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Strategies to Help Subject Matter Experts Become Master Trainers

Molly Everman
Regis University

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STRATEGIES TO HELP SUBJECT MATTER EXPERTS
BECOME MASTER TRAINERS

by

Molly Everman

A Research Project Presented in Partial Fulfillment
of the Requirements for the Degree
Master of Education

Regis University

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ABSTRACT

Strategies to Help Subject Matter Experts Become Master Trainers

Subject matter experts (SMEs) are often called on in the modern workplace to train other employees in their area of expertise. SMEs often do not have the training or teaching skills needed to perform this task successfully. As a result, SMEs often fall into training traps. In this project, the author attempted to solve this problem by designing a PowerPoint presentation of strategies SMEs can use. This presentation addressed the areas of greatest importance to SMEs who are in a training role. The areas this presentation addresses are adult learning, the role SMEs play, and training solutions.

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Chapter 1

INTRODUCTION

Most people in the corporate world who train other employees have a background in education. Most frequently, employees are teaching others because they are the expert in their field. Unfortunately, the lack of teaching skills can lead to disorder in the classroom or in a one-on-one training session. In this research project, the author provides a summary of background research on adult learning principles, the role of subject matter experts (SMEs), and aspects of training. Gaps in the research are addressed and identified in the statement of the problem.

Background

When educators walk into classrooms or workshops where the students are adults, they find a diverse group of learners. At any one moment, these learners can draw from life experiences and, in the next, resist new ideas. Adults may resist if new knowledge challenges ideas they have already formed. Motivation, self-direction, and having a sense of urgency are some characteristics of adult learners. However, adult learners can feel shortchanged when the instructor is a resource for learning rather than a reservoir of answers. Adult learners can also sometimes focus on grades instead of the learning that is taking place (Fiddler, Marienau, & Taylor, 2000).

Effective training does not happen by chance. Training and teaching takes a determined effort to comprehend and practice all the elements that can influence more positive outcomes (Cottringer, 2003). The people who are the most knowledgeable about an organization's services or products are not always the most qualified to teach others. These people are known as subject matter experts (SMEs). Still, companies rely on SMEs to train employees on a variety of business topics. Even with their well intentioned efforts, SMEs often leave the learner overwhelmed and bored (Managing Training & Development, 2004).

Due to their lack of training or teaching skills, SMEs are often prone to two extremes when asked to take on the role of teacher or trainer. Unneberg (2008) reported that they experience a high feeling. This occurs from unrealistic expectations about what and how much can be achieved. These expectations can be related to timing, extent of topics to cover, and depth or detail of each topic. The second extreme occurs when reality and expectations clash, and the SMEs experience despair. As trainers, SMEs can bring a whole new dimension to the training process. For example, SMEs have instant credibility in the eyes of the participants. They also have real-world experience and the most current knowledge on related topics (Klein & Trautman, 1993).

Education and training programs for adults vary from information or skill sessions to intensive residential study (Caffarella, 2002). Training programs are conducted for five primary reasons. First, they are developed to encourage continuous growth and development of individuals. Second, training is created to assist people in responding to the practical problems and issues of adult life. Third, training can prepare people for

current and future work opportunities. The fourth reason training is conducted is to assist organizations in achieving desired results and adapting to change. Finally, training helps to provide opportunities to examine community and societal issues, foster change for the common good, and promote a civil society (Caffarella, 2002).

Trainers now need much more than delivery and design skills. They need a deep understanding of their learners and all the different learning styles. They also need to know how individual development contributes to group and organizational learning. Additionally, trainers must know the content of their programs and see that it matches the needs of learners (Marsick & Meyer, 2003). Finally, trainers must plan the program and design the course materials.

Statement of the Problem

There is an enormous amount of research on adult learning principles. This research is geared toward educating instructors or facilitators in adult education. However, there is not much research geared toward helping SMEs develop their skills as master trainers. Providing SMEs with information that bridges the gap between their knowledge and training skills is both beneficial and necessary.

Purpose of the Project

The purpose of this project was to create a presentation that contains adult learning strategies. This presentation is designed for SMEs in the medical device manufacturing industry. The strategies used in the presentation model those that are identified as best practices in a corporate training environment. Presenting these

strategies to the SMEs as a learning and guidance tool may help them to develop their skills as master trainers.

