

LEARNING AND DEVELOPMENT

Guidelines and Procedures v1.0

Abstract

The following document's purpose is to provide an example from my previous work detailing how a Learning and Developments program is developed, deployed, and administered
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Table of Contents

Section 1: Introduction

- 1.1 Introduction to Learning and Development
- 1.2 Goals of Learning and Development
- 1.3 Learning and Development Document Usage Statement

Section 2: Learning Course Development and Deployment

- 2.1 Course Development
- 2.2 Internal vs. External Training Usage
- 2.3 Course Deployment
- 2.4 Class Recording
- 2.5 Continuing Improvement Approach to Learning

Section 3: Competency Based Learning Delivery Methodology

- 3.1 Learning Characterization: Blended Learning Approach to Target Competency Levels
- 3.2 Mechanisms to Delivery Blended Learning
- 3.3 Personnel Designation

Section 4: Geo-Services Learning and Development Program

- 4.1 Basic Seismic Survey Principles
- 4.2 Seismic Processing
- 4.3 Seismic Imaging
- 4.4's Integrated Imaging Software Platform and Desktop Applications
- 4.4 Business Essentials
- 4.5 QHSE

Section 5: External Partner Shared Learning

- 5.1 Client Partner Course Development Processes
- 5.2 Client Partner Course Delivery and Administration
- 5.3 Client Partner Feedback Processes

Section 6: Learning and Development Approval Guidelines

- 6.1 Personnel Internal Course Approval Guidelines
- 6.2 Personnel External Course Approval Guidelines
- 6.3 Joint Venture Partner Statement on Course Attendance
- 6.4 External Partner Approval Guidelines

Learning and Development Procedures

Section 1: Introduction

1.1 Introduction to Learning and Development

The company believes that access to learning gives its employees the best ability to continue to thrive and grow as individuals and as a company. believes that learning is a key core value and that by investing time and effort in its employees, it can continue to be an industry leader in the Oil Service Industry and adjacent markets. This belief is rooted in the philosophy that we are stronger together by sharing our collective knowledgebase. This shared knowledge has led to improvements in both project execution and delivery and push new technologies and products forward to meet our client's unique needs.

1.2 Goals of Learning and Development

The companies' Learning and Development team's goals include the following: aligning Learning and Development to its ongoing business goals, show real accountable impact on the business at large, stay agile in course development and deployment, maintain a positive environment, and finally deliver timely and effective courses with feedback from course participants, subject matter experts as well as the management team.

1.3 Learning and Development Document Usage Statement

The following document which outlines, and describer's Learning and Development practices is meant to be an evergreen document. The goal for this document is to continuously receive feedback from employees and other partners so that it can be improved upon with version updates as needed.

Learning and Development Procedures

Section 2: Learning Course Development and Deployment

2.1 Course Development

The company and its partners work together to identify subject matter for Learning and Development. These topics can be requested by individuals, teams or partnering companies. Subject matter requests are submitted to the Training Manager. All requests are reviewed internally by the Learning and Development team along with related department management for importance and priority. reviews each subject based on its importance to the business and weighs it against an employee competency model of the subject matter. If a subject matter is selected for development, the Training Manager will identify a team of Subject Matter Experts (SME's) to create a development plan for the topic. The Training Manager will manage the course development along with the Subject Matter Experts and will create a timeline to deliver the course. Additional items that are identified at this time include: the intended audience, appropriate materials and their deliver methodology, times, dates and locations of delivery, and approval of the respective management to attend course work.

2.2 Internal vs. External Training Usage

The company uses both Internal and External Subject Matter Experts (SMEs) for the purpose of training its employees. When courses are identified as being relevant and necessary, the Training Manager will review a list of internal Subject Matter Experts to see if there is a fit for the subject matter. If it can do so, an internal SME will be assigned to develop a course. External resources can be procured to deliver a course if deemed necessary with a recommendation of both the Training Manager and relative managing staff. In certain cases, an external contractor, or contracting company might have a significant advantage in delivering a subject over an internal Subject Matter Expert. In these cases, additional review will be provided prior to a final decision on which SME to deliver the course.

