

CENTER FOR HEALTHCARE EDUCATION AND STUDIES

DISTANCE LEARNING

By

CONTRACTOR: Booz-Allen & Hamilton, Inc.

Volume I Distance Learning Analysis Study

Contract Study

CAAS 98-001 A

September 1998

Approved for public releases Distribution Unlimited

19990217019

UNITED STATES ARMY MEDICAL DEPARTMENT CENTER AND SCHOOL FORT SAM HOUSTON, TEXAS 78234-6100

REPORT DO	Form Approved OMB No. 0704-0188			
Public reporting burden for this collection of inforn gathering and maintaining the data needed, and c collection of information, including suggestions fo Davis Highway, Suite 1204, Arlington, VA 22202	completing and reviewing the collection of information the second se	ormation. Send comments regard	ing this burden estimate or a Information Operations and f	Reports, 1215 Jefferson
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE September 1998	3. REPORT TYPE AND	DATES COVERED	
4. TITLE AND SUBTITLE Distance Learning Volume 1 Distance Learning Anal			5. FUNDING NUMBE	RS
6. AUTHOR(S)				
7. PERFORMING ORGANIZATION NA Booz-Allen & Hamilton, Inc. 8283 Greensboro Drive McLean, VA 22102-3838	ME(S) AND ADDRESS(ES)		8. PERFORMING ORG REPORT NUMBER DAD10-97-Q0174	GANIZATION
9. SPONSORING / MONITORING AGE Center for Healthcare Education a United States Army Medical Deparment and School Fort Sam Houston, Texas 78234-	and Studies	5)	10. SPONSORING / N AGENCY REPOR CAAS 98-001 A	
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION / AVAILABILITY	STATEMENT		12b. DISTRIBUTION	CODE
13. ABSTRACT (Maximum 200 wor The primary focus of this project strategies to 22 selected PPSCP c	is the determination of the feas	sibility and cost effectiv bistance Learning Analy	veness of applying L vsis Procedures Mar	Distance Learning wal.
14. SUBJECT TERMS			15. NUME 16. PRICE	ER OF PAGES 180 CODE
17. SECURITY CLASSIFICATION OF REPORT U	18. SECURITY CLASSIFICATION OF THIS PAGE U	19. SECURITY CLASSIF OF ABSTRACT U	ICATION 20. LIMIT	ATION OF ABSTRAC

ABSTRACT

DISTANCE LEARNING

Volume I Distance Learning Analysis Study Volume II Course Analysis Manual for Conversion to Distance Learning

The primary focus of this project is the determination of the feasibility and cost effectiveness of applying Distance Learning strategies to 22 selected PPSCP courses and development of a Distance Learning Analysis Procedures Manual.

DISTANCE LEARNING ANALYSIS STUDY FOR PROFESSIONAL POSTGRADUATE SHORT COURSE PROGRAM



FINAL REPORT

DEVELOPED UNDER CONTRACT DADA10-97-Q-0174

1. Purpose of Report

The Department of Health Education and Training (DHET) commissioned a study to determine the feasibility of converting their Professional Postgraduate Short Course Program (PPSCP) from their current format to a distance learning format. This report presents the results of that distance learning study.

This report is a companion to another document prepared during the study - the "Course Analysis Manual for Conversion to Distance Learning". The analysis manual provides a step-by-step procedure for performing the analysis of an existing course to determine whether it might be converted to a distance learning format. For details on that process please refer to the analysis manual.

This report starts with an overview of the process we used to conduct the study. It follows with a summary of the key findings of the study. Subsequent sections provide some recommendations of things that might be considered as the results of this study are applied to the PPSCP; and, provide detailed analyses of individual courses that were audited during the conduct of this study.

This study was performed by a small group of consultants that included a Ph.D. in Education, a Ph. D. in Industrial Psychology, an alumnus of DHET, and data researchers who have developed and delivered instruction in a variety of subjects.

2. Procedures Followed

To perform this distance learning analysis several steps were performed. The key steps in the process were:

- Review the list of courses that were to be audited as part of this study
- Develop survey instrument to collect the data necessary to make recommendations
- Baseline the technologies that might be applied to distance learning, and identified key attributes of the technologies that make them applicable or inappropriate for various course contents
- Determine what distance technologies are supported by DHET, the Army Medical Directorate (AMEDD), and the Training and Doctrine Command (TRADOC) that might be available for converted courses
- Use the survey data to refine the analysis process presented in the original study proposal
- Apply the refined survey instruments to the remainder of the courses to be audited
- Develop analysis tools for making a decision about convertibility of a course
- Apply the analysis tools to develop a recommendation
- Synthesize trends and overall findings into the final report.

2.1 Infrastructure Analysis - The Total Army Distance Learning Plan

To ensure that the recommendations made in this report were implementable, we gathered data on the technologies that the Army was investing in that might make distance learning possible. The Total Army Distance Learning Plan has resulted in significant investments in training facilities around the world that can support a variety of computer and televised delivery formats. This infrastructure of communications, computers, and television resources was used as the bounds of options for our recommendations.

The Student Survey instrument administered at each course we audited allowed us to determine three things:

- 1) Did students have reasonable access to Army Distance Learning Centers at their normal place of work?
- 2) Were computers present at the student's place of work, or did they own home computers?
- 3) Were the computers that students have access to connected to the internet in some fashion?

In addition, we gathered information about the configuration of computers that students have access to in order to determine how many students had a "common" platform.

2.2 Analysis of distance learning technologies

Using information gathered from open sources we identified the existing and emerging technologies that could be used for the delivery of instruction from a distance. Those technologies were compared with the Army infrastructure that would exist over the next 2-3 years. Where there was a match, we included the technologies in the worksheets and tables that were used to develop our individual course recommendations. Where there was a technology that was not explicitly support in the Total Army Distance Learning Plan, we made mention of technologies that might be used to enhance a course in the future. We made a conscious decision not to recommend delivery media that would require the Army to make additional investments in infrastructure in order to make our recommendation implementable.

2.3 Development and refinement of the Data Collection Instrument

Assumptions we made in our study proposal about the content and organization of PPSCP courses proved to be inaccurate. PPSCP courses are not courses in a traditional sense. They generally are delivered in a symposium or conference format. The content for most courses is very different from one presentation to the next. The objectives of each course are very broad and general. Individual presentations or course modules are tied to the overall course objective, but a traditional hierarchy of learning objectives is not developed for each course. Instead, the courses tend to be informative and provide introductions to tools, techniques or issues that are currently facing the medical profession.

As a result of this difference between what we assumed about the courses, and the reality of their format and content, we had to completely revise our data gathering and analysis strategy early in the study. We took the revised instruments and reapplied them to the initial three courses to ensure that our final recommendations for individual courses were based upon the same data gathering techniques.

2.4 The data collection process

Course and infrastructure data were gathered primarily from two sources. Course information was gathered from the people who were responsible for organizing, staffing, and conducting a specific course. These people are generally discussed as "Course Administrators". They develop the syllabus for the course, identify and secure speakers, perform student registration functions, and ensure that proceedings from the course are available in some form to the students.

Infrastructure information was gathered from students attending the courses as well as Course Administrators. While survey instruments were provided to all students attending a course, the return rate varied greatly. In some cases we received most of the student surveys for a course. In other instances our return rate was only about half. We don't believe that the use of this incomplete data biases our recommendations or changes the list of technologies that are viable for PPSCP course delivery. There was enough cohesiveness in the surveys were did receive to conclude that the student population was well represented by our survey data.

2.5 Data analysis and reporting process

Details of the data analysis and reporting process are captured in the companion Course Analysis Manual for Conversion to Distance Learning. In general, we evaluated whether the educational content of a course would be made less effective if the course was converted to a distance learning media. In certain cases the primary goal of the course was to develop leadership skills or enhance interpersonal skills that would be very difficult (though not impossible) to accomplish via distance learning techniques. In other cases there was hands on lab work with access to materials or equipment not generally accessible outside of the course setting. The cost of converting these types of courses to distance learning are significantly more expensive to convert than to deliver in their current format.

When evaluating the material to be converted to distance learning, we factored our portions of the courses devoted to topics outside of the focus of the course. In many cases briefings that were of interest to the students were made a part of the conferencee (Tri-Care briefings, current job opportunities in a career field, evolution of individual Corps organizations). These modules of the course were not considered in our analysis our recommendations for an individual course.

3. Summary of Findings

This section provides general conclusions reached as a result of our study. These are offered as recommendations for the PPSCP program as a whole, not recommendations for a specific course.

3.1 Course Recommendations

The table below identifies the courses audited as part of this study and provides the summary recommendation for each course. Details for of the recommendations for an individual course is contained at the end of this report in the section with the corresponding course number on the tab label. Overall, two courses were recommended for conversion to a video teletraining (VTT) format, twelve were recommended for conversion to a web based training (WBT) format, one was recommended for enhancement through a distance learning technology, and seven were recommended to remain in their current format.

Course #	Course Title	Recommendation
A0111	1 st Combined Operational Aeromedical	WBT+ Enhancement
	Problems Course	
A0116	Gary P. Wratten Military Surgical	No change
	Symposium	
A0126	14 th Annual ACP/Army Regional	WBT + Enhancement
	Meeting: Internal Medicine	
A0137	Army Force Health Protection Conference	WBT
A0156	Multidisciplinary Approach to Head and	No change
	Neck Trauma	
A0202	Endodontics for the General Dentist	VTT
A0208	Restorative Dentistry and Dental	VTT
	Materials	
A0306	1998 Military Veterinary Medical	WBT
	Seminar	
A0307	Military Veterinary Foreign Animal	No change
	Disease Diagnostics	
A0416	Patient Administration Symposium	WBT
A0421	Health Facility Life Cycle Acquisition:	WBT
	Newcomer's Orientation Track	
A0423	AMEDD Worldwide Personnel	WBT
	Management Course	
A0437	Army Medical Evacuation Conference	Enhancement only
A0438	US Army Health Care Logistics	WBT
A0513	Phyllis J. Verhonick Research Course	WBT + Enhancement
A0515	Military Nursing Practical Course	WBT
A0524	Army Nurse Corps Company Grade	No change
	Leadership Course	
A0624	Army Medical Specialist Corps Executive	No change
	Management Course	
A0630	AMSC Combat Casualties and	No change
	Humanitarian Missions Course	_
A0711	91 B Multisystem Trauma Short C	WBT
A0717 A0803	91 R/S/T Short Course (Vet) Health Care Ethics	WBT

 Table 3-1:
 Summary Course Recommendations

3.2 Student Information Summary

A large amount of data was gathered about the demographics and geography of the students attending the PPSCP programs. This information gave insights into the overall costs of the current course, the access that students have to computers and other distance learning delivery platforms, and their goals for attending PPSCP courses The table below summarizes the findings of these surveys.

Data Category	Findings
Army Attendees	In most cases the courses were predominantly attended
	by active duty, regular Army staff. Normally there was a
	small percentage (5% or less) of attendees from other
	services or agencies. There were exceptions, such as the
	Health Care Logistics Course where nearly half of the
	attendees were from the Air Force. Only a small
	percentage of the courses were attended by members of
	the Army Reserve or National Guard.
Ranks	The highest attendance in these courses fell in the CAPT
	and MAJ ranks, representing about 40-50% of most
	courses. There was generally a 10% student population
	in each of the LTC and 2LT ranks. Civilians and other
	agency attendees were generally a small percentage of
	the attendees (less than 5%)
TDY Students	In general, over 85% of all attendees traveled on TDY
	status to attend these courses.
Primary Goal of	To Improve Professional Skills
Attendance (Decending	To Learn New Trends In My Professional Area
Order of Importance)	To Interact with Peers
	To have a better understanding of my organization
	To earn Continuing Educational Credits
	To develop professional contacts or networks
	To become familiar with a topic area
Computer literacy	On a 5 point scale, with 5 being "very literate" - 4.5
Regular Use of Computers	On a 5 point scale, with 5 being "every day" - 4.4

4 **Recommendations**

There were several general findings that may be helpful in using this study to implement a distance learning program for PPSCP. Those findings are discussed below.

