# Instructional Design and the Training of Chaplains for Combat Medical Ministry

**Zachary Tippetts, Department of Pastoral Ministry Training, Army Medical Department**

**Abstract:** In an organization as vast as the United States Army, there are many different instructional design applications that can provide different kinds of insight into the field. This article presents how instructional design practice and principles have been applied in the Combat and Emergency Medical Ministry Course presented by the Department of Pastoral Ministry Training (DPMT) at the Army Medical Department (AMEDD) Center & School. Lessons learned include reminders as to the powerful impact training can have on the target audience (and its audience, too) and of some of the basic principles of instructional design that sometimes are forgotten amidst the many activities instructional designers perform.

**Keywords:** instructional design, design practice, basic principles

Army Chaplains have been at the frontline of combat, supporting troops in their most difficult moments, since 1775. What many people don't know, however, is that Chaplains serve in the forward medical facilities, combat support hospitals (CSHs), and regional hospitals where the wounded come to begin healing or to die. To be prepared, some Chaplains participate in hospital clinical pastoral education (CPE), a year-long training program (ACPE, 2008). CPE is the model program for medical ministry training, both in and out of the military (Snorton, 2006). However, due to the time and resource commitments necessary to train Chaplains in this manner (thus limiting enrollments), CPE is currently not an option for all Chaplains needing medical ministry training. Also, National Guard and Army Reserve personnel do not have access to the year-long program. Since current combat operations have required more personnel than have been trained through CPE, an alternative was put in place. Combat Medical Ministry/Emergency Medical Ministry (CMM/EMM),

a two-week course presented by the DPMT, provides the training for Chaplains and Chaplain Assistants to prepare them for the rigors of one of the most difficult ministerial tasks in the world: emergency and combat medical ministry. Instructional design in the CMM/EMM course is the topic of this article.

The genesis of the instructional design work undergirding this article is found in the DPMT staff's desire for continual improvement. Because internal staff time was limited, the DPMT created space for and obtained funding to bring in a pair of contract instructional designers. The focus of these designers' contract was to develop new courses, but also to collaborate with staff on the improvement of the CMM/EMM course. Significant experiences of these instructional designers and the training team Chaplains over the course of the past year are chronicled below. Hopefully, new and experienced instructional designers can find additional insight into the field through these experiences.

## Information about Casualties

Since the beginning of Operation Iraqi Freedom in 2002, more than 6,600 Soldiers have been killed in action and more than 62,000 have been wounded in a way requiring medical evacuation from combat zones (Congressional Research Service, 2010). Injuries can be significant physically, mentally, and spiritually. A Soldier who has lost a limb to an improvised explosive device (IED) or one who has been shot, injured in a vehicle accident, or harmed in any other way goes through emotional and physical crisis. Helping those Soldiers that survive wounding or who grieve over the loss or injury of their fellow Soldiers is one of the primary roles of Chaplains. Like other medical care providers, Chaplains spend much of their time helping people whose lives have been shattered. Coping with the waves of trauma that are inherent in war is a difficult task, but, as with any task, preparation can make a difference in the success of the intervention.

There are over 1,500 active duty Chaplains in the Army with hundreds more Chaplains in the Guard and Reserves. For every Chaplain or Chaplain Assistant there is a first time to be deployed to a combat environment. Since very few people have experienced anything compared to combat, UMT members who have not deployed have no conceptualization of what they will soon encounter and the toll it will exact from them. For those assigned to a combat support hospital (CSH), the magnitude of their experience increases many times over. One of the instructors in the DPMT was deployed with a brigade that experienced more than 25 deaths in a year-long deployment. UMTs serving in a CSH see that many individuals in a week, all in crisis.