Definitions

For the purpose of the project, a subject matter expert (SME) is a person who has world-class industry expertise in a specific area. SMEs do not necessarily have skills, training, or background education in training or teaching adult learners (Klein & Trautman, 1993).

Chapter Summary

An outline of the background research, statement of the problem, and the purpose of the project were presented in this chapter. In Chapter 2, this author reviews the professional literature on adult learning principles, SMEs, and training strategies.

Chapter 2

REVIEW OF LITERATURE

Effective training and effective trainers have become staples in successful businesses. To become an effective trainer, which in turn produces effective training, one needs to have background knowledge on adult learning. Most of the research in the field of training is geared towards professionals with education backgrounds. Research on subject matter experts (SMEs) is limited with regard to helping to help them develop their skills as master trainers. The purpose of this project was to create a presentation for SMEs designed to help them understand adult learning strategies. This presentation includes those strategies that are best practices for SMEs in a corporate training environment. The goal of this presentation is to help SMEs fine tune their skills as master trainers. Within this chapter, research is reviewed on the topics and subtopics related to andragogy, adult learning principles, and training.

Andragogy

Andragogy is an adult learning framework that details how adult learning is different from childhood learning. This framework is useful to educators because it can help them understand the stages of adults as learners (Cousins, Gabriel, & MacDonald, 2000). Andragogy is the work of Malcolm Knowles (1980). The origin of the term “andragogy” is European. The meaning of the word is simple and straight forward. Andragogy is the form of helping adults learn that is both an art and a science (Knowles).

There are five assumptions within this framework. First, naturally, as adults go through life, they mature. Second, the framework assumes that, while maturing adults travel on a path that takes them from being dependent persons to self-directed persons. Also on this path, the adult's use of knowledge moves from future use to immediate use. Third, andragogy also assumes that adult experiences are a resource for learning. The fourth assumption is that adults have an eagerness to learn because they want to fill a social role (Knowles, 1980). The fifth assumption is that external motivators are less appealing to adult learners (Knowles & Associates, 1984). As outlined, adults choose education for different reasons than a child would. This is why it is important to recognize all the components of adult education.

Adult Education

Adult education can be continuing education programs for doctors, Spanish classes at a community center, software training at a workplace, and everything in-between. There are no limitations within adult education, such as age or mission (Caffarella & Merriam, 1999). Learning takes place at home, at work, in the community, and in formal school settings. The world is changing each day, and in order to survive, learning has become a function of every adult's life (Fiddler et al., 2000).

Learning can be formal or informal. Formal education is used to build new skills or maybe to advance in a career. Informal learning on the other hand can help adults develop personally (Fouch & Galbraith, 2007). There are a couple different meanings of adult education. The simple meaning of the word is the process of adults learning. The more technical definition relates to institutions and the programs within them that help

adults reach educational goals (Knowles, 1980). Not only does the term have multiple meanings, but there are multiple types of people that adult education encompasses.

Adult Educator

An adult educator plays a role in helping adults to learn (Knowles, 1980). With such a broad definition, many people could be labeled “adult educator.” For example, an adult educator can be a team leader, a co-worker, an outside consultant, or a college professor. Not all of these people would consider themselves to be an adult educator. Even fewer of them are aware that there are techniques and knowledge that can help them be better adult educators (Knowles). This awareness starts by understanding just how adults learn.

Adult Learning Principles

Adult learning principles are those important elements within adult learning. First, the application of material needs to be relevant to the learner’s personal and professional needs. If the goals and objectives are real to adult learners, they will commit to the learning process. Next, adults need to be motivated just as children need to be motivated. Incorporating the learner’s prior knowledge is also an important element of adult learning. Finally, the adult learner needs to feel welcome and comfortable in the learning environment (Knowles, 1980).

Relevancy

Adults want to know up front, what’s in it for me? Adults have a need for education that is solid and immediately applicable in their real world. If the information cannot be applied to practical problems, or it is not meaningful, adults become irritated

and loose interest with the learning process (Fouch & Galbraith, 2007). The demand for relevancy can be directly related to time. Time is very valuable in an adult's personal life and at work. In relation to work, time is money. Adults want to be able to go back to their office and apply what has just been taught to them.

