



**American
Red Cross**

National Headquarters

ATLAS Training Design Proposal

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Table of Contents

Executive Summary – 1.0 1

Background – 2.0 2

Training Program Requirements – 3.0 2

 Challenges – 3.1 2

 Requirements – 3.2 2

Training Design Guidelines – 4.0 3

Proposed Training Process – 5.0 3

Proposed Class Design – 6.0 5

 Guidelines – 6.1 5

 Class Structure – 6.2 5

Media Design and CBT – 7.0 7

Conclusion – 9.0 8

Appendix A: Research-Based Instructional Design 9

 Adult Learning Theory 9

 Learning Research Findings 9

Appendix B: Resources 10

 References 10

 Presentation and Template Files 11

1.0 Executive Summary

This proposal is provided at the request of the ATLAS training managers and presents requirements, guidelines, and processes. The training methodology and class design proposed incorporate adult learning theory and more recent findings from cognitive science. Most importantly, this proposal is also based on the input and goals of the training management team.

The current training approach does not optimize learning and has generated dissatisfaction with many learners. In addition, class delivery varies in quality and approach: Training and monitoring the trainers is a key factor. Furthermore, the demands of content management may have diverted staff from deeper instructional design considerations to upgrade training. Moreover, training demands and content are only expected to grow.

To make improvements, staff needs to spend more time assessing their instructional design to make continuous improvement. The new emphasis should be active learning. Given current demands, staff has done remarkably well. They are most likely time-starved.

Improving the training process should help increase learning. By having learners engage in more pre- and post-class work, knowledge and task learning will quicken and deepen. This self-directed learning can also be a tool to prepare learners for the live class and enable more interaction and more meaningful learning of more advanced skills.

Live classes should provide short instructional segments that include immediate practice by the learners. Whether it is a piece of knowledge or a task, classes should require learners to apply it immediately and provide instructor feedback. The entire class experience should be an interactive dialog between the instructor and the class.

Lastly, the results of the training should be assessed. Students should be required to provide assessments of each class and instructor, and, the learning of the student should be measured as well. Supervisors and data on key metrics will provide a full picture.

Most importantly, a continuous development process (ADDIE) could bring more rapid adaptation and more positive results. By applying this process with a cognitive approach and CBT considerations, ATLAS training can build on the accomplishments of the team and garner more support from ARC.

2.0 Background

ATLAS training offerings are in their infancy and present many opportunities for improvement. Kathleen Weis (Director, ATLAS Implementation) requested that Jonathan Grandey (Sr. Documentation Associate/Trainer) and Carlos Schoemaker (Lead Documentation Associate) work with Christopher Lepine (Intern) to formulate a new ATLAS training approach.

This document was authored by Christopher Lepine to review current training needs, requirements, and constraints, and outline new design principles and a comprehensive training process. The goals of this plan are to improve 1) training effectiveness, 2) training consistency, 3) materials consistency, style, and layout, and 4) effectively adapt to changing training needs and learners. Meeting these goals will not only help ARC fulfill its mission, but also more strongly demonstrate the value of the software systems, and, the ATLAS training group.

3.0 Training Program Requirements

More effectively meeting the software training needs of ARC chapters will not only require a different approach, but one that strongly considers existing conditions. Currently, there is inconsistency in training delivery, quality, and content. Classes often do not match the learning pace of most learners, and are many times delivered in a routine manner. Moreover, there are buy-in problems with many learners who prefer to stay with their current systems. Lastly, many training materials and job aids are not current or unavailable.

3.1 Challenges

The ATLAS training team faces significant challenges in developing and delivering training. Firstly, there are several complex, newly implemented enterprise systems that undergo periodic and ad hoc upgrades. Of course, these systems all require documentation and associated training efforts which give rise to diverse and very large amounts of content. In addition, each of these software systems has the potential to affect one another, causing a potential cascade of changes that must be reflected in training materials and offerings.