The CMM/EMM course was specifically designed to reinforce the Chaplain's mental and spiritual strength by putting him or her in a position to taste what the combat medical experience is like. In the course as it was put together at the beginning of this project, Chaplains and Chaplain Assistants were exposed to the rigors of trauma while serving as duty Chaplains/Chaplain Assistants at Brooke Army Medical Center, participating as the Chaplain on the trauma team, and receiving another 60 hours of training on topics ranging from Grief and Loss to Traumatic Event Management and Ethics. The resulting changes to the course have not been radical, but they represent an important shift in how such courses are viewed and how improvements can be made. The instructional systems design (ISD) steps known as ADDIE

(Molenda, 2003) serve as the framework for this discussion, since ADDIE served as the framework for the changes made to the course. ADDIE is the instructional design process used to guide all formal instructional development throughout the U.S. military.

## Information about Analysis

The first task given to the instructional designers was to analyze the current course. Since the task analysis had been completed earlier, the initial "analysis, for this revision of the course, consisted of formative evaluation--that part of ADDIE that would again propel us through design, development, and implementation. As has been mentioned, "(t)he purpose of formative evaluation is to revise the instruction so as to make it as effective as possible for the largest number of students." (Gagne, Briggs, & Wager, 1992)

Evaluation/analysis provided a great opportunity to sit in the classroom and watch instructors teach with a focus on identifying what works with the audience and what doesn't. In combination with observation, additional evaluation instruments were added to the course to supplement our analysis. Students took a Spiritual Attitude Inventory (USACHPPM, 2009), completed section and course evaluations (representing response, Kirkpatrick level 1) and received pre and post tests representing learning (Kirkpatrick level 2) (Kirkpatrick & Kirkpatrick, 2006). The course-response data were analyzed by aggregating the means, examining trends over time, and performing qualitative analysis of the student comments by looking for trends. The student pre- and post-test scores were examined to see in which content areas the instruction was not meeting the needs of the students. While the tests themselves are still in the process of being validated, preliminary information has already given the instructional designers insight into the effectiveness of the content and helped them identify changes that could be implemented in the course. The analysis provided three significant lessons.

First, learner characteristics were better defined, which helped narrow the focus of the instruction. As noted by Bednar, Cunningham, Duffy and Perry (1995), what is meant by a learner, is most frequently a larger population of learners, and includes the general conditions and range of how the system needs to function. From the data and observations, it became apparent that the audience was not homogeneous. The Unit Ministry Team (UMT) consists of a Chaplain and a Chaplain Assistant. In most cases there

are several differences between the two members of the team. Typically, the Chaplain is older and the assistant younger; the Chaplain is an officer and the assistant is enlisted; the Chaplain has a religious affiliation and the Chaplain Assistant may not; the Chaplain has a master's degree or doctorate and the assistant's education begins with a high school diploma and may go to a bachelor's degree. While some assistants have more education than that, the proportions are very small. Understanding the audience is key for adapting training.

Second, breaking up long stretches of PowerPoint slides was important. Death by PowerPoint is almost a cliché.  However, anyone who has sat through four-hour blocks of PowerPoint instruction without a change in instructional method understands the possible mind-numbing effects. Also, by repeating content presentation through role-plays, the learner has a chance to deepen his or her understanding of the content. Although the tight scope of the course prevents significant spacing effects from occurring (Thalheimer, 2006), it doesn't decrease the power of modeling and repetition (Taylor, Russ-Eft, & Chan, 2005).

Third, the complicated skills of dealing with grief, performing a crisis intervention, or responding to trauma, cannot simply be described to be learned. One of the strengths of the course before our arrival was the time spent actually working in the trauma room providing pastoral support while working under the supervision of an experienced trauma Chaplain. Our goal, where possible, was to replicate that kind of learning in the other areas of the course. This meant increasing role plays and practice sessions where the students assume the roles of the injured or grieving party and the Chaplain or Chaplain Assistant who provides the help.