Motivation

Motivation is another element of adult learning principles. Uguroglu and Walberg (1979, as cited in Wlodkowski, 1999) performed an analysis of motivation in relation to academic learning. They found that, 98 % of the time, motivation and academic learning ran parallel to each other in a positive outcome in students under the age of 18. In other words, positive motivation relates to positive academic outcomes. The researchers concluded that, because this relationship is so strong and reliable, the same relationships can be assumed for adults.

Wlodkowski (1999) writes that motivation can be beneficial to learning, but it is also a consequence of learning. An instructor can tell if his or her learners are motivated. They know this by determining if the learning process is moving smoothly, effective communication is taking place, and creativity has increased. A learning experience in which the learner leaves feeling motivated is experience which intrigues the learner. The learner will be more likely to return in the future to these situations. Wlodkowski believes adults become lifelong learners when they have motivating experiences over and over again.

Adult motivation grows step-by-step. The first step of motivation is success and decision. During the learning activity, if adults experience success and choice, motivation

will be sustained. The next step adds value. Value, in relation to relevancy, is a reoccurring theme in adult education. If the adult feels the activity has value, then motivation will be sustained. The last step of motivation incorporates enjoyment. At this step, the learner has enjoyed the educational process (Wlodkowski, 1999).

Experience

Life experiences are a key element in adult learning principles. Life experiences also differentiate one adult learner from another (Caffarella & Merriam, 1999). There are several roles experience plays in adult learning. Adults mainly use experience to transfer knowledge, modify current knowledge, and retain new skills or knowledge during learning (Caffarella & Merriam). Adults are always comparing and contrasting new information with the experiences they have had in the past. However, an adult's past experience can sometimes be an obstacle in the learning process. Some learners have to unlearn old ways of doing things and dismiss negative views of learning (Caffarella & Merriam). Just like motivation, if there is recognition of prior experience, lifelong learning will take place. Experience serves as a device that aids workers in obtaining formal recognition and certification of skills gained through work and learning (Bateman, Bedggood, Bolm, Claton, & Hughes, 2004).

Belonging

A sense of belonging is important to the adult learner. Learners want to feel as though they are part of the group. They want to be accepted by other members of the group. Learners need to feel as though they can trust the group if they make a personal disclosure (Daloisio & Firestone, 1983). When training emphasizes this inclusion, a

connection to the learning is made. They also make a personal commitment which allows them to produce results. However, if a learner is on the other side and feels left out, disengagement will occur (Haudan, 2008). Adults learn best in a relaxed and informal setting. They would rather have cooperation and respect, instead of competition (Daloisio & Firestone, 1983).

Subject Matter Experts

For the purpose of this project, a subject matter expert (SME) is a person who has little or no training or teaching experience. These individuals are, however, world-class industry experts in a specific area (Unneberg, 2008). SMEs are the people who are the most knowledgeable within the organization about its services or products (Managing Training & Development, 2004). SMEs know the content to be presented, yet they are unaware of the most effective methods to deliver the information (Fouch & Galbraith, 2007).

Skills Needed

In order for SMEs to be effective trainers, they need have a number of skills. The entire training process needs management; managerial abilities are a necessity. Having communication skills includes the ability to motivate learners. An ongoing requirement is for trainers to have analytical and problem solving skills. SMEs must also be computer literate. Finally, SMEs must have information literacy. This is the ability to find, access, evaluate, and use information for their programs (Goad, 1997).

Important Role

SMEs can bring a whole new dimension to the training process. To start, they have instant credibility in the eyes of the learner. In addition they can bring real-world experience to the training program. For example, they can teach from an outline and fill in blanks with examples from their experience. SMEs also have the most current knowledge on work processes. Lastly, there is shorter preparation time before training delivery. This is because there is little or no learning curve in respect to the technical aspects of the training (Klein & Trautman, 1993).