4.1 Refinement of Data Collection

The data gathering instruments used in our study, and provided in the companion analysis manual proved very useful. However, if we were to continue with additional audits we would probably eliminate the use of the student survey. While the data was very illuminating, it did not vary greatly from course to course. Once we were able to establish a baseline, the subsequent courses generally followed the trend closely.

4.2 Development of a Style Guide for VTT and WBT

In order to make the development of VTT and WBT courseware and productive and consistent as possible, effort should be placed on the development of style guides for both

technologies. The WBT style guide could be broadened to encompass standards for computer based training (CBT) as well. The use of these style guides will immensely improve the usefulness of the developed products, and minimize the cost of producing the courseware.

4.3 Administrative Factors

Conscious effort will need to be made to "market" distance learning coureware. The availability of courses and the relevance of the course content needs to be easily accessible to the target student population, or they won't enroll. The registration and tracking of student progress will need to be facilitated by automated tools created to support the administration of a distance learning curriculum.

4.4 Providing Assistance

DHET will need to add staff who can help the content developers, answer questions, and work through problems. These may be Program Managers, but the skill set will be specifically oriented to authoring courseware using automated tools, not the subject matter or the course objectives. DHET or the program officers should be proactive keep track of the content development. It's like putting together an anthology, there is a need to keep track of all the parts as the courseware comes together for each course offering.

The following tabbed sections present the final recommendations for the individual courses audited through this study.

1st Combined Operational Aeromedical Problems Course Conversion Analysis

COMBINED OPERATIONAL AEROMEDICAL PROBLEMS COURSE

Course Purpose:

Provide information and training to all military personnel (primarily Army and Navy) dealing with aeromedical problems, to include flight surgeons, medics and technicians. This was the FIRST combined aeromedical problems course.

Course Content Stability: Low The course presentation and specific focus will change from year to year.

General Presentation Style: Distributive

Practically all of the presentations were lectures supported by graphics. A CD-ROM is to be provided to participants containing copies of all the presentations.

Instructional Aids:

Computer/PowerPoint, video, overheads. All presentations had more than adequate technical support.

Hands-on Activities:

One hands-on demonstration session was available throughout most of the conference.

Degree of Instructional Interaction:

The degree of interaction was generally low. Very little time was available to ask questions Relevant Instructional Value: Moderate to high

This course had in excess of 135 presentations. A number of specialties were represented, primarily flight surgeons. While some of the presentations were of general interest, others were of specific interest to only one segment of the audience. The relevance of the instruction to the participant dependent primarily on careful selection of presentations by the participant.

Recommendation

Convert portions of this course to Web based training, others to an electronic journal. Because the content of this course will change every year, the actual portion to be designed as distance learning versus that presented in another format such as web-based discussion groups, webbased professional libraries, electronic journals, etc., will have to be made during the analysis phase.

While an Aeromedical Problems Web Site could be done it would require careful indexing and content supervision possibly by a board of experts. This course could be made into a number of courses. Aspects of this course were actually a professional association conference. While such activities are necessary, not being instruction, they would not be suitable for distance learning. While the current cost of the course is relatively high, (\$492,000) 60% of the cost was covered by Navy funds. The Army's expenses for this course was \$192,000 which is significantly less than the \$281,475 that would be required to convert this course.

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: 1st Combined Operational	Course Number: A0111
Aeromedical Problems Course	

1. Instructional goals of the course: Provide information and training to all military personnel (primarily Army and Navy) dealing with aeromedical problems, to include flight surgeons, medics and technicians.

2 Eroquonov of course offering a		# 1							Ver	NF -
 Frequency of course offering p Current length of course in hour 		# 1 # 91	7.	Con	ort	to DL?			Yes	No
4. Number of hours to be converted		# 91	8				.		<u>X</u>	
5. Number of registered students	eu	# 455	0.	Сппа	nce	!			Х	
6. Number of potential students th	aat	# 455								
could benefit from the course	lat	# 1500								
		#1500	1							
9. If item 8 = Yes, Specify -	Electronic	c Journal						<u> </u>		
Technology	Level 1		2	Level	3	Level	4			
WBT		X								
CBT										
VTT	Low	1		High						
Other		·								
						I	l			
Labor Hours Estimation Method	I: Short _	X_ Long	<u> </u>	Synch	ron	ous	_			
		Cost Data	a							
10. Total Cost Year One				and the second se		1,475				
11. Total Cost Year Two						1,475				
12. Total Cost Year Three						1,475				
13. Total Cost Year Four						1,475				
14. Total Cost Year Five						1,475				
15. Total costs year 1 to 5 (Sur	n of lines	s 10 throi	ıgh	14)	\$ 1,4	407,475				
	· · ·									
16. Average cost, years 1 to 5 (di			5 by	(5) 8	5 28	1,475				
17. Total potential students over a			<u> </u>							
(multiply the number of poten	tial stude	nts (item	o ar	,	1 7 F	00				
by 5.)	atudanta			7	<i>‡</i> 75	00				
18. Average cost per potential s period.	student d	over 5 yea	41							
(divide the value in line 15 by	the value	a in lina 17	7)		\$ 18	8				
(divide the value in the 15 by	the value)	`		0				
Additio	onal Hard	dware/So	ftw	are Rer	nuir	ed				
Item:						t per ur	it	Total	Cost	
						· por ui		- Otar -	0000	
Proposed Enhancement(s)	Cost									
Electronic Journal	\$ 3,375									
	\$ 5,575									
	\$									
Total Enhancement Costs	\$ \$3,375									
	φ 3,375									
and an										

2

Instructional Formats and Physical Training Requirements

Course		omedical Problems	Course Number: A0111				
% of Course Using this Instructional Format	Format		Description	Physical Presence Required?			
95%	Lecture with questions/answer opportunities	A speaker/speakers present may ask questions regarding	No				
	Panel Discussion	A selected group (often sel area) discusses an issue ir about the ideas being preser	ected for their expertise or experience in a given n front of students. Students may ask questions nted.	No			
	Poster Session	A group of individuals prese the material being presented	nts material in a poster format. Students may read I, and ask questions about the material.	No			
	Small Group Discussion	Small groups of students (2~	-5) discuss an assigned topic.	?			
	Group Discussion	A larger group discusses a emphasis on student particip	n issue – usually led by a facilitator – with heavy bation.	?			
4%	Demonstration	Students observe the applic participating themselves.	?				
	Student Verbal Presentations	Students present verbal info	?				
	Student Procedural Presentations	Students present procedural	information to the larger group.	?			
	Field Trip	Students visit an instruction individuals who present infor	ally relevant site to observe activities or meet with mation in an applied setting.	?			
1%	Shop Activity	Hands-on technical tasks/pro	Hands-on technical tasks/procedures.				
	Lab Activity	Hands-on laboratory tasks/p	rocedures.	?			

Course Information Summary Sheet

Course Name: 1st Combined Operational Aeromedical Problems Course

Course Number: A0111

Length of course - number of hours of instruction: 85

Number of Registered Students: 455

Number of potential students that could benefit from this course: 1500

Instructional goals of the course: To provide information and training to all military personnel, to include flight surgeons, medics, and technicians, dealing with aeromedical problems, .

Frequency of Course Offering: Once a year

Continuing Education Credit Offered? Yes

Number: 31

Administrative Requirements	Check		Check
Self pacing		Detailed student records	
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit			
Training / Instruction Approach			
Lecture / Text	X	Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	
Self study		Structured Review	
Demonstration		Feedback on performance	
Exhibit		Remediation	
Guided Discussion		Group activities/collaborative tasks	1
Simulation (roll play, in-basket)		······································	-
Problem solving exercises			
Testing Types			
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test – "paper"		No testing/Student course eval	X
Performance test – hardware			
Graphics			
2D graphics still	X	3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
		Pre recorded video /films	X
Communications			
Audio		Open Discussion	
Indirect discourse		Question and answer	
Assigned reading			

Note: Demonstrations were used less than 4% of the time and Audio (for non-voice sound reproduction) was used less than 2% of the time. These factors will not be considered for the remainder of the analysis.

Course (Name) 1st Combined Operational Aeromedical Problems Course			Technologies			
Administrative Requirements	CBT	WBT	VTT	1		
Self pacing	Check			VII		
Group training						
On-demand availability						
	-			-		
Open entry / open exit				_		
Detailed student records		-		_		
Test Security						
Multiple test forms						
Training / Instruction Approach						
Lecture / Text	X					
Live Presenters (guest speakers)						
Self study						
Demonstration						
Exhibit						
Guided Discussion						
Simulation – knowledge based						
Simulation - hardware						
Problem solving exercises	-					
Learning to Mastery						
Practice / drill			-			
Structured Review						
Feedback on performance						
Remediation						
Group activities/collaborative tasks						
Testing Types	1				1	
Objective knowledge tests			T	1		· _ · · · · ·
Essay						
Performance test –"paper" exercise						
Performance test – hardware simulation						
Performance test – hardware						
Oral testing						
No testing/Student course evaluation	X					-
Graphics	^		1			
2D graphics still	X			1		
3D graphics still	^				-	
2D animation						
3D animation						
2D interactive animation						
3D interactive animation						
Pre recorded video /films	X		-			
Communications	~	-			1	
Audio	· [· · · · · ·				1	
Indirect discourse						_
Assigned reading					-	_
Open Discussion						
					ļ	
Question and answer opportunities						

4. Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Aeromedical Problems Course Asynchronous Course	WEB Based Training						
Interactivity Factors	Level 1						
-	Lever1	Level 2	Level 3	Level 4			
Administrative Requirements							
Self pacing		>>>>>>>	>>>>>>>	>>>>>>>			
Group training							
On-demand availability		>>>>>>>	>>>>>>>	>>>>>>>			
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Detailed student records		>>>>>>>	>>>>>>>	>>>>>>>			
Test Security		>>>>>>>	>>>>>>>	>>>>>>>			
Multiple test forms			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Training / Instruction Approach							
Lecture / Text	X	>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Live Presenters (guest speakers)							
Self study		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Demonstration			>>>>>>>	>>>>>>			
Exhibit	-		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Guided Discussion	-						
Simulation – knowledge based			>>>>>>>	>>>>>>>			
Simulation - hardware							
Problem solving exercises			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Learning to Mastery		>>>>>>>	>>>>>>>	>>>>>>>>>			
Practice / drill		>>>>>>>	>>>>>>>	>>>>>>>			
Structured Review	set of			>>>>>>			
Feedback on performance			>>>>>>>	>>>>>>>			
Remediation			>>>>>>>	>>>>>>			
Group activities/collaborative tasks							
Testing Types							
Objective knowledge tests		>>>>>>>	>>>>>>>	>>>>>>>			
Essay							
Performance test –"paper" exercise			>>>>>>>>	>>>>>>>>			
Performance test – hardware simulation							
Performance test – hardware							
Oral testing							
No testing/Student course evaluation	Х	>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Graphics	^	L					
2D graphics still	X	>>>>>>>	>>>>>>>	>>>>>>>>			
3D graphics still			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
2D animation			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
3D animation				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
2D interactive animation				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
3D interactive animation							
Pre recorded video /films		Х	>>>>>>>>	>>>>>>>>			
Communications							
Audio		>>>>>>>>	>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Indirect discourse							
Assigned reading		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>			
Open Discussion Question and answer opportunities							