The approval process guidelines for both Internal and External Usage can be found in Section 6.1 of this document.

Learning and Development Procedures

2.3 Course Deployment

The company's course deployment allows for course material to be developed for the correct audience level of competency. Competency can be described as the following: No Experience, Novice, Experienced and Subject Matter expert. seeks to improve a learner's understanding of a subject by using the appropriate method too effectively build a foundation of knowledge for a learner by addressing basic awareness and then application of information and technology. Further description of the company's competency model can be found in Section 3.1 of this manual.

The company uses a "Blended Learning" approach to Learning and Development. This includes a variety of methods from eLearning, Online Webinars, Instructor Led Classroom events as well as Group Driven Workshops. Additional information on Blended Learning can be found in Section 3.2 of this manual.

Additional items to be completed will include, course dates and time assignments, delivery methodology, room appropriation, notification to attendees that have had approval for their attendance. Room setup in the case of Instructor Led Classroom training will be completed by the Learning and Development staff prior to course and will make sure that the learners will have the best possible environment, which can include computers, projections equipment, special software requests and any other housekeeping items necessary.

2.4 Class Recording

All courses are eligible for Video Recording of their events. Video recording of any event shall require an approval of the SME providing the training. Prior to the course being recorded, all individuals in attendance shall be informed of the course recordings due to privacy concerns of all involved. These recordings are edited for time and content and then uploaded to a common location that students and others in can review at a later date.

2.5 Continuing Improvement Approach to Learning

At the conclusion of the course, evaluations will be distributed, completed, and recorded from attendees. The evaluation's purpose is to better understand how well the course improved the attendees understanding of the subject matter and seek improvement for future courses. Attendees are not required to give their names regarding feedback, unless they wish to do so. Feedback is reviewed by the Learning and Development staff and then shared with both the SME's and appropriate management. follows the Lean Six Sigma measures for improvement regarding all training materials. These are defined as: Define, Measure, Analyze, Improve, and Control. These ideals are used to help identify course work as well as to continue to improve upon their delivery.

Learning and Development Procedures

Section 3: Competency Based Learning Delivery Methodology

3.1 Learning Characterization: Blended Learning Approach to Target Competency Levels

A person's understanding of a specific subject, which includes their ability to understand both theory and the ability to perform specific tasks define a person's competency in that subject. believes understanding its employee's competency in specific subjects and tasks will help it to better deploy persons to projects as well as to identify gaps in the overall competency in each task. seeks to help its employees by improving their understanding of these subjects through learning courses as well as on the job training tasks.

Competency Levels classified as:

- **No Experience:** The learner has either had no experience with a subject or very limited exposure to it.
- **Novice:** The learner has had preliminary contact with a subject which can include the following:
 - Basic Awareness and Theory
 - Basic Application and Practical Follow-up
 - Any practical on the job work with a subject would require the learner to have assistance from a mentor or subject matter expert in order to complete a project
- **Experienced:** The learner is experienced with a subject and can handle it with little or no assistance. These learners are classified as having achieved the following:
 - Thorough understanding of theory for a subject
 - Can apply skilled application of a job task
 - Can assist others by giving advice or during the Peer Review process
- **Subject Matter Expert (SME):** The person can both complete a task as defined, but they also intimately understand the foundational and advanced theory behind it. To become a Subject Matter Expert, the learner will display the following abilities in that subject:
 - Mastery of the theoretical understanding of a subject
 - Mastery of application of a specific job task including deeper understanding of the tool itself and how it can be used or manipulated to deliver the best product possible
 - Is a source for others to assist with work in an advisory role
 - The person can act as a mentor for tasks they are considered a SME
 - Can deliver instruction on a specific subject.

The company's goal is to improving its employees understanding of subjects to the "Experienced" level. Those individuals that seek out to become Subject Matter Experts would occur over time and additional exposure to on-the-job training, workshops as well as professional organizations.