Training Traps

Because SMEs do not have the background knowledge in teaching or training, they often fall into common training traps. A trap is defined as common pitfall that inexperienced trainers fall into that will tend to undermine the effectiveness of the training. The first common trap is using telling as training. Telling as training is when the trainer is literally teaching the learners by telling them how something is done. During this practice, the trainer includes no interaction or activities. Boring the audience is the second trap into which they fall. This may occur because the SME has forgotten to include some interaction pieces in the training program. Often, they also fall into the disorganized trap. They know everything to know about their topic, but they are unable to determine what is important and to whom (Managing Training & Development, 2004). SMEs often have a hard time discerning what information is relevant to the learners and what information does not need to be stated. Many times, SMEs send their audience into information overload. Knowledge is wealth, but SMEs just know much more information

than they need to convey (Klein & Trautman, 1993). Identifying and acknowledging these traps can help SMEs in advance prepare and modify lessons so they do not fall into one.

Training

Training has grown into a business requirement for success in the competitive marketplace. Successful organizations view training as an important part of the equation. Customers demand it, and employees need it to survive. The training process can be highly formalized and long term, or informal and brief. Regardless, the goal is that the learners come out of training with new or stronger skills. The goal of management is to develop its employees (Goad, 1997). To do this, they must rely on the training process. The training process is circular and includes multiple components that make it complete.

Importance of Training

Training makes employees more effective, thus more valuable. Employees with knowledge and skills have a direct impact on the effectiveness of the company. Therefore, companies view training as an important component for several reasons. Technology is continually advancing. In turn, the people who implement that technology must update their skills. Second, organizations have moved in the direction of being learning organizations. This means that the people within the organization must use training as one method of continuing the learning process. Another reason for the importance of training is team orientation. Work group members most often need to be cross-trained to perform others' jobs. Government intervention in the workplace causes a need for training. This is particularly with respect to laws that have an impact on work

and workers (Goad, 1997). For example, medical device manufacturers are regulated by the Food and Drug Administration. These companies must continually train employees to conform to the government's regulations.

Facilitated Learning

Facilitated learning is a component of the training process. Trainers are facilitators who assist adults in acquiring skills and knowledge required by the workplace (Goad, 1997). These skills can range from sexual harassment prevention to design control changes. The trainer needs to identify, ensure, and help develop the key competencies that enable employees to perform their jobs.

A trainer is a person who fills many roles. When it comes to training, the number-one role is to facilitate learning. When trainers have completed a session, they can expect that participants will have gained knowledge and skills that they did not previously have (Goad, 1997). Trainers must accept that they are responsible for creating the learning climate. Within this climate, students have some measure of control over their own learning. Trainers must establish clear objectives and goals. Then they must make sure the learner is aware of them. Trainers also need to have confidence in their own knowledge and conviction that their methods increase adult learning (Stuart, 1988).

Focus on Performance

Effective training programs require assessment. This is done to determine what the need is and if training is the answer to that need. The goal of this assessment is to determine if employee performance and organizational performance meet established standards. There are four ways for trainers to keep focused on performance. First, trainers

should focus on the problems that training can solve. Then, trainers should focus on designing training to close the gap between current practices and set standards. Next, trainers should focus on how to improve performance. Doing this will keep trainers on task and comply with the first two steps. Finally, trainers should focus on simplicity (Goad, 1997).

Focus on Learning

The focus then must be shifted from performance to learning. The adult learning principles need to be a part of every training session (Goad, 1997). These principles outline the way in which adults learn. Trainers must make adult learners feel as though each one of them belong in the class. Trainers must also develop content that is relevant to the learner's needs. During training, it is the trainer's job to keep learners motivated and to draw from the learners' experiences.

Planning

Planning is the next step in the learning process. Planning is essential because this is where the trainer defines the objectives and develops the course (Unneberg, 2008). Planning is needed for any training program, whether it is a lengthy customized training or a brief one that has been repeated. Planning is made easier if assessment has lead to well-defined learning objectives (Goad, 1997). The first step in the process is to select a delivery method. Delivery methods can include classroom, self-paced, one-on-one, and media driven (Goad). Then the trainer should select the media in which the content or exercises in the program will be presented. Forms of media can be basic or advanced. Basic media includes, but is not limited to, flip charts, whiteboards, overhead projectors,

and audio tapes or CD. Advanced media includes video demonstrations, projection methods, computer-based training, simulators, and LCD (Goad). Next the trainer will want to select an evaluation method. Trainers should select evaluation methods early in the process so that the trainer can be sure to tie it into the learning objectives. There are three different evaluation methods. Verbal, written, and performance tests are all methods of evaluation. The goal of each of these methods is to get detailed feedback from the participants. The next step in the process is for the trainer to select the learners (Goad). Then the trainer must develop materials and exercises. Finally, trainers should select a facility and room layout that will accommodate the program needs (Goad).