Technology Interactivity Factors

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Asynchronous Course	Computer Based Training						
Interactivity Factors	Level 1	Level 2	Level 3	Level 4			
interactivity ractors	Levell	Leverz	Levers	Level 4			
Administrative Requirements		· · · · · · · · · · · · · · · · · · ·					
Self pacing		>>>>>>>	>>>>>>>	>>>>>>			
Group training			ł				
On-demand availability		>>>>>>>	>>>>>>>	>>>>>>>			
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>			
Detailed student records							
Test Security							
Multiple test forms			>>>>>>>	>>>>>>			
Training / Instruction Approach							
Lecture / Text	X	>>>>>>>	>>>>>>>	>>>>>>			
Live Presenters (guest speakers)							
Self study		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>			
Demonstration			>>>>>>>	>>>>>>			
Exhibit			>>>>>>>	>>>>>>			
Guided Discussion							
Simulation – knowledge based			>>>>>>>	>>>>>>			
Simulation - hardware			1				
Problem solving exercises		>>>>>>>	>>>>>>>	>>>>>>			
Learning to Mastery		>>>>>>>	>>>>>>>	>>>>>>			
Practice / drill		>>>>>>>	>>>>>>>	>>>>>>			
Structured Review			>>>>>>>	>>>>>>			
Feedback on performance		>>>>>>>	>>>>>>>	>>>>>>			
Remediation			>>>>>>>	>>>>>>			
Group activities/collaborative tasks		1					
Testing Types							
Objective knowledge tests		>>>>>>>	>>>>>>>	>>>>>>			
Essay							
Performance test – "paper" exercise	-		>>>>>>>	>>>>>>>>			
Performance test – hardware simulation	-		-	>>>>>>			
Performance test – hardware	-						
Oral testing							
No testing/Student course evaluation	Х	>>>>>>>	>>>>>>>	>>>>>>>			
Graphics				I			
2D graphics still	X	>>>>>>>	>>>>>>>	>>>>>>>			
3D graphics still			>>>>>>>	>>>>>>>			
2D animation			>>>>>>>	>>>>>>>			
3D animation	-			>>>>>>>			
2D interactive animation				>>>>>>>			
3D interactive animation							
Pre recorded video /films		Х	>>>>>>>	>>>>>>>			
Communications		^		1			
Audio		>>>>>>>	>>>>>>>	>>>>>>			
Indirect discourse							
Assigned reading		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>			
Open Discussion				///////////////////////////////////////			
Question and answer opportunities							

Technology Interactivity Factors

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Short Worksheet: Development Time

	ort Worksheet: Refined				our of Instruction	
		a operational?			ed Training Level:	2
		Analysis	Design	Development		Sums
1	Percentage of Time Spent by Task Type by Level	.40	.20	.25	.15	
2	Multiply line 1 by average * hours200					
3	Average hrs. per phase	80	40	50	30	and t
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.61	.5	.8	.3	
5	Adjusted hrs. per phase. Multiply line 3 by line 4.	48	20	400	9	
	Total Labor Hours - sum across line 5			a de la companya de		117

* Average hours per hour of instruction

** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

¹ Given that this course will require a substantial amount of reorganization to make it suitable for distance learning from an instructional perspective, additional time will be needed during the analysis phase. possible time savings are reduced to 40%.

Short Worksheet: Development Time

Sh	ort Worksheet: Refined	Estimate of	f Developm	ent Hours Per H	our of Instruction				
Course Name: 1st Combined Operational Aeromedical Problems Course									
		-		Media: CBT Mul	timedia Lev	/el: 2			
		Analysis	Design	Development	Implementation	Sums			
1	Percentage of Time Spent by Task Type by Level	.40	.20	.25	.15	dert der T. St. H Hand			
2	Multiply line 1 by average * hours200		· · ·						
3	Average hrs. per phase	80	40	50	30				
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.6 ²	.5	.8	.3				
5	Adjusted hrs. per phase. Multiply line 3 by line 4.	48	20	40	9	<u>.</u>			
	Total Labor Hours - sum across line 5					117			

* Average hours per hour of instruction

** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

 $^{^2}$ Given that this course will require a substantial amount of reorganization to make it suitable for distance learning from an instructional perspective, additional time will be needed during the analysis phase. possible time savings are reduced to 40%.

Course	Cost	Estimation	Worksheet
--------	------	------------	-----------

	Course Cost Estimate Work	sheet: Web Base	d Training
		ourse Number: A	<u> </u>
1	Write the sum from Refined Estimate estimated number of hrs. per hr. of in	,	Hrs. 117
2	Average hourly labor cost in dollars		\$ 50
3	Multiple line 1 by line 2 and put the re	esults on line 3.	\$ 5850
4	Actual number of classroom equivale converted or developed.		Hrs. 68
5	Compression: If conversion to asyncl multiply line 4 by .7 (seven tenths) ar on line 5. If not a conversion to async skip line 5	nd put the results chronous delivery	Hrs. 48
6	Multiply line 3 by line 5 if a conversion asynchronous delivery OR line 3 by 1 conversion to asynchronous delivery on line 6.	\$ 280,800	
	Do not use lines 7 to 12 for any	costs that are to	be shared.
7	Infrastructure Costs		\$
8	Recurring Costs		\$
9	Delivery Labor Costs	· · · · · · · · · · · · · · · · · · ·	\$
10	Travel Costs		\$
11	Miscellaneous Costs (Electronic Jour	nal)	\$ 675
12	Add line 7 to 12		\$ 675
13	Total Cost - Add lines 6 and 12.		\$ 281,475
14	Number of potential students		# 1500
15	Average Cost Per Student Divide lin	e 13 by line 14	\$ 188

	Course Cost Estimate Wo	rksheet: CBT Mul	timedia
		Course Number: A	
1	Write the sum from Refined Estimate estimated number of hrs. per hr. of i	/	Hrs. 117
2	Average hourly labor cost in dollars		\$ 50
3	Multiple line 1 by line 2 and put the r	results on line 3.	\$ 5850
4	Actual number of classroom equival converted or developed.		Hrs. 68
5	Compression: If conversion to asyn multiply line 4 by .7 (seven tenths) a on line 5. If not a conversion to asyn skip line 5	ind put the results	Hrs. 48
6	Multiply line 3 by line 5 if a conversion asynchronous delivery OR line 3 by conversion to asynchronous delivery on line 6.	line 4 if not a	\$ 280,800
	Do not use lines 7 to 12 for any	costs that are to	be shared.
7	Infrastructure Costs		\$
8	Recurring Costs	· · · · · · · · · · · · · · · · · · ·	\$
9	Delivery Labor Costs		\$
10	Travel Costs		\$
11	Miscellaneous Costs (Electronic Jou	ırnal)	\$ 675
12	Add line 7 to 12		\$ 675
13	Total Cost - Add lines 6 and 12.		\$ 281,475
14	Number of potential students		# 1500
15	Average Cost Per Student Divide lin	ne 13 by line 14	\$ 188

Course Cost Estimation Worksheet

Separate worksheets are needed for each technology. Follow the instructions given on the worksheet.

Cost Estimate for a Single Course Over a Five Course Name: 1st Combined Operational				Course Number: A0111					
Aeromedical Problems Course									
Technology Selected Level			Level	2	Level 3	Level 4			
WBT			X						
CBT									
VTT	Low				High				
Other									
Cost Factors			Values			S	ource		
1. Labor hours year 1		56							
2. Labor hours year 2		56				echnology	Match Table		
3. Labor hours year 3		56				ivity Factors Table			
4. Labor hours year 4		56							
5. Labor hours year 5		56							
6. Subtotal		28080							
7. Average labor cost		\$50							
8. Total labor Cost over 5 yr.	period.	\$ 1,404,000							
Multiply line 6 by line 7									
Additional Development/ Del	ivery Co	ost	By Yea	ar					
9. Cost year 1		\$ 675		Data to S	upport Cos	st Analysis Worksheet			
10. Cost year 2		\$ 675				······			
11. Cost year 3		\$6	575	_	-		· · · · · · · · · · · · · · · · · · ·		
12. Cost year 4		\$6	675						
13. Cost year 5		\$6	575						
14. Total Additional Costs .									
Sum lines 9 to 13 and ente	r on	\$3	3,375						
line 14									
15. Total Course Cost. Add lines 8 and 14 and ent line 15		\$2	281,475						
 Average cost over 5 years. Divide line 15 by 5 and ent line 16. 		\$ 2	281,475						
17. Potential students year 1		15	500		From Cou	ırse Inform	ation Summary Sheet		
 Total potential students yea (multiply line 17 by 5. and enter on line 18) 	nd	75	00						
19. Average cost per student5. (divide line 15 by line enter on line 19)		•			Round up	to the nea	arest whole dollar		

Gary P. Wratten Surgical Symposium Conversion Analysis Gary P. Wratten Military Surgical Symposium

The course provides an opportunity for residents to present research efforts, update military surgeons on current surgical topics presented by national experts, and to encourage exchange between military surgeons.

Course Content Stability: Low The majority of the course focuses on advances in the field and research findings. As such the content changes yearly

General Presentation Style:

The standard method of presentation was lecture. One presenter showed a Video of approximately ninety seconds length in support of his presentation.

Instructional Aids:

Power Point visuals, 35mm slide or overheads supported all presentations.

Hands-on Activities: None

Degree of Instructional Interaction

Questions were encouraged and asked throughout the presentations. This was important as a learning technique to the resident presenters.

Relevant Instructional Value:

Unlike most PPSCP courses, the resident (student) presenters were the primary focus rather than the audience at large. This conference permitted new residents to practice presenting their research findings to an audience of other residents and staff physicians. While only staff physicians received CME credit (19) the primary beneficiaries of this course were the presenters. All attendees are pre-selected, consequently the number of participants is limited and would continue to be limited if converted to distance learning.

Recommendation

Do not convert.

While it is technically possible to convert this course to a distance learning using Video Teletraining, it is recommended that the course not be converted because little if any cost savings could be expected. If the decision were made to convert the course, the only media that could support it would be Video Teletraining. Since the presenters currently make up approximately 54% of the audience, a unique approach would be needed. The course could be divided into three segments separated by a period of time (for example one week) between sessions. This would allow student presenters to only spend one day presenting plus one day travel time. Excluding cost, the value of having the opportunity to present face-to-face has to be considered. Presenting before a television camera is a different environment and may not provide the type of experience that would be of most benefit to the resident surgeon presenters.

DISTANCE LEARNING CONVERSION REPORT FORM

_

Course Name: Gary P. Wratten Militar Symposium	y Surgical	Co	urs	e Num	ber:	A0116			
1. Instructional goals of the course the military to present their research ef presented by nationally known experts especially in reference to readiness iss	forts.b.t , and c.tc	o update i encouraç	milit ge e	ary sur	geon	is on current	surgical	l topics	in in
2. Frequency of course offering po	ar vear	# 1						Yes	No
3. Current length of course in hour		# 20	7	Con	vort	to DL?		165	X
4. Number of hours to be converte		<u># 20</u> # -0-	8						X
5. Number of registered students	,u	# -0- # 75		. בוווו	ance				^
6. Number of potential students th	at	# 15							
could benefit from the course	ai	# 100							
		# 100							
9. If item 8 = Yes, Specify									
Technology	Level 1	Level	2	Leve	3	Level 4	T		
WBT					. •				
CBT									
VTT	Low			High		X			
Other	LOW			riigii		<u>^</u>			
Labor Hours Estimation Method:	Short _	_ Long_	_ (Synch	ronc	ousX_			
	(Cost Data					a co validade da de		
10. Total Cost Year One				T	\$ 76	5,850			
11. Total Cost Year Two						3,850			
12. Total Cost Year Three						3,850			
13. Total Cost Year Four						3,850 3,850			
14. Total Cost Year Five						3,850			
15. Total costs year 1 to 5 (Sum	of lines	10 throu	ıgh	14)		52,250			
	:				<u> </u>	2.450			
16. Average cost, years 1 to 5 (div			a c	y 5)	\$ 70	0,450			
17. Total potential students over a			ام 2						
(multiply the number of potenti by 5.)	al studer	its (item t	o ai	sove)	4 E	00			
18. Average cost per potential s	tudanta	Vor E vor			# 5	00			
period.	luuent o	ver 5 yea	"						
(divide the value in line 15 by t	he value	in line 17	n		\$ 70	15			
)		φι				
Additio	nal Hard	ware/So	ftw	are Re	aui	red			
Item:						st per unit	Total	Cost	
Proposed Enhancement(s)	Cost						L		
	\$								
	\$								
	\$								
Total Enhancement Costs	\$								
	ı.								

