate longer term HRIS and learning management solutions.

Here are just a few examples of related LMS functionality:

- Manage and track learning progress. Regardless of what delivery method they choose, administrators can use the LMS to gain immediate insight into which users are registered for which courses, and to track progress to ensure completion.
- Measure the effectiveness of your learning programs. The LMS provides tools for creating and administering multiple levels of assessments, including learner reactions, learning acquired, and the extent to which learners have modified their workplace behaviors.
- Generate accurate and flexible reports. The system's ad hoc reporting lets you configure reports to suit your requirements using easily selectable database fields. You can also schedule reports as needed and share data via e-mail, report links within the portal, or Web-embedded views.

## **Phased Implementation Plan**

We recommend the following phased approach to implementation, which incorporates an agile form of the ADDIE model (analyze, design, develop, implement, evaluate).

## Phase I: Analysis

### Description

Conduct data-gathering activities to validate the learning need and determine a plan of action.

### **Timeline**

[Details omitted]

### Roles

Project manager, lead instructional designer

## Phase II: Design

### **Description**

Execute against the plan with the following actions:

- 1. Finalize program branding
- 2. Create and distribute design guidelines and templates for each training method.
- 3. Develop a design prototype for each learning activity including learning objectives, detailed content outline, activity descriptions, and assessment instruments
- 4. Create a program style sheet (a shared document for all training content developers that lists decisions about format and language as they evolve throughout the project to ensure consistency and save revision time)

### **Timeline**

[Details omitted]

### Roles

Project manager, instructional designers, graphic designer

## Phase III: Development

## Description

Develop training assets (e.g., images, videos, scenarios) and pilot deliverables (e.g., slide decks with embedded facilitator notes, handouts, and huddle-based training agendas) through an iterative process:

1. Create initial drafts with content gaps

- 2. Conduct SME reviews to fill in missing data and ensure accuracy and completion of information
- 3. Revise to a semifinal
- 4. Conduct quality reviews (including editing for continuity, clarity, and instructional soundness)
- 5. Revise and proofread
- 6. Deliver final pilot versions

Note that courses in the first two phases of training must be complete by [Month date], but development and implementation can overlap during the [program name] pilot. This is necessary in part because of limited bandwidth of the Manufacturing Company team members who serve as SMEs, reviewers, and facilitators.

### **Timeline**

[Details omitted]

### Roles

Project manager, instructional designers, graphic designer, writers, subject matter experts, editor, reviewer

## Phase III: **Implementation**

### Description

Roll out pilot for all new hires. Capture evaluation data and lessons learned. If time and budget allow, enable members of the development team to observe week one activities.

### **Timeline**

[Details omitted]

## **Phase IV: Evaluation and Finalization**

## **Description**

Learning developers review training evaluation results and feedback from facilitators and then revise deliverables in time for bringing in the next new hire cohort.

### **Timeline**

[Details omitted]

### Roles

Project manager, facilitator, instructional designer (other development roles as needed)

[Endnotes deleted]