Delivery

There are several general principles incorporated into being a good presenter. Keeping things simple is always a good idea (Goad, 1997). Keeping presentations simple allows everyone to have a maximum opportunity to achieve the learning objectives. Trainers should consider how the audience will perceive them. Adult learners add their own perceptions to words, stories, and humor. This means that these elements must be prepared in advance to convey the context of the program. Adult learning principles stress the importance of sharing the learning process with the learner. Thus, trainers must also be good listeners. Listening and recognizing what a learner has to say is an important part of delivery. Trainers need to break the ice and get the learners acquainted. This will set the tone and build the sense of belonging that adult learners need. Getting the learners involved immediately is equally important in the beginning of the training program (Goad).

Interaction

Getting learners involved is the key to a successful training. When adult learners are physically and mentally dedicated to the learning, learning will take place. There are several different techniques to get the learners involved. Asking questions can be a technique to involve the learners. Direct, indirect, and open ended questions are the best format for interaction (Goad, 1997). Asking questions before rather than after the lesson can be a technique that will get the learners interacting. In addition, role-playing, demonstrations, small groups, and writing exercises are all interaction techniques that are acceptable for training programs. Providing feedback is also an interaction that can be used during the program to allow the trainer to interact with the learner individually or with the group as a whole (Goad).

Feedback

Feedback can be used as both an interaction tool and as an evaluation tool. Successful trainings have checkpoints throughout to determine how the process is going (Goad, 1997). Conversation with learners can be an informal way of collecting a tremendous amount of feedback. Conversation can clarify questions or concerns about the program. Instructors can determine if information has been heard. Conversations can also provide opportunities for comments on program changes. An important component of adult learning principles is validating the learner. Feedback can validate a learner's thoughts and comments (Caffarella, 2002).

Continual Improvement

To bring the learning and training process full circle, trainers must continually improve their programs and skills. When trainers fine tune their programs and skills, it helps them become successful. If improvements are not made, the result might be an ineffective program (Goad, 1997). Improvements can be as simple as adding more or longer break times. Improvements can also be as complex as redesigning the entire program. Trainers should keep in mind that the outcome of continual improvement is a better training program.

Chapter Summary

Understanding the adult learning principles and techniques that work best with adults is the first step to becoming a master trainer. In this chapter, the author reviewed Malcolm Knowles' concept of andragogy. Andragogy sets the framework for adult learning. Within adult learning, there are principles that trainers and teachers must incorporate into their programs. Adult learners learn best when the learning is relevant and they are motivated. Adults also want to feel like they are validated and welcome. The most knowledgeable people within an organization may be called on to be a trainer. These people are known as subject matter experts. Often, they do not have education backgrounds, and sometimes they fall into training traps. That is why it is especially important for them to understand and integrate the adult learning principles. Training is a circular process. Each element of the training must be executed in order to have successful programs. In Chapter 3, the author describes the method used to develop a PowerPoint presentation designed to make better trainers out of subject matter experts.

Chapter 3

METHOD

Planning and methodology are behind every great project. This author describes the method used to develop a PowerPoint presentation for SMEs. The presentation includes strategies and best practices for trainers to use in a corporate training environment. The purpose for creating this presentation is to help SMEs develop their training skills.

Target Audience

The primary audience for this project is subject matter experts (SMEs). To be more specific, this project is targeted towards SMEs in the medical device manufacturing industry. This population includes, but is not limited to, software engineers, process engineers, information system associates, production line leads, and logistic associates. For the purpose of the project, SMEs are individuals who do not have skills, training, or knowledge in training or teaching. They have world-class industry expertise in a specific area (Unneberg, 2008).