Learning and Development Procedures

3.2 Mechanisms to Delivery Blended Learning

The company's Learning and Development utilizes a "blended learning" approach to training. What blended learning means to is: use the best tools and methodology to prepare individuals for their prospective role assignments. To do so, has created a network of courses and materials that allow for a continuous learning environment. uses a wide array of differing methods to deliver learning which include but are not limited to eLearning via the company's Learning Management System (LMS), Instructor Led Classroom Training (ILT) events, Virtual Instructor Led Classroom (VILT), online webinars, group led workshops, and external training partner courses both eLearning and classroom. All live courses and webinars are recorded by the Learning and Development staff and are offered at will to staff.

Course offerings are aimed at a specific learner's competency in a subject, as the learning environment needs to fit that learner's level of competency to help with improvement.

The following describes how seeks to deliver content based on the learner's competency level in a subject matter.

3.2.1 eLearning via the company's Learning Management System (LMS)

- eLearning is used at to introduce subjects to those new to a subject matter or those having limited experience
- eLearning's goal is to give basic awareness to subject matter and if possible, provide basic application
- eLearning can be used as a pre-requirement for certain Instructor Led events to help improve the learners basic understanding of terminology and theory
- Course selection includes a combination of developed eLearning courses along with external vendor selections

3.2.2 Instructor Led Training (ILT) and Virtual Instructor Led Training (VILT)

- Instructor led training and Virtual Instructor Led Training (VILT) are used at to improve a learner's understanding of subject matter materials and can be deployed for those with little or no experience with a subject through those with limited experience with a subject
- ILT's and VILT's can be handled via a variety of methods including online webinars which can include screen sharing with students as well as in class instruction.
- ILT's and VILT's goals are broken into three categories and based on the learner's level of competency:
 - Foundation Level ILT's and VILT's
 - Intermediate Level ILT's and VILT's
 - Advanced Level ILT's and VILT's

Learning and Development Procedures

3.2.3 Instructor Led Training Categories Defined

- Foundation Level ILT courses
 - Skill Level for Learners: No Knowledge/Novice
 - Seek to give basic awareness and application of a subject.
 - Foundation level ILT courses do not require prior understanding of a subject, however commonly, they will include pre-work assessments and assignments prior to course start dates
- Intermediate ILT Instruction
 - Skill Level for Learners: Novice/Experienced
 - Seek to improve the learners theoretical understanding of a subject while also improving their capabilities with work related tools, methodologies, and application
 - Intermediate ILT course require learners to have a novice level of understanding of a subject prior to attending
- Advanced ILT instruction
 - Skill Level for Learners: Experienced
 - Seeks to improve a learner's competency level to mastery of a subject matters theory and improve on application of work-related tools, methodologies and application
 - Advanced ILT courses requires learners to have extensive on the job experience with a subject and the purpose of these courses is assist them while working toward becoming Subject Matter Experts

3.2.4 Group Led Workshops

- Group led workshops allow small groups of employees to learn together and discuss current and future technologies in the confines of a moderator environment
- Workshops typically include multiple presenters along with question & answer sessions
- Workshops allow for instantaneous feedback between SMEs and active subject matter users
- Workshops typically include a variety of personnel with varying levels of competency
- Workshops allow for "Group Think" exposure to difficult topic sessions which encourage open discussion on how to best approach subject matters

3.2.5 Learning Reference Site: Confluence (Internal Wikipedia)

- The company believes that all learning and development materials should be easily accessible and searchable and has created a location for long term storage for this purpose on the software platform known as Confluence.
- Confluence is an Atlassian Corporation product which allows users access to the latest presentations, videos and how to guides for its products and services
- ION's Learning and Development site includes thousands of documents and pages related to its Imaging Services business and includes over 800+ hours of recorded video of course presentations

Learning and Development Procedures

3.3 Personnel Designation

The company classifies its personnel for Learning and Development into several categories. The purpose is to design suitable learning programs based on levels of experience for incoming new hires as well as dedicated staff. These designations include roadmaps to success so that they might better complete their roles and continue their career development pathways.