Furthermore, with thousands of learners in hundreds of chapters, the ATLAS team is required to adapt to a very diverse population. Often, learners are unmotivated and can arrive unprepared without prerequisite skills or class materials such as printed exercises. And, as mentioned before, there is inconsistency in the way training is delivered by ATLAS training staff which includes contractors. Some trainers actively interact with the learners, while others simply recite the class scripts. Moreover, due to turnover, training the trainers becomes even more challenging.

3.2 Requirements

The new system must meet the following requirements:

- Help chapters fulfill their missions
- Provide higher quality, more effective training
- Deliver consistent training between all trainers and throughout all offerings and materials

- Be driven by measurable objectives in learning achievement/outcomes
- Be delivered in a timely manner through appropriate media channels
- Quickly incorporate software changes, acquisitions, and removals

To create and maintain such a system, the training development process must continue to:

- Demonstrate and state its value to ARC at the national and local levels
- Effectively select and develop training staff
- Employ a well-developed and cogent instructional design process
- Utilize effective instructional tool selection and use
- Maintain effective content management
- Initiate process improvement at regular intervals

4.0 Training Design Guidelines

The focus of the proposed training system is to improve employee performance with active engagement of the learners. At present, most training is delivered through static content broadcasts that seek to share all important information related to an application that could apply to various jobs. While exercises are presented in the lessons, and the job aids provide comprehensive, high-quality information, the learner is *rarely challenged or held accountable* to apply the information. It is assumed that this will happen on the job. Certainly, this occurs, but it is not known how much is learned from the training.

By seeking to have learners practice skills with the instructor, by stressing that learners can only make progress through application, the proposed system should be more effective. Mere exposure, even repeated exposure to data, does not induce learning. Only *active and repeated application*, ultimately, on the job, will deliver the best results and the most learner satisfaction. In fact, the closer the learning conditions mirror the job conditions, the better.

For ATLAS training to be more effective, it must be more active, more tailored to specific job roles, and come as close as possible to job conditions. These training assumptions have strong implications for not only the entire training system, but, all training classes and products.

5.0 Proposed Training Process

The proposed training process incorporates most of the current structure, but presents a few new aspects. Looking at *Figure 1* (page 4), the learners sign up for a course in LMS and receive confirmation from the instructor. However, the new emphasis is to have learners practice basic prerequisites before class in addition to printing out the exercises. This should help bring most learners up to a common level of knowledge and enable the classes to go into more depth. By the time the student notifies the instructor to review her preparation, she will be well-prepared for class.