Organization of the PowerPoint Presentation

The author designed a presentation using Microsoft PowerPoint format. This author first identifies elements specific to adult education. By doing this, the audience gains an understanding of education and why it is important to adults. Next, this author introduces adult learning principles. To be a good trainer, the audience needs to know

how adults learn. The audience should have an easy time understanding the principles, since they are adults themselves. Following the adult learning principles, there is a discussion about SMEs, their role in education training programs, skills needed to be effective educators, and training traps. Helping this audience identify their roles in adult education is an important component of the presentation. The final section of the presentation is focused on training. This author identifies the best practices for training in the medical device manufacturing field.

This author has three goals. The first goal of this project is to identify elements specific to adult education. This includes the process by which adults learn, why adults learn, and the role of adult educators. The second goal is to introduce techniques and knowledge that will aid SMEs in becoming better trainers. The third goal is to identify best practices in the corporate training setting. The primary objective is to help the SMEs become master trainers.

Peer Assessment

The assessment tool chosen for this project is a short, five question survey consisting of questions that can be answered on a scale or with short answers. Four employees within the organization were surveyed to determine if the material in this presentation is effective and useful for SMEs. All four people work in the medical device manufacturing field. The group consisted of a training consultant, a director of organizational development, and two SMEs in the fields of engineering and information systems. Their feedback is discussed in Chapter 5.

Chapter Summary

In this chapter, the author identified the target audience as SMEs in the medical device manufacturing industry. The author provided a detailed, step-by-step procedure for creating the presentation. The presentation is in the format of a Microsoft PowerPoint presentation. This author's presentation covers the topics of adult learning, SMEs, and best practices in corporate training. The primary goal is to support SMEs and help them become master trainers. In Chapter 4, the author provides the PowerPoint slides designed for the presentation.

Chapter 4

RESULTS

For this research project, the author created a presentation of strategies to help subject matter experts become master trainers. This presentation is designed to meet the needs of SMEs in the industry of medical device manufacturing. This chapter contains the PowerPoint presentation slides along with key points that will be made during the presentation. The presentation addresses adult learning, the roles SMEs play, and training solutions.



BECOMING A MASTER TRAINER

Introduction:

- Masters degree emphasis in adult education, training, and development

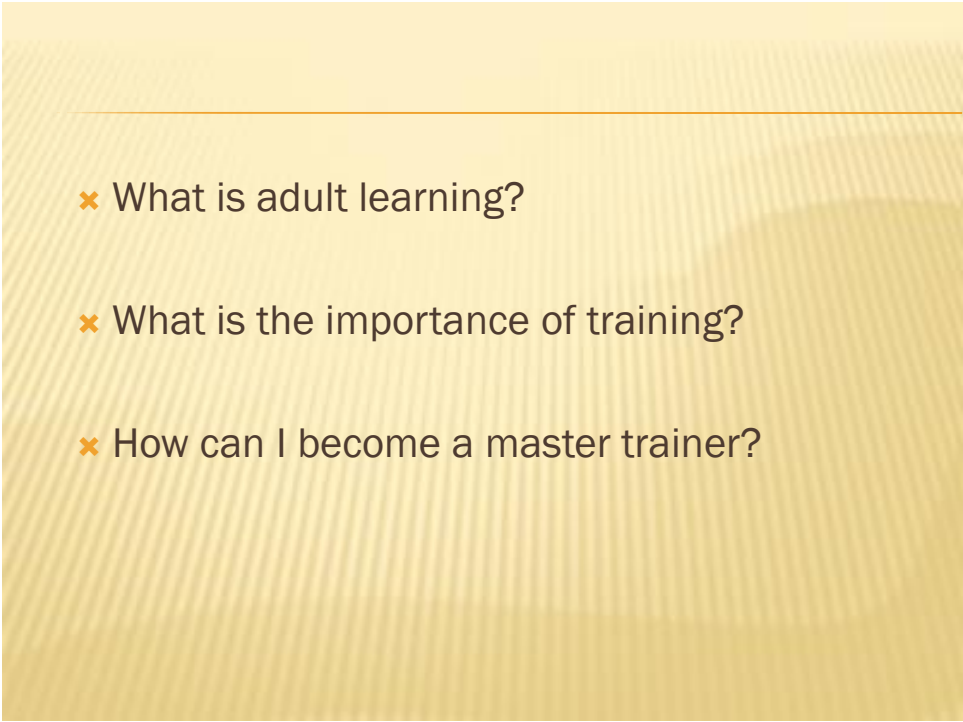
Why might you be asked to train others?