For learning and development purposes, we see's employees as fitting one of the following roles in which training for those individuals can therefore be appropriate delivered.

New Hires

- New Hire
- Experienced New Hire

Current Internal Staff, Contractors and Advisors

- Novice
- Experienced
- Subject Matter Experts
- Management

For the purposes of Learning Development, each role is described below:

3.3.1 New Hire

New Hires at are described as someone new to the industry, typically persons hired directly from an accredited University, whom has little work-related experience or background. These people will be given an appropriate Learning and Development plan to suit the role they have been hired to perform. This typically will include the introductory 90 Day Learning Program along with follow up appropriate Foundations level learning course work.

3.3.2 Experienced New Hires

Experienced New Hires at are described as someone that has had substantial experience in the Imaging Service industry either with another company or from working with a Governmental entity. Experienced New Hires typically are ready to work on day 1, if they are given appropriate exposure to the company's Integrated Internal Workflow and Production Platform. These individuals will also be considered for Learning and Development courses based on prior experience to improve their competency of subjects related to their job duties.

Learning and Development Procedures

3.3.3 Novice

Novice staff are those with limited experience at and are working towards improving their competencies related to their position at. The Novice staff identifier is only a designation related to their competency in a specific subject and these individuals might be considered as very competent in other areas related to their work duties. Typically, the learning and development model for these individuals is to complete Foundations level learning in related fields before moving on to intermediate and advanced course work.

3.3.4 Experienced

Experienced staff are those considered to have extensive experience with a subject at. The people understand the fundamental theory around a subject but can also perform tasks related to the subject with little or no help from others. Experienced staff typically will assist others via Mentorship roles, along with assisting project related work in the Peer Review process. For learning and development, experienced staff will continue their educations in roles to master the theory crafting of these subjects along with giving feedback to software development staff when requested.

3.3.5 Subject Matter Experts

Subject Matter Experts (SMEs) are people that have mastered both the theoretical background of a subject, but also their job-related duties. SMEs can teach others about subjects they have achieved mastery in, but also can/will write technical papers for industry related publications. SMEs typically coordinate with the R&D staff during the development of new technologies, as well as give feedback on those already delivered. SMEs can also assist with software testing.

3.3.6 Management

The company's management staff represent an important group regarding learning and development of new topics for course materials. From a learning and development standpoint, these individuals' help to provide feedback on what courses are needed to be developed and deployed.

The company's management staff fill a vital role in supplying feedback related to staff's competency in work related activities. The company's management staff also help to provide feedback regarding priorities of potential topics in forecasting future learning needs. The Management staff works closely with the Learning and Development staff in these regards. Feedback received from courses is also shared with related Management personnel to help provide an understanding of the immediate impact of courses delivered along with follow ups at future time periods to track how courses have helped or hindered staff's development.

Learning and Development Procedures

Section 4: Imaging Service Learning and Development Program

The company's Learning and Development team has created a variety of different levels of materials to help improve learner's understanding of subject matter related topics. As described in Section 3, courses are developed towards an individual's level of competency. programs target improving individual's competency from Basic Awareness and Application all the way through Mastery of topics. Programs are designed specifically to adjust towards the individual. Adjustments or giving credit within a program for specific subject matter can be given if the individual has already achieved an acceptable level of competency. Programs can also be further augmented based on specific circumstances such as a topic not being a part of an individual's job duties or within their sphere of influence. Such augmentations require approval from the employee's supervising director as well as the Learning Staff.

All employees upon their hiring will be assigned to either's 90 Day Learning Program for those new to the Geo-Service Industry, or to the Experienced New Hire Program.

The company's 90 Day Learning Program purpose is to bring those new to the E&P Industry, a basic understanding of the E&P Industry and their related services along with course work covering a variety of information needed to succeed in's Imaging Service Department.