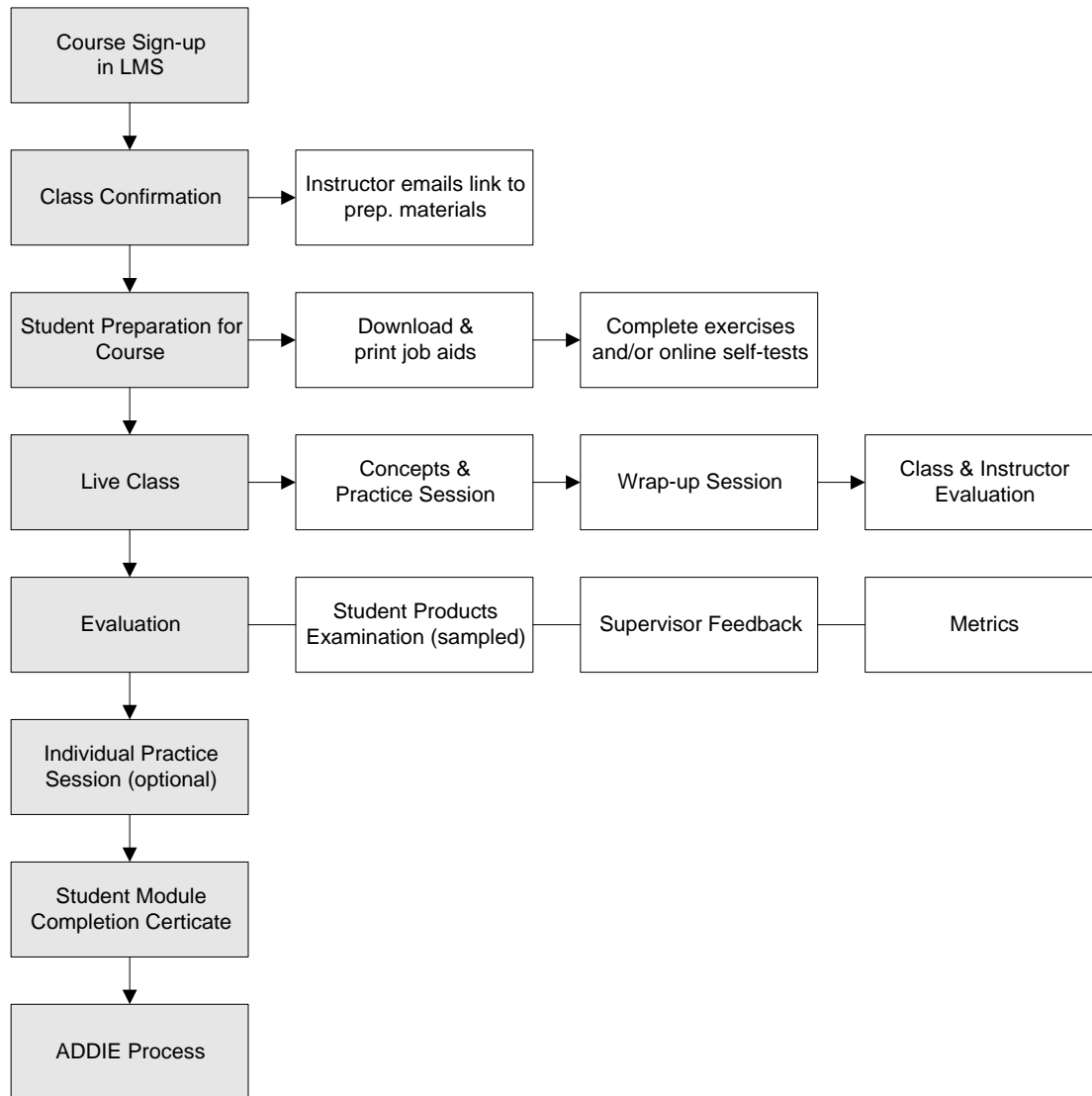


Figure 1.0 – Proposed Training Program Process

During class, the instructor will stress application by the learners of not only the key tasks, but the knowledge needed to perform them. This will vary from task to task, and may consist of very simple facts and concepts, but, it will greatly aid learning the software procedures. A voluntary practice session will be offered after class where the instructor will be available to assist. Students who complete class evaluations will earn a certificate of completion in the class or module. Not only are the skills practiced in class, but, they are reinforced shortly thereafter in the practice exercises.

An evaluation of the students will take place by looking at a sample of the products of the exercises, soliciting feedback from supervisors, and looking at key metrics. Due to the very high numbers of learners, the most practical approach will be to randomly look at a sample of learners and supervisors. The evaluation will be valid and meaningful if great care is taken in constructing and administering the survey and test instruments, as well as analyzing the data.

Lastly, the ADDIE instructional design process should be continually utilized to help provide the most effective training possible. Since traditional instructional design paces could not meet the rapid changes and challenges of the ATLAS team, design schedules should be *accelerated* and use rapid prototyping. While thorough instructional design can take more time, this proposal believes that it will provide long-term benefits that will enable training development that is not only more effective, but that keeps pace with change.