- ✦ Subject Matter Expert (SME)
 - + You are a world-class industry expert in a specific area
 - + You have instant credibility in the eye of the learner
 - + You bring real-world experience to the program



Subject matter expert

- Add new dimension to training
- Most knowledgeable within the organization

- 
- ✘ What is adult learning?
 - ✘ What is the importance of training?
 - ✘ How can I become a master trainer?

Open discussion questions:

ADULT LEARNING

- ✘ Andragogy
 - + Framework that describes how adult learning differs from childhood learning
 - + Educators use framework to help them understand how adults learn
 - + 5 assumptions within the framework

- ✘ Can be formal or informal
 - + To develop skills or to develop personally

- ✘ 5 Principles of Adult Learning
 - + Relevancy, motivation, prior knowledge, and belonging

Andragogy

- Five assumptions
 - Adults mature as they go through life
 - Maturing adults travel on a path from being a dependent to self-directed person
 - Experiences are a resource for learning
 - Eagerness to learn to fill a social role
 - External motivators are less appealing to adult learners

Formal or Informal

- Formal learning is used to build new skills or advance in career

ADULT LEARNING PRINCIPLES

Relevancy

- + WIFM- What's in it for me?
- + Real world application
- + Immediate application

What is your time worth?



Relevancy

- Adults need solid, immediate application in the real world
- Time is valuable in personal life and at work
- Time equals money to the business

ADULT LEARNING PRINCIPLES

Motivation

- + Directly linked to academic success
- + Can be beneficial to learning or a consequence of learning
- + Grows step-by-step
 - × Success + Decision + Value + Enjoyment

What motivates you to learn?



Motivation

- Trainers can tell when learners are motivated when:
 - Learning process is moving smoothly
 - Effective communication is taking place
 - Creativity increases

ADULT LEARNING PRINCIPLES

Experience

- + Key element in adult learning
- + Differentiate one learner from another
- + Use to transfer, modify, and retain knowledge

How can prior experiences be obstacles in the learning process?

Experience

- Always comparing and contrasting past learning experiences
- May have to unlearn ways of doing things
- Dismiss negative views of learning
- Recognition of experience creates lifelong learning

ADULT LEARNING PRINCIPLES

Belonging


- + Adults want to feel as though they are part of the group
- + Trust is needed so they can disclose
- + Inclusion = connection to learning
- + Learn best in a relaxed environment

What makes you feel welcome in a learning environment?



Belonging

- When learners feel like they belong, they make a personal commitment to the learning
- On the other hand, if they feel left out, disengagement will occur



Training

WHAT IS THE IMPORTANCE OF TRAINING?

- ✘ A business requirement for success
- ✘ Develops employees
- ✘ Needed because of advancements in technology
- ✘ Team orientation
- ✘ Government intervention

Training

- Employees with knowledge and skills have a direct impact on the effectiveness of the company
- Training is one method of continual learning
- Training is needed to enable cross-training of employees

WHAT IS MY ROLE AS A TRAINER?

- ✘ Trainers assist adults in acquiring skills and knowledge
- ✘ Trainers must accept responsibility for creating a learning climate
- ✘ Trainers must create learning objectives and make sure the learner is aware of them

Trainer

- Number one goal is to facilitate learning
- Develop content that is relevant to the needs of the learner

TRAINING SOLUTIONS

Skills trainers need

- + Communication
- + Computer literacy
- + Information literacy

Perform a needs assessment

- + Trainer needs to determine if training is the answer
- + Assessment can determine what training can solve

Skills

- Managerial
- Ability to motivate learners

Assessment

- Determine if employee performance and organizational performance meet establish standards
- Trainer must ask the questions, can training close the gap between current practices and preset standards?
- Focus on simplicity

TRAINING SOLUTIONS

Apply the Adult Learning Principles

- + Know your audience
- + Motivate your learners
- + Use your learners' prior knowledge
- + Instill a sense of belonging

Adult Learning Principles

- Make sure training is worthwhile to your audience
- Adults are less motivated extrinsically than intrinsically
- Prior knowledge validates learners