After examining these three areas, it became clear that more activities and role plays were needed to address our three concerns. First, activities would help address the differences between the Chaplains and the Chaplain Assistants. By doing role-plays, each would get to experience the topic in his or her own role and sometimes in the role of the other. Second, interactive activities would help break up the PowerPoint presentations and allow the learners time to digest and implement their instruction. Third, activities and role plays would give the students an opportunity to practice the skills they were learning. To prepare for such activities and role plays, the instructional designers identified media tools to provide intermediate knowledge be-

tween the theory and practice. These tools help place the learning in context. Thus, based on a careful analysis, creating active learning activities and adding appropriate supportive media became the goals for the course improvement.

## Information about Design, Development, and Implementation

Based on these goals, the first changes to the course had to do with increasing the fidelity of the course in terms of representation and practice. For example, video was added that showed what the UMTs would be dealing with in the field. Luckily, there was an HBO film produced in 2003, *Baghdad ER*, that showed trauma and also showed the Chaplain's role in the trauma room. Using copyrighted media, like Baghdad ER, adds its own strictures to development (allowing for time to obtain permission to use the content in training, for example), but has the benefit of a typically higher aesthetic as well as access to content and situations not normally available to instructional designers. Using the video allowed Chaplains without experience in a deployed environment to see actual events, thus helping them to foresee what their experience ministering to a person whose leg has just been blown off might be like. Next, role plays and group activities were added. What do you say, for example, to a Soldier who's just lost his battle buddy to a sniper attack? Also, the team developed an Oregon-Trail-type game (Sugar & Brown, 2008) with the goal of placing the various learning topics into their practical context. In the game, students manage their time through the use of tokens, allotting hours to sleep, physical training, spiritual development (for Chaplains), rapport with fellow Soldiers (for Chaplain Assistants), personal time, and coordination. Based on the student's choices on how to distribute his or her time, the day plays out differently. The game has been a great teaching tool for those who haven't deployed. As noted by Klopfer, Osterweil, and Salen, "The productivity of gaming environments lies in the fact that [students] among themselves are free to discover and create learning and teaching arrangements that work for them." (2009)

To change the pacing of the instruction, good ideas from instructors teaching the course for limited sections (and who used a more diverse approach than simply PowerPoint) were implemented in order to spread those ideas into other areas. This meant developing a combination of PowerPoint, role-playing activ-

ities, group work, games, video, and journaling. The instructional designers made sure that the materials necessary for group work were provided so that it wasn't difficult to set up and lead brainstorming and other collaborative activities.

Also, an audience response system (ARS) was introduced into the course. Audience response systems allow learners to use remote controls to participate in polling, group questions, or activities. Software tied to the remotes aggregates the data from all the students and allows for immediate display of a snapshot of answers. Unfortunately, due to technical problems with the Qwizdom ARS tool utilized in the course (it slows down the longer the system is used; sometimes taking two-to-four minutes to move from one question to another) it isn't as useful as it could be. However, the activities using the ARS are always welcomed by the students and serve to increase student enthusiasm.

Finally, the issue of audience disparity was addressed. This proved to be the one item for which there was no "best single answer." To increase the educational level of the course to meet the Chaplains' needs would most likely move the course content outside the zone of proximal development (Vygotsky, 1978) for the Chaplain Assistants. Likewise, role plays that are good for the Chaplain Assistant are oftentimes seen as too basic for Chaplains who have more counseling experience. This conundrum applied across the board. So, the approach taken to deal with this difficulty was variety. Sometimes higher-level content is taught and the Chaplain Assistants struggle. Sometimes the content is more basic to meet the needs of the Chaplain Assistant. Variety provides the opportunity to balance the instruction so all learners benefit.