6.0 Proposed Class Design

6.1 Guidelines

Each lesson should, again, be organized around the essential tasks that learners will perform on the job, not the index of software functions. *Current materials and lessons do this well.* In addition, lessons should provide the big picture of how the lesson as a whole relates to other lessons and the learners' jobs. Furthermore, common skills that will be used in many lessons, should be learned early in initial lessons, and touched on later. This foundation will provide the prerequisites to help enable a good pace and optimal learning in later lessons.

Lastly, each lesson should be based on a deep understanding of the learners: What is their technical proficiency and access to technology? What instructional media and methods do they respond to? What are their personal and professional goals? What are the expectations of the chapters? A thorough audience analysis would answer these and other questions and provide a deep understanding of the context of the learners.

6.2 Class Structure

Based on this active approach to teaching and the consideration of the cognitive processes of the learners, this proposal stresses a new lesson structure. *Figure 2.0* (page 6) illustrates the key components and movement through this system. While the new approach is similar and has sought to retain the effective aspects of the current system, it introduces new key components and methods.

Concepts and Practice Session

The first segment should provide presentation and practice on all key knowledge and tasks. The entire lesson should be organized around key tasks and the knowledge that is necessary to do them. The lesson begins with an introduction which prepares the learners by explaining how the class relates to others in the sequence. This helps provide a big picture that will be used by the learners to jog their memories and incorporate knowledge. Stressing the benefits and importance of the class for personal and organizational goals greatly helps increase learner motivation.

The overview section provides a one-sentence statement which tells learners the purpose of the lesson and what will be covered. Of course, the whole point of the lesson is to enable learners to perform tasks, and these should be listed as the key objectives of the lesson. Each objective should be a task that can be *observed and measured* for success or progress. Lastly, the instructor should present an outline that shows the three main segments: Concepts and Practice, Wrap-Up, and Individual Practice.