Instructional Formats and Physical Training Requirements

Course Nan Gary P. Wratt	ne: ten Military Surgical	Symposium Course Number: A0116				
% of Course Using this Instructional Format	Format	Description	Physical Presence Required?			
52%	Lecture with questions/answer opportunities	A speaker/speakers present verbal information to an audience. The audience may ask questions regarding that information.				
	Panel Discussion	A selected group (often selected for their expertise or experience in a given area) discusses an issue in front of students. Students may ask questions about the ideas being presented.	No			
	Poster Session	A group of individuals presents material in a poster format. Students may read the material being presented, and ask questions about the material.	No			
	Small Group Discussion	Small groups of students (2~5) discuss an assigned topic.				
	Group Discussion	A larger group discusses an issue – usually led by a facilitator – with heavy emphasis on student participation.	?			
	Demonstration	Students observe the application of knowledge. In this case, students are not participating themselves.	?			
48%	Student Verbal Presentations	Students present verbal information to the larger group.	?			
	Student Procedural Presentations	Students present procedural information to the larger group.	?			
	Field Trip	Students visit an instructionally relevant site to observe activities or meet with individuals who present information in an applied setting.	?			
	Shop Activity	Hands-on technical tasks/procedures.	?			
	Lab Activity	Hands-on laboratory tasks/procedures.	?			

Course Information Summary Sheet

Course Name: Gary P. Wratten Military Surgical Symposium

Course Number: A0116

Length of course - number of hours of instruction: 20

Number of Registered Students: 75

Number of potential students that could benefit from this course: 100

Instructional goals of the course: a. To provide an opportunity for surgical residents and fellows in the military to present their research efforts. b. to update military surgeons on current surgical topics presented by nationally known experts, and c. to encourage exchange between military surgeons especially in reference to readiness issues and field surgery.

Frequency of Course Offering: once a year

Continuing Education Credit Offered? Only for attending staff **Number:** 19 physicians, not residents.

Administrative Requirements	Check		Chec
Self pacing		Detailed student records	
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit			
Training / Instruction Approach			
Lecture / Text	X	Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	
Self study		Structured Review	
Demonstration		Feedback on performance	
Exhibit		Remediation	
Guided Discussion		Group activities/collaborative tasks	
Simulation (roll play, in-basket)		······································	
Problem solving exercises			-
Testing Types			
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test – "paper"		No testing/Student course eval	
Performance test – hardware			-
Graphics			
2D graphics still	X	3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
		Pre recorded video /films	X ¹
Communications		· · · · · · · · · · · · · · · · · · ·	
Audio		Open Discussion	T
Indirect discourse		Question and answer opportunities	X
mun cot uiscourse			

¹ One non-student presenter used ninety seconds of video in his presentation. Video will not be used to determine technology of level of interactivity.

(Name) Gary P. Wratten Military Surgical Symposium			Technologies				
Administrative Requirements	Check	CBT	WBT	VTT			
Self pacing				1997 - 19			
Group training							
On-demand availability				e e e			
Open entry / open exit				1.1.1			
Detailed student records							
Test Security		l su sta					
Multiple test forms							
Training / Instruction Approach							
Lecture / Text	X						
Live Presenters (guest speakers)							
Self study							
Demonstration							
Exhibit							
Guided Discussion			le e				
Simulation – knowledge based						-	
Simulation - hardware						-	
Problem solving exercises							
Learning to Mastery				-			
Practice / drill							
Structured Review	-						
Feedback on performance							
Remediation							
Group activities/collaborative tasks	+						
Testing Types				I			
Objective knowledge tests	1				1		
Essay				1			
Performance test –"paper" exercise	+			a dia 1			
Performance test – hardware simulation							
Performance test – hardware							
Oral testing		1. A 1. A					
No testing/Student course evaluation							
Graphics				1		-L	
2D graphics still	X			1	[1	
3D graphics still	^						
2D animation	-						
3D animation	-						
2D interactive animation						1	
3D interactive animation	-	· · · · · · · · · · · · · · · · · · ·					
Pre recorded video /films	-						
Communications		1					
Audio	[<u> </u>		T		1	
Indirect discourse							
Assigned reading							
Open Discussion			. <u></u>				
Question and answer opportunities							
Question and answer opportunities	X				1	1	

Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Course Name: Gary P. Wratten Military Surgical Symposium	Course Number: A0116 Video Teletraining					
Synchronous Course						
Interactivity Factors	Level 1 Low					
Administrative Requirements						
Self pacing						
Group training		>>>>>>>				
On-demand availability						
Open entry / open exit						
Detailed student records						
Test Security		>>>>>>>				
Multiple test forms		>>>>>>>				
Training / Instruction Approach						
Lecture / Text	X	>>>>>>>				
Live Presenters (guest speakers)	<u> </u>	>>>>>>>				
Self study						
Demonstration		>>>>>>>				
Exhibit		>>>>>>>				
Guided Discussion						
Simulation – knowledge based		>>>>>>>				
Simulation - hardware						
Problem solving exercises	-					
Learning to Mastery						
Practice / drill	-					
Structured Review						
Feedback on performance						
Remediation						
Group activities/collaborative tasks						
Testing Types						
Objective knowledge tests						
Essay						
Performance test – "paper" exercise						
Performance test – hardware simulation						
Performance test – hardware	an ta Secondaria. Na secondaria di Anglia					
Oral testing No testing/Student course evaluation						
Graphics		>>>>>>				
2D graphics still	×					
	X	>>>>>>				
3D graphics still 2D animation		>>>>>>				
3D animation		>>>>>>				
• •		>>>>>>>				
2D interactive animation						
3D interactive animation						
Pre recorded video /films		>>>>>>				
Communications	1					
Audio		>>>>>				
Indirect discourse						
Assigned reading		>>>>>>				
Open Discussion						
Question and answer opportunities		Х				

Technology Interactivity Factors

Shaded blocks indicates factors NOT supported by that level of technology Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Calculation of Synchronous Training Costs

Course Name: Gary P. Wratten Military Surgical Symposium	Course Numbe	er: A0116	
	Costs:		
Labor	Session 1	Session 2	Session 3
Development Cost = (320 hrs.) x average hourly	003310111	00331011 2	06351011 3
rate (\$50)	\$ 5,350	\$ 5,350	\$ 5,300
Course Managers Studio Cost = (Total studio time	-	φ 0,000	φ 0,000
+ 1 hour for each day the course is offered) x			
number of times course is presented x average			
hourly rate (\$50)	\$ 400	\$ 450	\$ 300
Non-local Labor Cost = Number of non-local			
presenters) x (length of the course in days +1) x			
number of times offered x average daily rate (\$400	\$ 1,600	\$ 2,400	\$ 2,400
Moderator	\$ 350	\$ 400	\$ 250
Local Labor Cost + Number of local presenters x			
average hourly rate (\$50) X 2 X number of times			
course is offered.	\$ 100	\$ 200	\$ 100
Total Labor Costs per session	\$ 7,800	\$ 8,800	\$ 8,350
Additional Cost (any co	osts not captured	above)	<u> </u>
Total Per Diem =			
(length of course in days plus one travel day x number of non-local presenters) x			
(local daily per diem rate) x number of time the			
course will be presented.	\$ 3,740	\$ 5,440	¢0 700
Total Airfare = (Average Round Trip Airfare x	\$ 5,740	φ 5,440	\$2,720
number of non-local presenters) x number of times			
the course will be presented.	\$ 11,000	\$ 16,000	\$ 8000
Total dollar amount paid as honorariums	\$ 1,667	\$ 1,667	\$ 1,666
(Other)	\$ 16,407	\$ 23,107	\$ 12,386
(0.1.0.)	φ το, τοτ	ψ 20,107	φ 12,500
Total Estimated Cost: Add Total Per Diem,	Airfare, Labor C	Costs, and Addition	onal Costs
Total Labor Costs	\$ 24,950		
Total Per Diem	\$ 11,900		
Total Airfare	\$ 35,000		
Total paid as honorariums	\$ 5,000		
(other)	\$ -0-		
TOTAL COURSE COST Year 1	\$ 76,850		
Cost Per Student = Total course costs divided by			
potential number of students	\$ 769		

 Student presenters not included in labor costs.

- 2. Cost of a Moderator included.
- 3. Per diem includes costs of student and non student presenters.
- 4. Air fair estimated at \$1000 round trip.
- 5. Total honorariums of \$5000 divided between the three sessions.
- 6. While the possible number of attendees is 100 almost half may be student presenters. Since part of the "learning" includes answering questions the focus is on the presenter (many questioners to one learner) rather than the audience (one instructor to many learners) the need for a small class is not as significant as it would be in a typical class situation.

Cost Estimate for a Single Course Over a Five Year Period

Course Name: Gary P. Wratten Mil Symposium	itary Sι	ırgical	Co	ourse Numb	er: A0116	
Technology Selected	Level	1 Level	2	Level 3	Level 4	
WBT	,					
CBT						
VTT	Low	•		High X		
Other						
Cost Factors		Values			Sour	ce
1. Labor hours year 1		499				
2. Labor hours year 2		339		[−] Course T	echnoloav	Match Table
3. Labor hours year 3		339				vity Factors Table
4. Labor hours year 4		339		-		,
5. Labor hours year 5		339				
6. Subtotal		1855				
7. Average labor cost		\$ 50				
8. Total labor Cost over 5 yr. per	hoi	-				
Multiply line 6 by line 7		\$ 92,750				
Additional Development/ Delive	ry Cos	st By Yea	r			
9. Cost year 1		\$ 51,900		Data to S Workshee	upport Cos et	t Analysis
10. Cost year 2		\$ 51,900				
11. Cost year 3		\$ 51,900				
12. Cost year 4		\$ 51,900				
13. Cost year 5		\$ 51,900				
14. Total Additional Costs . Sum lines 9 to 13 and enter of line 14	n	\$ 259,500				
15. Total Course Cost. Add lines 8 and 14 and enter 0 line 15	on	\$ 352,250				
16. Average cost over 5 years. Divide line 15 by 5 and enter o line 16.	on	\$ 70,450				
17. Potential students year 1		100		From Course Information Summary Sheet		
 Total potential students year 1 (multiply line 17 by 5. and enter on line 18) 		500				
19. Average cost per student yr.5. (divide line 15 by line 18 enter on line 19)		\$ 705		Round up	to the nea	rest whole dollar

Internal Medicine Conversion Analysis

INTERNAL MEDICINE COURSE

Course Purpose:

To present the latest research and developments in the field of internal medicine. Course Content Stability:

Given that this course presents the latest developments in the field of internal medicine, the content material changes from year to year.

General Presentation Style: Lecture

This course could best be described as a "conference". That is, the information was delivered using a lecture format as the primary vehicle in which one instructor presented information to many learners.

Instructional Aids: Heavy reliance on 35 mm and PowerPoint slides outlining the lecture, or presenting graphs showing research results and pictures of symptoms associated with various conditions. In addition, many of the instructors provided handouts with supplemental information relevant to the topic they were addressing.

Hands-on Activities:

Degree of Instructional Interaction:

During the plenary sessions, students were instructed to hold their questions until the end. The instructors were then told to meet with students with questions at a particular location during breaks. There were opportunities for the students to ask questions during the breakout sessions, and the degree to which this interaction was engaged in varied from instructor to instructor, and from student to student. In general, these questions concerned points of clarification, and served to allow the learner to better understand how to apply the information in a real world situation. The question/answer periods were generally limited to an exchange between an individual student and the instructor, such that the interaction did not expand into a general discussion period involving several students.

Relevant Instructional Value: Moderate

This course provides a significant amount of information, but with a goal of making the listeners familiar with the topic. Should the students wish to apply any of the information that was provided, it is doubtful that this could be wisely accomplished without further researching the topic independently. The main thing to be gained from attending this course (according to the POC) was an opportunity to network, and to make contacts among peers.

Recommendation:

Convert the course to Web Based Training supplemented by an Electronic Journal

The internal Medicine course was delivered in a standard large conference format, a plenary session in the morning and breakout sessions in the afternoon where the students could attend most of the sessions being conducted as they wished. Some "workshop" sessions were by invention only, which focused on such topics as American College of Physicians (ACP) chapter business, and Army internal medicine residency curriculum development. Other sessions identified as workshops were actually panel discussions.

Considering the plenary and breakout sessions, the conference provided a total of 72+ hours of presentations. Some 116 fifteen minute presentations were included for a total of 29 hours of fifteen minute presentations. Of the 12 hours of time devoted to the plenary sessions some 5 hours were devoted to ACP business, 10 fifteen minute presentations of papers submitted for competition, and various awards and recognition of service.