TRAINING SOLUTIONS

Plan

- + Planning is needed whether training is lengthy or brief
- + Planning process
 - × Select delivery method
 - × Select media in which content will be delivered
 - × Select evaluation method
 - × Select learners
 - × Develop materials
 - × Select facility, room layout

Plan

- Planning and organization important factors in planning a training

TRAINING SOLUTIONS

Delivery

- + Keep presentations simple
- + Consider how the audience will perceive you
- + Share learning process with the learner
- + Be a good listener
- + Break ice

Delivery

- Adults add their own perspective, words, stories, and humor
- Listening and recognizing what the learner has to say is a part of delivery

TRAINING SOLUTIONS

Interaction

- + Getting learners involved is key to successful training
 - × Ask questions
 - × Role-playing
 - × Demonstrations
 - × Writing exercises
 - × Small group
 - × Feedback

Interaction

- Direct, indirect, and open ended best questions to ask
- Any of the interaction activities (mentioned above) can be performed in small groups or larger groups

TRAINING SOLUTIONS

Feedback

- + Interaction and evaluation tool
- + Conversations
- + Validates learner

Continual Improvement

- + Use evaluations
- + Fine tune programs

Try to avoid common training traps

- + Telling as training
- + Not including interaction
- + Information overload

Feedback


- Successful trainings have checkpoints to determine how things are going

Improvement

- Not making improvements will result in an ineffective program
- Improvements can be as simple as adding more break time to complex as redesigning entire program

Training traps

- Pitfalls of inexperienced trainers
- Literally teaching learner by telling them
- Avoid boring audience. Knowledge is wealth but understand there must be a limit



Questions or comments?

- Answer questions
- Ask for feedback

RESOURCES

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Chapter Summary

Presented in this chapter were the strategies needed to become a master trainer. Subject matter experts are provided the opportunity to utilize this information to become master trainers. In Chapters 5, this author discusses the completed project.

Chapter 5

DISCUSSION

The intent of this project was to create a presentation of strategies to help subject matter experts in the field of medical device manufacturing become master trainers. In this chapter, the author discusses the completed project.

Contribution of the Project

This project fulfills the need for providing training knowledge to subject matter experts. This presentation gives the SMEs an understanding of adult learning and adult learning principles. This presentation also defines the role the SMEs play in training. Finally, this presentation outlines training solutions that SMEs can apply to training programs. After attending this presentation, subject matter experts in the medical device manufacturing field will have the knowledge to effectively train or teach adult learners. Using the strategies presented, SMEs will be able to avoid common training traps. SMEs will also be able to revise their current training programs so that they include adult learning principles. SMEs that use the strategies presented will be better trainers.

Limitations

This research project does have limitations. Subject matter experts who attend this presentation still may need additional coaching on their training techniques, planning,

delivery, or assessment. A single presentation can only provide a starting point to which a SME can become a better trainer.

Another limitation of this project is the absence of practice time. To become true master trainers, the SMEs need to practice their craft. This project presents the best strategies they should use in their training programs, but it does not allow time for the SMEs to practice these strategies.

Peer Assessment

Four people within the medical device manufacture field were selected for the peer assessment. All four people agreed that the material presented in this project was useful for subject matter experts. In addition, they provided some positive and some negative feedback about the project. Some of the positive feedback included their interest in the open discussion format, clear outline of strategies, and to the point training solutions. Negative feedback included peers wanting a “take away” that they could use at a later time that would outline what was covered in the presentation. The peers also expressed an interest in practicing the skills and knowledge provided in the presentation.

Recommendations for Further Development

One recommendation for further development would be to assess a subject matter expert’s teaching after this presentation. During this evaluation, the following questions should be addressed: Did the SME apply the strategies presented to them? Which strategies did the SME incorporate? How did the learners respond to this change? Once the data from this assessment has been evaluated, additional support could be provided to

the SME if needed. Additionally, one-on-one mentoring could be scheduled to help the SME develop their skills further.

Project Summary

In this research project, the author has identified a problem related to subject matter experts as trainers and offered a possible solution. SMEs are often called on to be trainers because of their wealth of knowledge. However, SMEs are not trainers or educators by nature, so they need help to be successful at this task. This author researched adult learning theory and practice and created a presentation of strategies that would meet the needs of the SMEs.

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