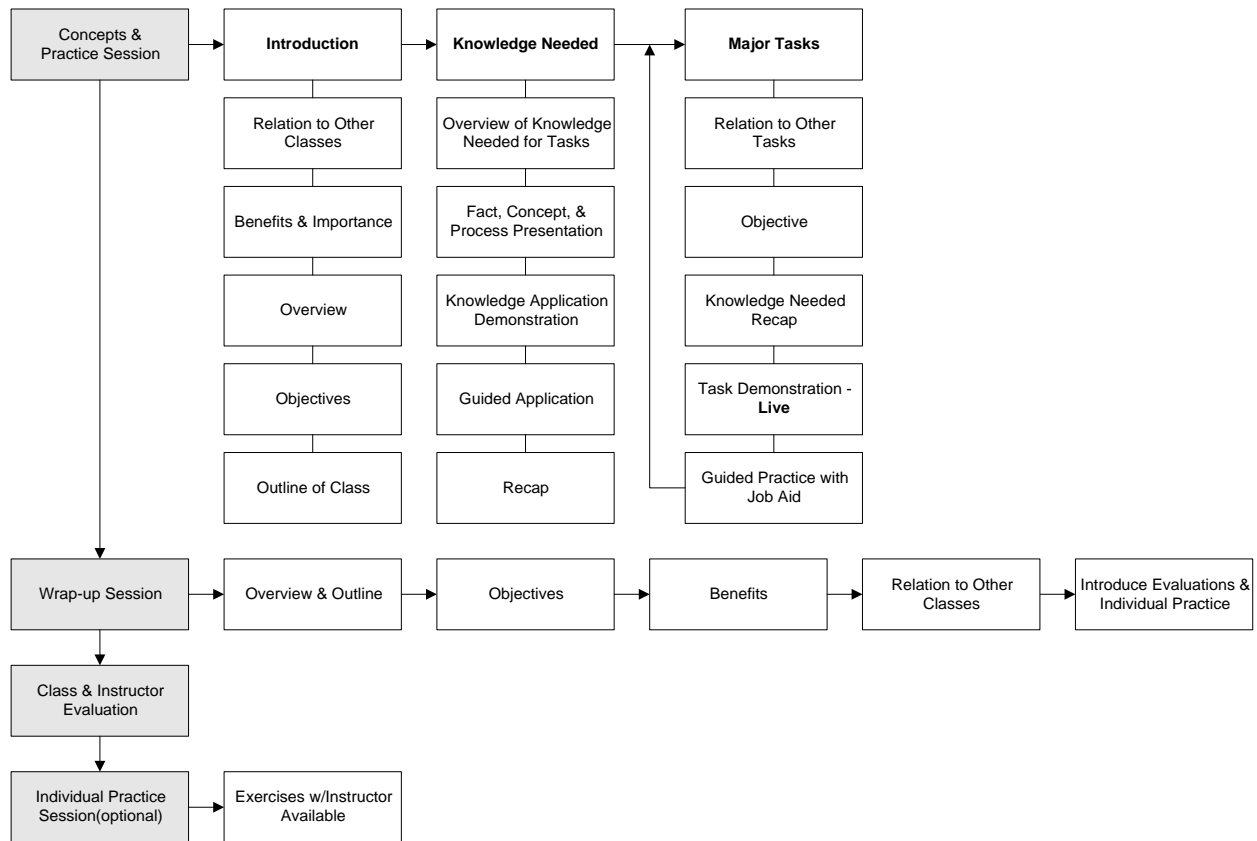


Figure 2.0 – Proposed Class Process

Knowledge-needed will be presented and practiced by the learners. First, the instructor should give an overview or list of what will be covered. Next, each key fact, concept, and process should be presented individually and followed by a practice demonstration, then followed by practice by the learners. Each key knowledge aspect should be presented, demonstrated, and practiced. After all knowledge as been covered, the instructor should end the process with a brief recap of the knowledge reviewed.

The major tasks section will be broken down by task. It should begin with a list of all tasks to be covered, followed by details on each task. For each task, the instructor should stress its relation to other tasks and clearly state what the learners will be able to do. The key knowledge needed will be mentioned before the instructor *demonstrates the task live*. Learners will then practice the task with a job aid before the instructor proceeds to the next task. These job aids should be open and concise with clear, meaningful graphics that do not compete with text. In addition, the step-by-step lists should incorporate decision trees where helpful, rather than as separate job aids.

Wrap-up Session

Next, the instructor will ask for any questions. The instructor should encourage learners to answer these as well. Once these have been addressed, the instructor will provide an overview and outline of what was covered, a discussion of the key objectives, a recap of the benefits, and a discussion of the relation of the lesson to other courses. Next, the instructor will present the optional individual practice exercises and explain the certificate of completion. Lastly, the instructor will thank the learners and direct them to the online class and instructor evaluation form.

Class and Instructor Evaluation

Learners have been emailed this link and must complete this form to receive credit for the class. This data will be used to help improve trainer performance and current offerings. However, the instrument must be constructed and interpreted with great care and should be part of a multi-prolonged research effort.

Individual Practice Session (optional)

Learners will print out the individual practice sheets and work on their own on the same tasks which are shown on the live class exercise sheets. They will report when they are done so the instructor can evaluate their progress. In addition, the instructor will also *check in* with each learner during this period and request to view their screens. Of course, learners will be able to contact the instructor as well, as is currently done. Immediate application and feedback is critical for learning. *Memorization of steps is virtually worthless.*

7.0 Media Design and CBT

Besides adhering to known graphic design guidelines, the instructional materials should seek to optimize learning, even if this diminishes the aesthetic appeal of a product. Job aids should be concise, clear, and provide tables to contain each step with appropriate graphics. Decision trees and process or system illustrations should be employed when this foundation knowledge is helpful. Incorporate decision trees into the step tables as feasible. Insure that there are good amounts of white space and that no element competes with learner comprehension. If an element does not aid learning, if it can be removed without creating distraction, it should be eliminated.