A maximum of 21 Continuing Medical Education (CME) credit could be earned at this conference.

Procedural Recommendations: This course can be converted to Web Based Training at a very low cost given the following:

1. All the fifteen minute presentations as well as some six (6) hours of longer presentation which do not specifically address the purpose of the course should be delivered through an electronic journal.

2. Closed workshops (working groups), which are not intended for student participation, cannot be converted to distance learning and another venue should be found for these activities.

Excluding the above items some 30 hours of content remains which includes the common core (plenary sessions) and the breakouts (specialty sessions) Because of the 10 specialty sessions (which can change in number from year to year), the use of VTT is not recommended. The course would need to be offered multiple times, or the specialty sessions would need to be offered sequentially which would create a significant scheduling problem in identifying which sites are needed and when. The large number of potential participants (800) who are distributed worldwide, would add to the scheduling problem. While the per student cost of VTT is less than Web Based Training (\$40 vs. \$68) if presented only once, the administrative and scheduling problems would very likely result in a much lower attendance and completion rate.

The use of a Web Based Training approach allows for self-registration, and open entry/open exit use. This would significantly reduce the administrative burden as well as being more adaptable to the work environment. Also the courseware could be easily converted to CBT Multimedia, at minimal cost, for any participants who do not have Internet access.

The 30 instructional hours recommended for conversion can be assigned by the Program Officer to a common core or specialty option as appropriate.

Conversion of each fifteen-minute presentation and other papers to an electronic journal should take approximately 45 minutes, to include scanning, formatting, and indexing. Total labor time for this task should be approximately 92 hours.

The conversion of this course should result in a yearly 70% saving over current costs. This saving is approximately equal to the current student transportation cost, which is some 75% of current expenditures.

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: 14th Annual ACP/Army Regional	Course Number: A0126
Meeting: Internal Medicine	

1. Instructional goals of the course : To present the latest research and developments in the field of internal medicine.

2. Frequency of course offering per year:	#	1			Yes	No
3. Current length of course in hours	#	72	7.	Convert to DL?	X	
4. Number of hours to be converted	#	30	8.	Enhance?	X	
5. Number of registered students	#	300				1
 Number of potential students that could benefit from the course 	#	800				

9. If item 8 = Yes, Specify: Production of an Electronic Journal									
Technology	Level 1	Level 2	Level 3	Level 4	<u></u>				
WBT	X								
CBT									
VTT	Low		High						
Other									

Labor Hours Estimation Method: Short X Long Synchronous

Cost Data		
10. Total Cost Year One	\$ 53,950	
11. Total Cost Year Two	\$ 53,950	
12. Total Cost Year Three	\$ 53,950	
13. Total Cost Year Four	\$ 53,950	
14. Total Cost Year Five	\$ 53,950	
15. Total costs year 1 to 5 (Sum of lines 10 through 14)	\$ 269,750	
16. Average cost, years 1 to 5 (divide value in line 15 by 5)	\$ 53,950	
17. Total potential students over a five year period.		
(multiply the number of potential students (item 6 above)		
by 5.)	# 4000	
18. Average cost per potential student over 5 year		
period.		
(divide the value in line 15 by the value in line 17)	\$ 68	
Additional Hardware/Software R	equired	·

Additional Hardware/Software Required

Item:		Cost per unit	Total Cost
Proposed Enhancement(s)	Cost		
Electronic Journal	\$ 4,600 per year		
	\$		· · · · · · · · · · · · · · · · · · ·
	\$		
Total Enhancement Costs	\$ 23,000 over five years		
		an a carrier and	

Instructional Formats and Physical Training Requirements

Course Na 14th Annua Medicine		onal Meeting: Internal	Course Number: al A0126				
% of Course Using this Instructional Format	Format		Description	Physical Presence Required?			
52%	Lecture with questions/answer opportunities	A speaker/speakers present may ask questions regarding	A speaker/speakers present verbal information to an audience. The audience may ask questions regarding that information.				
5%	Panel Discussion	area) discusses an issue in	A selected group (often selected for their expertise or experience in a given area) discusses an issue in front of students. Students may ask questions about the ideas being presented. A group of individuals presents material in a poster format. Students may read the material being presented, and ask questions about the material.				
	Poster Session						
	Small Group Discussion	Small groups of students (2~	5) discuss an assigned topic.	?			
3%	Group Discussion	A larger group discusses an emphasis on student particip	?				
	Demonstration	Students observe the applica participating themselves.	ation of knowledge. In this case, students are not	?			
40%	Student Verbal Presentations	Students present verbal infor	mation to the larger group.	?			
	Student Procedural Presentations	Students present procedural	information to the larger group.	?			
	Field Trip		Students visit an instructionally relevant site to observe activities or meet with individuals who present information in an applied setting.				
	Shop Activity	Hands-on technical tasks/pro	cedures.	?			
	Lab Activity	Hands-on laboratory tasks/pr	ocedures.	?			

Course Information Summary Sheet

Course Name: 14th Annual ACP/Army Regional Meeting: Internal Medicine

Course Number: A0126

Length of course - number of hours of instruction: 72

Number of Registered Students: 300

Number of potential students that could benefit from this course: 800

Instructional goals of the course: To present the latest research and developments in the field of internal medicine.

Frequency of Course Offering: Once a year

Continuing Education Credit Offered? yes

Number: 21

For each item listed, check ✓ row marked "Check" if observed or documented.

Administrative Requirements	Check		Chec
Self pacing		Detailed student records	
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit			
Training / Instruction Approach		·	
Lecture / Text	X	Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	
Self study		Structured Review	
Demonstration		Feedback on performance	
Exhibit		Remediation	
Guided Discussion		Group activities/collaborative tasks	
Simulation (roll play, in-basket)		· · · · · · · · · · · · · · · · · · ·	
Problem solving exercises			
Testing Types			
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test "paper"		No testing/Student course	X
Performance test – hardware			
Graphics			
2D graphics still	X	3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
		Pre recorded video /films	
Communications	•		
Audio		Open Discussion	
Indirect discourse		Question and answer	
Assigned reading			
		l	

Course (Name) 14th Annual ACP/Army Regional 1	Meeting:		Т	echnolog	ies	
Internal Medicine	e			5		
Administrative Requirements	Check	СВТ	WBT	VTT		
Self pacing						
Group training						
On-demand availability						
Open entry / open exit						
Detailed student records	-			-	····	-
Test Security						
Multiple test forms					-	-
Training / Instruction Approach						
Lecture / Text	X					
Live Presenters (guest speakers)			din seg			1
Self study		· · · ·				
Demonstration	1					-
Exhibit	1					
Guided Discussion						
Simulation – knowledge based						
Simulation - hardware	-		1.0			
Problem solving exercises						
Learning to Mastery						
Practice / drill					· · · · · · · · · · · · · · · · · · ·	
Structured Review						
Feedback on performance						
Remediation		1				
Group activities/collaborative tasks						
Testing Types				_	_l	
Objective knowledge tests						
Essay						
Performance test –"paper" exercise						
Performance test – hardware simulation						
Performance test – hardware						
Oral testing						
No testing/Student course evaluation	X					
Graphics		1			1	
2D graphics still	X				T	[
3D graphics still						-
2D animation						
3D animation	1					
2D interactive animation						
3D interactive animation	1		-			
Pre recorded video /films	1					-
Communications		1			1	
Audio					1	
Indirect discourse				1		
Assigned reading					1	
Open Discussion	-					
Question and answer opportunities						+

Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Asynchronous Course	V			
Interactivity Factors	Level 1	Level 2	Level 3	Level 4
Administrative Requirements	1			
Self pacing		>>>>>>>	>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Group training				
On-demand availability		>>>>>>>	>>>>>>>	>>>>>>>
Open entry / open exit		>>>>>>>	>>>>>>>>	>>>>>>>
Detailed student records		>>>>>>>	>>>>>>>>	>>>>>>>
Test Security		>>>>>>>	>>>>>>>	>>>>>>
Multiple test forms			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Training / Instruction Approach				
Lecture / Text	X	>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Live Presenters (guest speakers)	^			
Self study		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Demonstration			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Exhibit			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Guided Discussion				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Simulation – knowledge based	-			
Simulation - hardware	- 10 Mar 10		>>>>>>>	>>>>>>
Problem solving exercises	n de la composition de la comp			· .
Learning to Mastery			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Practice / drill		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Structured Review		>>>>>>>	,,,,,,,,,,	>>>>>>>>
				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Feedback on performance Remediation	te de la companya de		>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Group activities/collaborative tasks		°		
Testing Types	1			T
Objective knowledge tests		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Essay Performance test –"paper" exercise				
			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>
Performance test – hardware simulation				
Performance test – hardware				
Oral testing				
No testing/Student course evaluation	X	>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Graphics	T			T
2D graphics still	X	>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
3D graphics still 2D animation	-		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
	-		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
3D animation				>>>>>>>>>
2D interactive animation				>>>>>>>
3D interactive animation				
Pre recorded video /films			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Communications	<u></u>	1	T	T
Audio		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Indirect discourse	$-\epsilon_{\rm eq}$			
Assigned reading		>>>>>>>	>>>>>>>	>>>>>>>
Open Discussion				
Question and answer opportunities				

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Asynchronous Course	Con	nputer B	ased Trai	ning
Interactivity Factors	Level 1	Level 2	Level 3	Level 4
Administrative Requirements				
Self pacing		>>>>>>>>	>>>>>>>	>>>>>>
Group training				
On-demand availability		>>>>>>>	>>>>>>>	>>>>>>
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>
Detailed student records				
Test Security				
Multiple test forms			>>>>>>>	>>>>>>>
Training / Instruction Approach				
Lecture / Text	Х	>>>>>>>	>>>>>>>	>>>>>>
Live Presenters (guest speakers)				
Self study		>>>>>>>	>>>>>>>	>>>>>>>
Demonstration			>>>>>>>	>>>>>>>
Exhibit			>>>>>>>	>>>>>>>
Guided Discussion				
Simulation – knowledge based			>>>>>>>	>>>>>>>
Simulation - hardware			1	
Problem solving exercises		>>>>>>>	>>>>>>>	>>>>>>>
Learning to Mastery		>>>>>>>	>>>>>>>	>>>>>>>
Practice / drill		>>>>>>>	>>>>>>>	>>>>>>>
Structured Review			>>>>>>>	>>>>>>>
Feedback on performance		>>>>>>>	>>>>>>>	>>>>>>>
Remediation			>>>>>>>	>>>>>>
Group activities/collaborative tasks				
Testing Types	j "	·		
Objective knowledge tests		>>>>>>>	>>>>>>>	>>>>>>
Essay				
Performance test – "paper" exercise	. *		>>>>>>>	>>>>>>>>
Performance test – hardware simulation				>>>>>>
Performance test – hardware				
Oral testing				
No testing/Student course evaluation	Х	>>>>>>>>	>>>>>>>	>>>>>>>
Graphics	1 -	ι	1	L
2D graphics still	X	>>>>>>>	>>>>>>>	>>>>>>
3D graphics still			>>>>>>>	>>>>>>
2D animation			>>>>>>>	>>>>>>
3D animation				>>>>>>
2D interactive animation				>>>>>>
3D interactive animation				
Pre recorded video /films			>>>>>>>	>>>>>>
Communications				I
Audio		>>>>>>	>>>>>>	>>>>>>
Indirect discourse				
Assigned reading		>>>>>>>	>>>>>>	>>>>>>
Open Discussion				
Question and answer opportunities				

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support tha factor.