The company's Experienced New Hire Program focuses on rapidly integrating experienced personnel with their new team members with a focus on the company's software platform, workflows and technology.

The following information below briefly describe the types of topics those individuals at will receive in either program. Any topic described below is available to any employee, regardless of their experience level.

4.1 Basic Seismic Survey Principles

The Basic Seismic Survey Principle program is designed for those at that are new to the E&P Industry and new to Seismic Processing and Imaging. The goal of this program is to give basic awareness of information related to working for a Seismic Processing and Imaging Company. To meet this goal, the program covers topics related to the petroleum industry, petroleum geology, seismic survey work including survey design, acquisition, and introduction to seismic processing, imaging and interpretation.

Learning and Development Procedures

4.2 Seismic Processing

Seismic Processing at requires an understanding of a variety of different complex technologies. Seismic processing's focus includes preparing data for Seismic Imaging by applying differing information related to headers, positioning information and adjusting data based on acquisition related issues such as static corrections and changes in elevation. Seismic processing also seeks to improve Signal to Noise ratio and influence data towards its original signal strength from source.

Learners in Seismic Processing will learn techniques which include: data formats, seismic wavelet analysis and adjustments for phase and amplitude changes created by a seismic waves travels through the earth, removal of unwanted noise with examples including but not limited to; source related noise created by seismic air guns, environmental noise created by waves in the ocean, repeated seismic signals that are not from the original source host which are called multiples, adjustments and improvements due to issues related to the seismic recording instruments, ambient background noise, failed source detonations and many more issues that occurred during the recording of a seismic survey.

4.3 Seismic Imaging

The company's Seismic Imaging Services was an industry leader in Seismic Imaging technology and techniques and has consistently developed cutting edge technology to improve the ability to map the subsurface of the earth. To keep's employees up to date on its latest technology offerings, Learning and Development team offers a variety of courses related to Seismic Imaging with two major categories including the Velocity Model Building (VMB) process and Seismic Migration.

Velocity model building course work features' proprietary Full Waveform Inversion (FWI) technology and's iterative Tomography based approach to velocity model building. also is a leader in Seismic Migration technology. utilizes two migration method category types which includes wave-based migration methods via Reverse Time Migration (RTM), and Least Squares RTM along with ray-based migration methods which include, Kirchhoff and Beams. Also included in's Imaging Toolkit are Time Migration based methods which use a Kirchhoff Based methodology which requires a RMS Velocity.

Learning and Development Procedures

4.4's Integrated Imaging Software Platform and Desktop Applications

The company's user desktop environment utilizes a variety of different tools to deliver high quality products to its clients. has developed its own Integrated Imaging and Processing software working environment to host a variety of tools and applications in one central location.

The software allows its users the ability to coordinate all Seismic Survey based activities which include survey work organization, job management, data management, resource management, and managing peer reviews. The software hosts all project related work including data loading, Seismic Processing, Seismic Imaging and also allows users the ability to work with a variety of Visualization toolkits.

The company also utilizes a variety of 3rd Party software packages to manage day to day operations which includes Microsoft Office products, and access to remote desktop environments via virtual desktops.

4.5 Business Essentials

The company's Learning and Development team believes that it needs to host additional non-technical topics to help develop critical competencies vital to the success of the business. To do so, it hosts a variety of topics related to best practices and techniques of time management, project management, presentation skills, negotiation skills, conflict resolution and additional topics when needed.

4.6 QHSE

Quality, Health, Safety and the Environment (QHSE) are considered bedrock principles of, its Senior Management team and its employees. QHSE related topics are a required part of an employee's ongoing learning and development career path. The QHSE team helps to identify topics for delivery to it's employees and then coordinates with its departments to ensure all employees gain these necessary QHSE related competencies.

Learning and Development Procedures

Section 5: External Partner Shared Learning

The company believes in a shared learning experience, which includes its employees, its partners, clients and vendors. To better serve this community, the Learning and Development team has created a variety of options to better serve in this capacity. Each option is specifically packaged to best help individuals involved in these learning activities, and as with all classes, seeks to improve the understanding of the learners.