Self-paced online materials can provide an excellent means to build prerequisite and primary skills. Each of these modules should address the learners in a personal manner and be organized in short presentation and practice segments around key tasks. All simulations should be followed by immediate and repeated practice and feedback. Learners should be provided job aids to track and maintain their self-study progress.

8.0 Conclusion

The ATLAS training team faces great challenges which are likely to continue to grow. Whether staff are updating training offerings or utilizing new training technologies, the rollout to hundreds of chapters will be challenging. In addition, each person who attends training is developing an opinion of ARC technical training and the software offerings. The ATLAS training team will continue to play a critical role and will likely receive increased feedback as more users receive training.

The effectiveness and learner satisfaction from ATLAS training will have a profound impact on the support the ATLAS training team will receive from ARC as a whole.

The current training approach and offerings incorporate a vast amount of content, and the ATLAS training team *should be commended* for their work. Now that this team has established a substantial foundation of content and methods in such a short time, the updating of training materials and methods should provide better results in the learners and a better experience for the training staff. However, continuing the current approach is less likely to provide these benefits.

This proposal presents a new approach which should lead to better outcomes and job satisfaction for training staff. By changing the way classes are run, by focusing on providing *more* active learning of supporting knowledge for software procedures, and the tasks themselves, learners should be very satisfied and capable.

Lastly, the instructional design process initiated by the training managers is expected to evolve and provide increasingly effective and satisfying training through high-quality, consistent, and meaningful materials and classes. This moment of ATLAS training redesign should be just the beginning of a process of continuous innovation and stimulation.

Appendix A: Research-Based Instructional Design

Over the past 25 years, there has been an explosion of new scientific findings about learning. Key findings from The National Academy, The American Psychological Association, and original scientific studies *can bring excellent payoff* and are the basis of this proposal. Although it usually takes about 20 years for research findings to be used, the proposed training design will enable ARC to benefit from the latest knowledge about well-established learning principles and explanations.

Most teachers and trainers teach as they were taught: The key will be for staff to learn and practice the fundamentals of the new understandings about learning outlined here and in the training literature.

Adult Learning Theory

Much more is known today about adult learners than just a couple decades ago. Many thinkers have proposed new and effective ways to approach adult learning, and this document has selected the following concepts based on these theorists:

1. Learners need to know how learning will be achieved; they also wish to know why it matters.
2. Adults need to engage in and control a self-directed learning process.
3. The identity and background of adults provides a very rich source of knowledge that heavily impacts learning.
4. Adult learners seek training when there is a necessity for it in their lives.
5. Adults prefer to and learn best when they attack real-world problems.
6. Adult motivation to learn is directly proportional to an area's direct impact on their lives.
7. Training has the potential to aid in the transformation of a learner if that learner is at a moment of great dissatisfaction and stress that produces a desire for personal change.

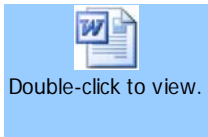
Learning Research Findings

This document proposes the following key principles based on learning research:

1. Reveal and utilize the existing knowledge of students.
2. Provide an environment to construct knowledge.
3. Help students guide and maximize their learning; help them assess, plan, carry out, and monitor their learning.
4. Create a learner-centered environment; this environment meets the individual learning needs and characteristics of students.
5. Provide a knowledge-centered environment; focus efforts on an intensive exposure and creation of knowledge.
6. Enable an assessment-centered environment; continually test for knowledge and skills, and provide help for staff to master these areas based on the assessments.
7. Encourage a community-centered environment; reinforce the direct link of ARC to the community or responders and victims.

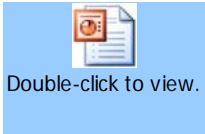
Appendix B: Resources

References

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Presentation and Template Files

Atlas Training System Optimization: Considerations and Approaches



Proposed PowerPoint Training Template