Synchronous Course		eletraining
Interactivity Factors	Level 1 Low	Level 2 High
Administrative Requirements		
Self pacing		
Group training		>>>>>>
On-demand availability		
Open entry / open exit	a second a second a	
Detailed student records		
Test Security		>>>>>>>
Multiple test forms	· · · · · · · · · · · · · · · · · · ·	>>>>>>>
Training / Instruction Approach		
Lecture / Text	X	>>>>>>
Live Presenters (guest speakers)	^	>>>>>>
Self study		
Demonstration		
Exhibit		>>>>>
Guided Discussion		>>>>>>
Simulation – knowledge based Simulation - hardware		>>>>>>
	-	
Problem solving exercises		
Learning to Mastery		
Practice / drill		
Structured Review	-	
Feedback on performance		
Remediation		
Group activities/collaborative tasks		
Testing Types	· · · · · · · · · · · · · · · · · · ·	
Objective knowledge tests		
Essay		
Performance test – "paper" exercise		
Performance test – hardware simulation		
Performance test – hardware		
Oral testing		
No testing/Student course evaluation	X	>>>>>>
Graphics		
2D graphics still	X	>>>>>>
3D graphics still		>>>>>>
2D animation		>>>>>>
3D animation		>>>>>>
2D interactive animation		
3D interactive animation		
Pre recorded video /films		>>>>>>
Communications		
Audio		>>>>>>
Indirect discourse		
Assigned reading		>>>>>>
Open Discussion		

Shaded blocks indicates factors NOT supported by that level of technology Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Short Worksheet: Development Time

	Short Worksheet: Refined Estimate of Development Hours Per Hour of Instruction Course Name: 14th Annual ACP/Army Regional Meeting: Internal Medicine							
			Ç	ledia: Web Bas		l: 1		
		Analysis	Design	Development	Implementation	Sums		
1	Percentage of Time Spent by Task Type by Level	.40	.20	.25	.15			
2	Multiply line 1 by average * hours100							
3	Average hrs. per phase	40	20	25	15			
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3			
5	Adjusted hrs. per phase. Multiply line 4 3 by line 4.	12	10	20	4.5			
	Total Labor Hours - sum across line 5					47		

* Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Short Worksheet: Development Time

	Short Worksheet: Refined Estimate of Development Hours Per Hour of Instruction Course Name: 14th Annual ACP/Army Regional Meeting: Internal Medicine											
	Media: Computer Based Training Level: 1											
	Analysis Design Development Implementation Su											
1	Percentage of Time Spent by Task Type by Level	.40	.20	.25	.15							
2	Multiply line 1 by average * hours100											
3	Average hrs. per phase	40	20	25	15							
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3							
5	Adjusted hrs. per phase. Multiply line 3 by line 4.	12	10	20	4.5	<u>n an ain an an</u>						
	Total Labor Hours - sum across line 5					47						

* Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

	se Cost Estimation Worksheet Course Cost Estimate Worksheet: Web E	Rased Training
	rse Name: 14th Annual ACP/Army Course Numb	
Regio	nal Meeting: Internal Medicine	
1	Write the sum from Refined Estimate Worksheet, estimated number of hrs. per hr. of instruction.	Hrs 47
2	Average hourly labor cost in dollars	\$ 50
3	Multiple line 1 by line 2 and put the results on line	
4	Actual number of classroom equivalent hours to b converted or developed.	HIS. 30
5	Compression: If conversion to asynchronous delive multiply line 4 by .7 (seven tenths) and put the rest on line 5. If not a conversion to asynchronous del skip line 5	sults Hrs 21
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery OR line 3 by line 4 if not a conversion to asynchronous delivery. Put the resuon line 6.	
	Do not use lines 7 to 12 for any costs that a	re to be shared.
7	Infrastructure Costs	\$
8	Recurring Costs	\$
9	Delivery Labor Costs	\$
10	Travel Costs	\$
11	Miscellaneous Costs	\$
12	Add line 7 to 12	\$
13	Total Cost - Add lines 6 and 12.	\$ 49,350
14	Number of potential students	# 800
15	Average Cost Per Student Divide line 13 by line	14 \$ 62

Course Cost Estimation Worksheet

	se Cost Estimation Worksheet Course Cost Estimate Worksheet: Computer Ba	sed Training					
	rse Name: 14th Annual ACP/Army nal Meeting: Internal Medicine						
1	Write the sum from Refined Estimate Worksheet, estimated number of hrs. per hr. of instruction.	Hrs 47					
2	Average hourly labor cost in dollars	\$ 50					
3	Multiple line 1 by line 2 and put the results on line 3.	\$ 2350					
4	Actual number of classroom equivalent hours to be converted or developed.	Hrs. 30					
5	Compression: If conversion to asynchronous delivery multiply line 4 by .7 (seven tenths) and put the results on line 5. If not a conversion to asynchronous delivery skip line 5						
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery OR line 3 by line 4 if not a conversion to asynchronous delivery. Put the results on line 6.	\$ 49,350					
	Do not use lines 7 to 12 for any costs that are to	be shared.					
7	Infrastructure Costs	\$					
8	Recurring Costs	\$					
9	Delivery Labor Costs	\$					
10	Travel Costs	\$					
11	Miscellaneous Costs	\$					
12	Add line 7 to 12	\$					
13	Total Cost - Add lines 6 and 12.	\$ 49,350					
14	Number of potential students	# 800					
15	Average Cost Per Student Divide line 13 by line 14	\$ 62					

Course Cost Estimation Worksheet

Calculation of Synchronous Training Costs

Course Name: 14th Annual ACP/Army Regional	Course Number: A0126
Meeting: Internal Medicine	
	Costs:
Development Cost = (320 hrs.) x average hourly	
rate (\$50)	\$ 16,000
Course Managers Studio Cost = (Total studio time	
+ 1 hour for each day the course is offered) x	
number of times course is presented x average	
hourly rate (\$50)	\$ 1650
Non-local Labor Cost = Number of non-local	
presenters) x (length of the course in days +1) x	
number of times offered x average daily rate (\$400	\$ 4000
Local Labor Cost + Number of local presenters x	
average hourly rate (\$50) X 2 X number of times	
course is offered.	\$2800
Total Labor Costs	\$ 24,450
	osts not captured above)
Total Per Diem =	
(length of course in days plus one	
travel day x number of non-local presenters) x	
(local daily per diem rate) x number of time the	
course will be presented.	\$ 1700
Total Airfare = (Average Round Trip Air Fair x	
number of non-local presenters) x number of times	
the course will be presented.	\$ 1000
Total dollar amount paid as honorariums	\$ -not provided-
(Other) electronic journal	\$4,600
Total Estimated Cost: Add Total Per Diem,	Air Fair, Labor Costs, and Additional Costs.
Total Labor Costs	\$ 24,450
Total Per Diem	\$ 1,700
Total Airfare	\$ 1,000
Total paid as honorariums	\$ -not provided-
(other) electronic journal	\$ 4,600
TOTAL COURSE COST Year 1	\$ 31,750
Cost Per Student = Total course costs divided by	
potential number of students	\$ 40

Note:

- The course, if offered sequentially, would require 3.75 days assuming 8 hours attendance per day.
- While the course lists four days, the first day is simply registration which can be done on the morning of the second day.
- Number of presenters determined by assuming one hour per presentation.
- Number of non-local presenters was determined as an equivalent percentage of the current number of non-local presenters excluding fifteen minute presentations and other presentations not recommended for conversion.
- Information on instructor travel not provided in Administrators Survey. No coast to coast travel noted. Assume \$500 round trip.

Cost Estimate for a Single Course Over a Five Year Period

Course Name: 14th Annual ACP/. Meeting: Internal Medicine				ourse Numb	er: A0126			
Technology Selected	Level 1	Level	2	Level 3	Level 4			
WBT	X							
CBT		_						
VTT	Low			High				
Other								
Cost Factors		Values			50	urce		
1. Labor hours year 1		987	•					
2. Labor hours year 2		987 987		Course T	ochnology	Match Table		
3. Labor hours year 3		<u>987</u> 987				ity Factors Table		
4. Labor hours year 4		987 987			yy meraolin	ny racions rable		
5. Labor hours year 5		987		-				
6. Subtotal		4934						
7. Average labor cost		\$ 50						
8. Total labor Cost over 5 yr. per	iod							
Multiply line 6 by line 7	\$	246,750						
Additional Development/ Delive	erv Cos	t Bv Yea	ar					
9. Cost year 1		4,600		Data to S	upport Cost	Analysis Worksheet		
10. Cost year 2		4,600						
11. Cost year 3		4,600		Cost for production of Electronic Journal				
12. Cost year 4		4,600						
13. Cost year 5		4,600						
14. Total Additional Costs .								
Sum lines 9 to 13 and enter o line 14	n \$	\$ 23,00						
15. Total Course Cost. Add lines 8 and 14 and enter line 15	on \$	\$ 269,750						
16. Average cost over 5 years. Divide line 15 by 5 and enter o line 16.		53,950						
17. Potential students year 1		300		From Cou	ırse Informa	ation Summary Sheet		
 Total potential students year 1 (multiply line 17 by 5. and enter on line 18) 	4	000						
19. Average cost per student yr.5. (divide line 15 by line 18 enter on line 19)		68		Round up to the nearest whole dollar				

Multidisciplinary Approach to Head and Neck Trauma Conversion Analysis

MULTIDISCIPLINARY APPROACH TO HEAD AND NECK TRAUMA

Course Purpose: Gather specialists concerned with trauma to the head and neck. Discuss recent techniques, research and other critical issues. **Course Content Stability:** Low Topics will change yearly. Content and topics will change depending on current research and developments. **General Presentation Style:** Distributive The information was delivered using a lecture format as the primary vehicle in which one (1) instructor presented information to many learners. Instructional Aids: Heavy reliance on 35 mm slides. In addition, most presenters provided handouts with supplemental information relevant to the topic they were addressing. Hands-on Activities: None **Degree of Instructional Interaction:** The presentations moved quickly. There was no opportunity for the students to ask questions during the presentations. At the end of each half-day, the students could ask questions of available speakers in a question and answer session. The question/answer periods were limited by the availability of the presenters at the question period. **Relevant Instructional Value:** Hiah Information presented was relevant to both peacetime and wartime activities of the military participants. The course was designed for and presented to physicians involved in the care of patients who have sustained trauma to the head and neck, primarily otolaryngologists/ear, nose and throat physicians. Content was not military specific. **Recommendation:** Based on information received from course personnel, do not convert to Distance Learning. See Note below. Technically, this course is a good candidate for conversion to Web based or computer based training. However, if the cost is to be amortized only among the small number of military participants, it would not be cost-effective. An estimated 45 civilian attendees paid a registration fee of \$150 and military attendees paid a \$75 registration fee. Fourteen vendors (pharmaceutical companies, book publishers, etc.) provided "monetary effort" of approximately \$500 each. Vendor funds were used for daily breakfast buffets during which a speaker presented and breaktime snacks. Considering civilian registration and vendor contributions, a total of approximately \$13,750 in funds above and beyond those provided through the PPSCP were made available to conduct the course. (Military registration was not considered in this figure, because it was reimbursed to the participants when they filed their travel vouchers.) Because vendor contribution might be limited when converting the course, and potential for collection of civilian registration fees would be eliminated, it appears that the relative costs of conversion would increase. However, if it were not held in residence, there would be no requirement for snacks and breakfast. Web-based or computer-based training is estimated to be \$21,385 per year, which is approximately \$6,000 per year more than the estimated current cost of \$16,000 (not counting food and snacks). VTT development would not be possible at Madigan Army Medical Center since it is not a Distance Learning Center and could not originate VTT training. Costs for conversion to Web-based training at Level 1 are provided on the following sheets.

NOTE: The content and structure of this course is ideal for conversion to Web-based training. The recommendation not to convert was made based on the cost analysis data provided by the Course Project Officer that results in a per-student conversion figure that is not cost-effective. The potential target audience identified by the Project Officer was something under 100 (apparently reflecting only the size of the military ENT physician specialty group). However, the material presented (primarily new techniques and procedures for dealing with acute and long-term treatment of injuries to the head and neck) is applicable to a much larger audience. This includes military and civilian physicians practicing worldwide in Trauma/ Emergency Department settings, Oral and Plastic Surgeons, Dentists, and other professional and paraprofessionals dealing with this patient population. In fact, paramedics from the Madigan Emergency Department were invited to attend this course. If this wider audience is considered, the perstudent cost drops dramatically and would most certainly support conversion to distance learning.