**Evaluation**

After addressing the concerns and implementing changes, evaluating these changes was the next step. The same processes used in analysis provided information about the changes made. Tracking student evaluations, monitoring, especially, their comments about each section of instruction, proved fruitful. Also, continued observation of the course and watching the implementation of the various new approaches helped the instructional designers refine the processes. In most cases students were appreciative of the changes implemented. However, not all students appreciated all changes (a byproduct of the audience issues noted above). In fact, sometimes meeting the needs of certain

students means decreasing the satisfaction (if not the learning) of other students. For example, where more interaction was instituted, some students pointed out how much they enjoyed PowerPoint. Continual monitoring of student data (checking for age of the student population or the numbers of previously deployed Chaplains and Chaplain Assistants) has been useful for tracking trends and for testing and improving activities. Demographic data were gathered for each course and compared to the evaluations and overall response to the course. Continued observation of sections of the course allows the designers to make recommendations for improvement. Monitoring the course and making changes requires a time commitment that can be significant, but it is very useful for incremental change.

Speaking of incremental changes, one example demonstrates the benefits of trying out different methods of instruction to find the most effective instructional practice. In the course, a review activity was conducted using a learning game that utilized the ARS. The game had two scoring options: one in which the first correct answer from a team of students won all the points and another in which team scores were aggregated. Students quickly figured out option one and teams would simultaneously submit each possible answer so as to be the first to answer correctly in order to win the point. This was not helpful for learning. The designers switched to the other (aggregate) option. Such wrinkles to the process were ironed out based on continuing evaluation and improvement.

As updates to the course were made, it became clear that improvement is an ongoing process that is often limited by resources. The changes that were made were based on resource availability. At the point at which more resources might become available, more improvements could be made. For example, crisis intervention is difficult to practice without a role model to emulate. While videotaping students performing role-plays was implemented to provide a talking point for practice, a better approach would be to increase the fidelity of the demonstration intervention video. A more realistic setting, better acting, and the demonstration of intervention skills would help students visualize actual interventions. Another useful instructional tool for interventions would be a simulation in which students could try many of the common intervention techniques (both correct and incorrect). The immediate presentation of consequences demonstrated by such a tool would help students avoid some of the negative effects of poor interventions. While

resources aren't available currently for these types of tools, the results of our evaluation indicate that the tools would be beneficial.

Last of all, Kirkpatrick level 3 evaluations (Kirkpatrick & Kirkpatrick, 2006) have been sent out one year after each course section to determine if the instruction was helpful, what information may have been lacking when compared to the operational environment, and what recommended changes could be made to the course. So far, the comments received back have been positive about the effect of the course on the Chaplains and Chaplain Assistants who have responded to the survey.

## Discussion and Recommendations

As instructional designers approach working with clients from the complete spectrum of learning needs, some enduring factors must be taken into account (and these are some of the lessons learned from working on this course). First, instructional designers are really in the people business, meaning they work through, with, and for people. Respect is a key component. The adage, "I don't care how much you know until I know how much you care" implies caring, understanding, and acknowledging where each individual is in his or her life. This includes recognizing the constraints that currently limit performance and respecting the knowledge and experience each participant brings to the desired educational goals. The significance of relationships is important for the instructors, the technology or support staff who help with the achievement of the learning outcomes, and the students who will apply the content provided and use it to protect, defend, and serve others. Instructional designers who cannot contribute to these kinds of connections will find they can make little headway in fomenting instructional change.

Second, instructional design is typically an ongoing process based on experience and iterative change. Each instructional design solution carries with it a package of constraints, or "layers," (Gibbons, 2003), that, had they been different, may have resulted in a different instructional solution. Instructional design products are also a result of the experience and knowledge of the instructional designers working on the project. As the constraints change with time and as instructional designers know more (through experience or evaluation), instructional products should be tested so they may, if necessary, be transformed. They should be tested to verify that they are still adequate and,

hopefully, optimal. If the products are found wanting, then they should be changed.

Also, the initial ideas designed to meet student needs will have to be tried, revised, and tried again. This is not a flaw in the system. Instructional designs live in the same way that databases, daily news, and other information processes based on learning, growing people live. Because changes are wrought simply by students and context existing from day to day, the instruction must adapt, too.