The following sections outline how this is handled.

5.1 Client Partner Course Development Processes

The company and its partners work together to deliver training suitable to those involved. To do so, a training plan proposal is drafted for each individual program. These programs are then reviewed by all those involved to verify that they will deliver what is expected, and then approval is needed by those parties. Once the approval process is completed, planning for the event can be set in motion. Key to these processes is understanding of the goals and outcomes for those individuals to participate in a program.

5.2 Joint Venture Partner and Client Partner Course Delivery and Administration

The company and its global joint ventures partners receive identical training standards as existing full-time personnel and will receive programs managed by the Learning and Development team.

The company and its client partners through the proposal process will create a schedule of events to best suit those individuals that will attend a Learning Program. Once the program has been approved, these programs are managed directly by the Learning Team and include daily meetings with the visiting personnel to verify that all course work is being delivered at an acceptable level for all learners. If issues are found, The Learning and Development team will work with both the Instructors and attendees to resolve issues to the best of its abilities. Resolution of issues can include but are not limited to, additional follow up coverage of certain materials, and potential more in-depth coverage on specified topics.

All course work is delivered in the English Language unless otherwise specified or requested. If course work is requested in a Non-English language, those requests might require additional preparation time and funding to create materials suitable for delivery. It is important that requests for courses in Non-English languages are requested as early as possible to determine if the request can be accommodated.

5.3 Client Partner Feedback Processes

All course work at their conclusion undergoes a review process to ensure that it was completed at the highest level possible. Learners are provided with feedback forms at course designated intervals to ensure the quickest feedback means possible.

The company takes all feedback very seriously and works with both instructors and learners to better understand and improve upon feedback given.

Learning and Development Procedures

Section 6: Learning and Development Approval Guidelines

The following information details the approval process for Learning and Development courses and workshop attendance

6.1 Personnel Internal Course Approval Guidelines

All full-time personnel, with the approval of their direct supervisor, can take any courses that are performed and scheduled by the Learning Team as long as they meet the course requirements to attend. All Learning courses have recommended subject matter competency levels which are posted in the Learning Course Catalog. Course approvals can be handled by the individual and their supervisor and do not require verification of the Learning team to attend.

6.2 Personnel External Course Approval Guidelines

The company works with 3rd party vendors on various training course topics which individuals at can use to help build toward mastery of specific competencies during their career. The company's full-time personnel, with the approval of their direct supervisor and Teams Director, are capable of taking any courses that fits this purpose. Persons interested in attending an external course are encouraged to allow the Learning Team to assist with scheduling their attendance when possible. Course reimbursement of funds for external courses will be handled on a case-to-case basis and with the approval of the individual's Management and a person with a level of authority to approve reimbursement of funds.

6.3 Joint Venture Partner Statement on Course Attendance

The company and its Joint Venture Partners work together to ensure that all project work is completed at as high a level of expectations as any delivered project. All Joint Venture Partners are capable of attending any Learning Course with Full Time Employees and when necessary, additional courses times and dates will be set aside to the Joint Venture Partners either at a facility or Instructors will deliver course onsite at the Joint Venture center.

6.4 External Partner Approval Guidelines

The company and its external partners when seeking approval for training courses, will use the following method to determine when and how these courses will be delivered. Prior to course delivery, and the external partner will discuss a learning program for those that will attend a course, or course series. Course development for these opportunities will start by outlining the goals and outcomes required. Once these items are noted, the Learning team will develop a course curriculum for the event. The course curriculum will be dependent on the attendees' competency levels in the subjects to be covered. The goals should also state what level of competency is expected that the attendees receive while attending a course. Once the Learning Plan is developed, it will seek out approval from the Learning and Development team, the company's Project Managing Team and the External Partner's Management team. Once approval is given, then the course can be scheduled for delivery.