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: Multidisciplinary App and Neck Trauma	roach to He	ad Cou	irse	Num	ber:	A0156			
1. Instructional goals of the co	urse: Gath	er speciali	sts (conce	rned v	vith trauma t	o the he	ad and	
neck. Discuss recent techniques, res	earch and c	other critic	al is	sues.					
2. Frequency of course offering	oer year:	# 1						Yes	No
3. Current length of course in hou	ırs	# 13	7.	Cor	nvert [·]	to DL?			X
4. Number of hours to be convert	ed	#0	8.	Enh	nance	?			X
5. Number of registered students		# 88							
6. Number of potential students t	hat								1
could benefit from the course		# 125							
9. If item 8 = Yes, Specify:									
Technology	Level 1	Level	2	Leve	el 3	Level 4			
WBT									
CBT									
VTT	Low			High					
Other									
Cost Estimate				ised 1	Train	ing, Level	1		
Labor Hours Estimation Method	i: Short _)	X_ Long		Sync	:hron	ous			
·····									
	C	Cost Data	I						
10. Total Cost Year One					\$ 21,385				
11. Total Cost Year Two		·			\$ 21,385				
12. Total Cost Year Three	·				\$ 21,385				
13. Total Cost Year Four					\$ 21,385				
14. Total Cost Year Five	e				\$ 21,385				
15. Total costs year 1 to 5 (Su	m of lines	10 throu	igh	14)	\$ 70	6,925			
		in line 41	- 6.	. 5 \	6 04	205			
16. Average cost, years 1 to 5 (d 17. Total potential students over	ivide value	in line 1:	o Dy	<u>()</u>	\$ Z 1	,385			
(multiply the number of poten			s ob						
by 5.)			au	love	# 62	5	#310	(militar)	
18. Average cost per potential	student o	ver 5-ves) <i>r</i>		# 02		#310	(mintar)	y)
period.	Stadent V	ver o-yee							
(divide the value in line 15 by	the value	in line 17)		\$ 17	1.08	\$344.	91 (mil	itary)
Additi	onal Hard	ware/So	itwa	are R	eauir	red			
Item:						t per unit	Total	Cost	
								in	
Proposed Enhancement(s)	Cost				L				
	\$								
	\$								
	\$				• •				
Total Enhancement Costs	\$	·····				••••••••••••••••••••••••••••••••••••••			
	<u> </u>					·····			

Instructional Formats and Physical Training Requirements

% of Course Using this Instructional Format	Format	Description	Physical Presence Required?
100%	Lecture with questions/answer opportunities	A speaker/speakers present verbal information to an audience. The audience may ask questions regarding that information.	No
	Panel Discussion	A selected group (often selected for their expertise or experience in a given area) discusses an issue in front of students. Students may ask questions about the ideas being presented.	No
	Poster Session	A group of individuals presents material in a poster format. Students may read the material being presented, and ask questions about the material.	No
	Small Group Discussion	Small groups of students (2~5) discuss an assigned topic.	?
	Group Discussion	A larger group discusses an issue – usually led by a facilitator – with heavy emphasis on student participation.	?
	Demonstration	Students observe the application of knowledge. In this case, students are not participating themselves.	?
	Student Verbal Presentations	Students present verbal information to the larger group.	?
	Student Procedural Presentations	Students present procedural information to the larger group.	?
	Field Trip	Students visit an instructionally relevant site to observe activities or meet with individuals who present information in an applied setting.	?
· · · · · ·	Shop Activity	Hands-on technical tasks/procedures.	. ?
	Lab Activity	Hands-on laboratory tasks/procedures.	?

Course Information Summary Sheet

Course Name: Multidisciplinary Approach to Head and Neck Trauma

Course Number: A0156

Length of course - number of hours of instruction: 13

Number of Registered Students: 88 (approximately 50% military)

Number of potential students that could benefit from this course: 125 (assume 62 military)

Instructional goals of the course: Gather specialists concerned with trauma to the head and neck. Discuss recent techniques, research and other critical issues.

Frequency of Course Offering: Once a year

Continuing Education Credit Offered? Yes

Number: 13

Administrative Requirements	Check		Check
Self pacing		Detailed student records	
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit			1
Training / Instruction Approach			
Lecture / Text	X	Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	
Self study		Structured Review	
Demonstration		Feedback on performance	
Exhibit	1	Remediation	1
Guided Discussion		Group activities/collaborative tasks	
Simulation (roll play, in-basket)			
Problem solving exercises			
Testing Types			
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test – "paper"		No testing/Student course eval.	X
Performance test – hardware			
Graphics			
2D graphics still	X	3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
		Pre recorded video /films	X
Communications			
Audio		Open Discussion	
Indirect discourse		Question and answer	
Assigned reading			
	1		

Note: Video was used during one thirty minute presentation (>4%) and will not be used to determine technology or level of interactivity.

Course Multidisciplinary Approach to Head and Neck Trauma			Technologies					
Administrative Requirements	CBT	WBT	VIT					
Self pacing		11.11.11.11.11.11.11.11.11.11.11.11.11.	a a consideration of a straight of the	" had in a share-ender	i i seta antinan'n statistica			
Group training					ŧ			
On-demand availability			Ì					
Open entry / open exit								
Detailed student records						<u> </u>		
Test Security			· · · · · ·		 			
Multiple test forms	<u> </u>							
Training / Instruction Approach	: : : : : : : : : : : : : : : : : : : :	tu seneru		: 1945년				
Lecture / Text	X		n men senara i		201321501			
Live Presenters (guest speakers)								
Self study								
Demonstration								
Exhibit	1							
Guided Discussion			1		1			
Simulation – knowledge based								
Simulation - hardware	<u> </u>							
Problem solving exercises					h			
Learning to Mastery								
Practice / drill								
Structured Review								
Feedback on performance	+					<u> </u>		
Remediation	+		<u> </u>		l	<u> </u>		
Group activities/collaborative tasks				1	4			
Testing Types				l PARSION		06.014		
Objective knowledge tests	1		الىكىكى بىرى يەر بىرىم ئىلىكىكى بىرى يەر بىرىم		T			
Essay			1	9				
Performance test – "paper" exercise								
Performance test - hardware simulation								
Performance test – hardware				1		1		
Oral testing						<u> </u>		
No testing/Student course evaluation	X				4	1		
Graphics		1 6 No.4975	Septembri	Section 2				
2D graphics still	X			r	T	T		
3D graphics still			1		1			
2D animation			1					
3D animation	1		1		+	1		
2D interactive animation	1	<u> </u>	1		i	1		
3D interactive animation	1	1						
Pre recorded video /films	1	<u> </u>	1		1			
Communications	e et som e		د. فروانده ایرا (معرار) محالی مسال و تاقیری					
Audio	1			1.	T	T		
Indirect discourse	1		1		+	†		
Assigned reading	-		1		+	1		
Open Discussion			1		+	<u>+</u>		
Question and answer opportunities	+	-			+	+		

Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Course Name: Multidisciplinary Approach to Head and Neck Trauma		lumber: A	0156				
Asynchronous Course	WEB Based Training						
Interactivity Factors	Level 1		Level 3	Level 4			
Administrative Requirements							
Self pacing		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Group training							
On-demand availability		>>>>>>>>	>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Open entry / open exit	-	>>>>>>>>	>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Detailed student records		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Test Security		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Multiple test forms			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Training / Instruction Approach		. Y 24 - 14	1206-01-5				
Lecture / Text	X	>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Live Presenters (guest speakers)		1	1				
Self study	_	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Demonstration			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Exhibit	-		>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Guided Discussion	-						
Simulation – knowledge based	-	i	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Simulation - hardware							
Problem solving exercises			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Learning to Mastery		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Practice / drill		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Structured Review		1		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Feedback on performance			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Remediation			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Group activities/collaborative tasks			1				
Testing Types			di kasara kasara	K CAACO III			
Objective knowledge tests	1240 C.	······································	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	5			
Essay							
Performance test – "paper" exercise	_		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Performance test – paper exercise	_						
Performance test – hardware							
Oral testing							
No testing/Student course evaluation	X	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
	<u> </u>						
Graphics 2D graphics still		Mariada and A. Carlo, S. S. Sandar a		2027SJC-1			
	X	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>			
3D graphics still 2D animation	_		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
	_		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
3D animation				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
2D interactive animation				>>>>>>>>			
3D interactive animation	_						
Pre recorded video /films			_ >>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Communications		and the second		- 1995			
Audio		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>			
Indirect discourse							
Assigned reading		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Open Discussion							
Question and answer opportunities							

Shaded blocks indicate factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Course Name: Multidisciplinary Approach to Head and Neck Trauma	Course Number: A0156						
Asynchronous Course	Computer Based Training						
Interactivity Factors	Level 1	Level 2	Level 3	Level 4			
Administrative Requirements							
Self pacing		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Group training							
On-demand availability		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Open entry / open exit		>>>>>>>>>	>>>>>>>	>>>>>>>			
Detailed student records							
Test Security							
Multiple test forms			>>>>>>>	>>>>>>>			
Training / Instruction Approach							
Lecture / Text	X	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Live Presenters (guest speakers)							
Self study		>>>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Demonstration			>>>>>>>	>>>>>>			
Exhibit			>>>>>>>	>>>>>>			
Guided Discussion							
Simulation – knowledge based			>>>>>>>	>>>>>>			
Simulation - hardware							
Problem solving exercises		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Learning to Mastery		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>>			
Practice / drill		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>	>>>>>>>			
Structured Review			>>>>>>>	>>>>>>			
Feedback on performance		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>>			
Remediation			>>>>>>>>	>>>>>>			
Group activities/collaborative tasks							
Testing Types							
Objective knowledge tests		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>			
Essay							
Performance test – "paper" exercise			>>>>>>>	>>>>>>			
Performance test – hardware simulation	_			>>>>>>			
Performance test – hardware							
Oral testing							
No testing/Student course evaluation	X	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>	>>>>>>>			
Graphics							
2D graphics still	X	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>			
3D graphics still			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>			
2D animation			>>>>>>>>	>>>>>>			
3D animation				>>>>>>			
2D interactive animation				>>>>>>>			
3D interactive animation							
Pre recorded video /films			>>>>>>>	>>>>>>			
Communications		14.21 S.A.S.					
Audio		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>			
Indirect discourse			•				
Assigned reading		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>			
Open Discussion							
Question and answer opportunities							

Shaded blocks indicate factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Short Worksheet: Development Time

•

Sh Co	Short Worksheet: Refined Estimate of Development Hours Per Hour of Instruction Course Name: Multidisciplinary Approach to Head and Neck Trauma Media: WEB Based Training Level: 1										
	Analysis Design Development Implementation										
1	Percentage of Time Spent by Task Type by Level	.40	.20	.25	.15						
2	Multiply line 1 by average * hours100										
3	Average hrs. per phase	40	20	25	15						
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3						
5	Adjusted hrs. Per phase. Multiply line 3 by line 4.	12	10	20	4.5						
	Total Labor Hours - sum across line 5					47					

 * Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for

PPSCP courses based on assumptions given.

Short Worksheet: Development Time

Sh Co	ort Worksheet: Refined urse Name: Multidiscip	I Estimate of linary Approa	ich to Head	and Neck Trauma	3	
		Analyzia			ased Training Le	
1	Percentage of Time Spent by Task Type by Level	Analysis .40	Design .20	.25	Implementation .15	Sums
2	Multiply line 1 by average * hours					
3	Average hrs. per phase	40	20	25	15	
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3	
5	Adjusted hrs. Per phase. Multiply line 3 by line 4.	12	10	20	4.5	
	Total Labor Hours - sum across line 5					47

 * Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for

PPSCP courses based on assumptions given.