Third, instructional design processes are driven as much by available resources as they are by desired instructional outcomes. The available amount of subject matter expert (SME) or faculty time determines the amount of change that can be implemented at any time. As workload increases in the office so that the trainers' duties increase, the amount of time for instructional modification and change decreases. The same basic principles apply to technology, software, and other resources that can improve final instructional product.

Fourth, ongoing evaluation will provide the best measuring stick for how well instructional goals are being met. There are differing metrics for course effectiveness. Student evaluations (e.g., Likert scales) give one perspective. Testing provides another. Practice portrays even another. In the best situations, long-term performance gives the best picture of the impact of instruction. Constant evaluation helps to discover trends in students and trends in instructional practice. Ongoing evaluation can track content creep (where content and presentation change incrementally based on student interaction), but documentation lags since no "major changes" have occurred.

## Conclusions

While working on this fairly traditional course (although there are online components in addition to the instructor-led components), the instructional designers learned a variety of lessons. It has been encouraging to note that the methods used to create good instruction have power across modalities. It has been insightful to recognize that all instruction is bound by constraints (time, money, and skill) and that people do the best they can with the resources available to them. Most of all, this course has been a reminder that training is used to improve lives. Working with the DPMT faculty has been eye-opening to the work entailed in meeting the needs of Soldiers throughout various combat environments. It has allowed us to use our skills to

improve the training Chaplains and Chaplain Assistants receive as they embark on a very difficult task—meeting the spiritual needs of our Army Soldiers in the dehumanizing battlefields of war.

## References

ACPE. (2008). Information for prospective students. Retrieved February 25, 2011, from http://www.acpe.edu/faq.htm

Bednar, A.K., Cunningham, D., Duffy, T.M., & Perry, J.D. (1995). Theory into practice. In Anglin, G.J. (Ed), *Instructional technology: Past, present, and future* (p. 105). Englewood, CO: Libraries Unlimited, Inc.

Congressional Research Service (2010). U.S. military casualty statistics: Operation New Dawn, Operation Iraqi Freedom, and Operation Enduring Freedom. Retrieved February 25, 2011, from http://www.fas.org/sgp/crs/natsec/RS22452.pdf

Gagne, R.M., Briggs, L.J., & Wager, W.W. (1992). Principles of instructional design (p. 30). Ft. Worth: Harcourt Brace Jovanovich.

Gibbons, A. S. (2003). What and how do designers design? *TechTrends*, 47(5), 22-25.

Kirkpatrick, D.L. & Kirkpatrick, J.D. (2006). Evaluating training programs, 3rd ed. San Francisco, CA: Berrett-Koehler Publishers, Inc.

Klopfer, E., Osterweil, S., & Salen, K. (2009). Moving learning games forward. *The Education Arcade, Massachusetts Institute of Technology*. (p.3). Retrieved May 3, 2011, from http://education.mit.edu/papers/MovingLearningGamesForward_EdArcade.pdf

Molenda, M. (2003). In search of the elusive ADDIE model [Electronic version]. *Performance Improvement*, 42 (5), 3-4.

Sportin, T. E. (2006). Setting common standards for professional chaplains in an age of diversity. *Southern Medical Journal*, 99(6), 660-662.

Sugar, W. & Brown, A. (2008). An examination of the last fifty years of DAVI/AECT convention presentations. TechTrends, 52(2), 59-69.

Taylor, P.J., Russ-Eft, D.F., & Chan, D.W.L. (2005). A meta-analytic review of behavior modeling training. Journal of Applied Psychology, 90(4), 692-709.

Thalheimer, W. (2006). Spacing learning events over time: what the research says. Work-learning Research. Retrieved May 3, 2011 from http://www.phase-6.de/opencms/system/galleries/download/lernsoftware/Spacing_Learning_Over_Time__March2009v1_.pdf

Vygotsky, L.S. (1978). Mind and society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.