Course Cost Estimation Worksheet

	Course Cost Estimate Wo	orksheet: Web Base	d Training
	rse Name: Multidisciplinary oach to Head and Neck Trauma	Course Number: A0156	
1	Write the sum from Refined Estimestimated number of hrs. per hr. o	•	Hrs. 47
2	Average hourly labor cost in dollar	S	\$ 50
3	Multiple line 1 by line 2 and put the	e results on line 3.	\$ 2350
4	Actual number of classroom equiv converted or developed.	alent hours to be	Hrs. 13
5	Compression: If conversions to as delivery multiply line 4 by .7 (seve the results on line 5. If not a conversion of the results on line 5. If not a conversion of the seven set of the seven belivery set of the seven seven set of the seven	n tenths) and put	Hrs. 9.1
6	Multiply line 3 by line 5 if a conver asynchronous delivery <u>OR</u> line 3 b conversion to asynchronous delive on line 6.	by line 4 if not a	\$ 21,385
	a to be a set of set of the set of the set	NY KATER AREA APPENDE	in Simme
Sec. Sec. 3			and the second secon
7	Infrastructure Costs		\$
7 8	Infrastructure Costs Recurring Costs	·	\$ \$
		· · · · · · · · · · · · · · · · · · ·	
8	Recurring Costs		\$
8	Recurring Costs Delivery Labor Costs		\$
8 9 10	Recurring Costs Delivery Labor Costs Travel Costs		\$ \$ \$
8 9 10 11	Recurring Costs Delivery Labor Costs Travel Costs Miscellaneous Costs		\$ \$ \$ \$
8 9 10 11 12	Recurring Costs Delivery Labor Costs Travel Costs Miscellaneous Costs Add line 7 to 12		\$ \$ \$ \$ \$ \$
8 9 10 11 12 13	Recurring Costs Delivery Labor Costs Travel Costs Miscellaneous Costs Add line 7 to 12 Total Cost - Add lines 6 and 12.	line 13 by line 14	\$ \$ \$ \$ \$ \$ \$ 21,385

Note: 125 total potential participants but less than half are military or government civilian. Web based training for military shown in the second number and cost figure in lines 14 and 15.

Course Cost Estimation Worksheet

a a ser en	Course Cost Estimate Worksheet: Cor	nputer Based Training
	rse Name: Multidisciplinary Course Notes N	umber: A0156
1	Write the sum from Refined Estimate Works estimated number of hrs. per hr. of instruction	· · · · · · · · · · · · · · · · · · ·
2	Average hourly labor cost in dollars	\$ 50
3	Multiple line 1 by line 2 and put the results o	n line 3. \$ 2350
4	Actual number of classroom equivalent hour converted or developed.	s to be Hrs. 13
5	Compression: If conversion to asynchronou multiply line 4 by .7 (seven tenths) and put t on line 5. If not a conversion to asynchronou skip line 5	he results Hrs Q 1
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery <u>OR</u> line 3 by line 4 if conversion to asynchronous delivery. Put th on line 6.	
	Do not use lines 7 to 12 for any costs i	hatrare to be shared.
7	Infrastructure Costs	\$
8	Recurring Costs	\$
9	Delivery Labor Costs	\$
10	Travel Costs	\$
11		
	Miscellaneous Costs	\$
12	Miscellaneous Costs Add line 7 to 12	\$ \$
12	Add line 7 to 12	\$
12 13	Add line 7 to 12 Total Cost - Add lines 6 and 12.	\$ \$ 21,385 # 125 or 62

Cost Estimate for a	Single Course Over a	Five Year Period
---------------------	----------------------	------------------

Course Name: Multidisciplinary / and Neck Trauma	Approad	ch to	Head	Cou	rse Numb	er: A0156	
Technology Selected	Leve	11	Level	2	Level 3	Level 4	Do Not Convert
WBT							x
CBT							
VTT	Low		L <u></u>		High		· · · · · · · · · · · · · · · · · · ·
Other						[
Cost Estima	ate for	the	Use of V	Veb	Based Tra	aining. Lev	el 1
Cost Factors			Values				urce
1. Labor hours year 1		42	7.7				
2. Labor hours year 2			7.7		Course To	echnology l	Match Table
3. Labor hours year 3			7.7			~~	ity Factors Table
4. Labor hours year 4		42	7.7				-
5. Labor hours year 5		42	7.7				
6. Subtotal		21	38.5			<u> </u>	· ···· · ·····························
7. Average labor cost		\$ 5	50				
8. Total labor Cost over 5-yr. period. Multiply line 6 by line 7		\$ 1	06,925				
Additional Development/ Deliv	ery C	ost	By Year	-			
9. Cost year 1	¥	\$			Data to S	upport Cost	Analysis Worksheet
10. Cost year 2	_	\$		-			
11. Cost year 3		\$			··· · · · · · · · · · ·		
12. Cost year 4		\$			•••••••••••••••••••••••••••••••••••••••		· · · · · · · · · · · · · · · · · · ·
13. Cost year 5		\$					
14. Total Additional Costs. Sum lines 9 to 13 and enter line 14	on	\$					
15. Total Course Cost. Add lines 8 and 14 and ente line 15	r on	\$ 1	06,925				
 Average cost over 5 years. Divide line 15 by 5 and enter line 16. 	on		21,385				
17. Potential students year 1		12	25 / 62		From Cou	ırse Informa	ation Summary Sheet
 Total potential students year (multiply line 17 by 5. and enter on line 18) 	i	62	5/310				
 Average cost per student yr (divide line 15 by line 15 enter on line 19) 		\$ 1	71.08 / 3	449	1		

ARMY FORCE HEALTH PROTECTION CONFERENCE Conversion Analysis

ARMY FORCE HEALTH PROTECTION CONFERENCE

Course Purpose: No Government Furnished Information (GFI) was provided on this conference, so the actual purpose is unknown. Our observer noted that the course provided participants with current information affecting the practice and administration of preventive medicine programs in the Army.

Course Content Stability: High

No GFI was provided on this conference, so the assessment of high stability is based solely on our observer's assessment of the material.

General Presentation Style: Distributive This course was delivered using primarily lecture (97%) with time for optional questions and answers and panel discussion (3%). The majority of the sessions, while falling within the definition of a lecture (one instructor to many learners), were structured to encourage and facilitate discussion and question and answer sessions.

Instructional Aidsoc A combination of overhead slides, computer-generated (Power Point) slides, 35 mm, and handouts supported presentation of the course materials.

Hands-on Activities:

None.

Degree of Instructional Interaction

Because of the large number of participants, instructional interaction was limited to question and answer sessions during the lectures with only a small percentage of attendees being able to participate within the time constraints.

Relevant Instructional Value: Unknown

Since the course theme and objectives were not provided, we are unable to assess the instructional value.

Conditional Recommendations.

Convert to Web-Based Training.

Based on the observed content, this conference would be an excellent candidate for conversion to Web-Based Training. However, because we have no current cost or student throughput information, the recommendation is conditional. Our recommendation is based on the nature of the material, most of which is reasonably stable, and the predominance of the lecture method of delivery (97% of presentations), and the heavy use of computer-generated or overhead slides in support of the delivery. It would be important to select a format that would allow questions from participants, and would benefit from a discussion platform. Such a platform would permit interaction between speakers and participants in exploring issues more deeply and in problem-solving to address some of the concerns presented. Most Web-Based presentation platforms have a built-in email capability to ask questions of presenters. In addition, discussion or chat groups could be instituted on existing web sites.

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: Army Force Health Protection Conference			Course N	Number: A 0137		
1. Instructional goals of the co	urse: Uni	known.				
2. Frequency of course offering	ber vear	Unknown			Yes	No
3. Current length of course in ho		28	7. Conve	ert to DL?	X	
4. Number of hours to be conver	ted	28	8. Enhar	ice?		X
5. Number of registered students	3	150	This is ar	approximate numb	er.	
Number of potential students t benefit from the course	hat could	Unknown				
9. If item 8 = Yes, Specify						
Technology	Level 1	Level 2	Level 3	Level 4		
WTB		Х				
СВТ						
VTT	Low		High			
Other						
Labor Hours Estimation Metho	d: Short _	X Long _	Synchi	ronous		
Cost Data						
10. Total Cost Year One 11. Total Cost Year Two				\$130,200		
12. Total Cost Year Three				\$65,100		
13. Total Cost Year Four				\$65,100		
14. Total Cost Year Five	1			\$65,100 \$65,100		
15. Total costs year 1 to 5 (Sur	n of lines	10 through	1.4)	\$390,600		
	ii or iiies		14)	\$390,000		
16. Average cost, years 1 to 5 (E)ivide value	in line 15 b	(5)	\$78,120		
17. Total potential students over				Unknown		
number of potential students [iten	n 6 above]	by 5.)	and by the			
18. Average cost per potential (divide the value in line 15 by the			eriod.	Unknown		
Additional Hardware/Software	Required				,,	
ltem:				Cost per unit	Total Cost	
Deserved Early	-1.41.1					
Proposed Enhancements		Cost			··	
						,
Total Enhancement Costs						
	· · · ·					

Instructional Formats and Physical Training Requirements

Course Name:		
Army Earon Health	Drotostion	Conformer

Course Number:

f Course ng this ructional mat	Format	Description	Physical Presence Required?
97%	Lecture with questions/answer opportunities	A speaker/speakers present verbal information to an audience. The audience may ask questions regarding that information.	No
3%	Panel Discussion	A selected group (often selected for their expertise or experience in a given area) discusses an issue in front of students. Students may ask questions about the ideas being presented.	No
	Poster Session	A group of individuals presents material in a poster format. Students may read the material being presented, and ask questions about the material.	No
	Small Group Discussion	Small groups of students (2~5) discuss an assigned topic.	?
	Group Discussion	A larger group discusses an issue – usually led by a facilitator – with heavy emphasis on student participation.	?
	Demonstration	Students observe the application of knowledge. In this case, students are not participating themselves.	?
	Student Verbal Presentations	Students present verbal information to the larger group.	?
	Student Procedural Presentations	Students present procedural information to the larger group.	?
	Field Trip	Students visit an instructionally relevant site to observe activities or meet with individuals who present information in an applied setting.	?
	Shop Activity	Hands-on technical tasks/procedures.	?
	Lab Activity	Hands-on laboratory tasks/procedures.	?

Course Name: Army Force Health Pro-	tection Con	ference	
Course Number: A 0137			
Length of course - number of hours	of instruc	tion: 28	
Number of Registered Students: app			
Number of potential students that co			
Instructional goals of the course: Un			
Frequency of Course Offering: Unknow			
Continuing Education Credit Offered	2 Unknow	Number: Unknown	
For each item listed, check ✓ rov	u markad	"Check" if checked or decurrent	4 a al
Administrative Requirements	Check	Check in observed of documen	
Self pacing	Check	Detailed student records	Checl
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit	-		
Training / Instruction Approach			
Lecture / Text		Learning to Mastery	
Live Presenters (guest speakers)	•	Practice / drill	
Self study		Structured Review	
Demonstration		Feedback on performance	
Exhibit		Remediation	
Guided Discussion		Group activities/collaborative tasks	
Simulation (roll play, in-basket)			
Problem solving exercises			
Testing Types			
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test "paper"		No testing/Student course eval	1
Performance test – hardware		<u> </u>	
Graphics			
2D graphics still	1	3D animation	
3D graphics still		2D interactive animation	1
2D animation		3D interactive animation	1
		Pre recorded video /films	1
Communications			
Audio		Open Discussion	
Indirect discourse		Question and answer	
Assigned reading			

Course: Army Force Health Protection Con				chnolog		
Administrative Requirements	Check	СВТ	WBT	VTT		
Self pacing						
Group training						
On-demand availability						
Open entry / open exit						
Detailed student records						
Test Security						
Multiple test forms						
Training / Instruction Approach						
Lecture / Text	1	-				
Live Presenters (guest speakers)						
Self study						
Demonstration						
Exhibit						
Guided Discussion						-
Simulation – knowledge based						-
Simulation - hardware						+
Problem solving exercises						
Learning to Mastery						-
Practice / drill						-
Structured Review						
Feedback on performance				·		
Remediation				-		
Group activities/collaborative tasks	1	1				
Testing Types	1				_L	
Objective knowledge tests	1				1	1
Essay						-
Performance test –"paper" exercise		-				-
Performance test – hardware simulation				-		-
Performance test – hardware						
Oral testing		-				
No testing/Student course evaluation	1					
Graphics			I	1		
2D graphics still	1					
3D graphics still			-			
2D animation			-			
3D animation						1
2D interactive animation						
3D interactive animation						
Pre recorded video /films	 ✓ 					
Communications		•	· · ·			
Audio						
Indirect discourse						-
Assigned reading						
Open Discussion		· · ·	тананан Танананан			
Question and answer opportunities					1	1

Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side, then this technology should not be used for the course.

Course Name: Army Force Health Protection Conference	Course Number: A 0137					
Asynchronous Course	v	VEB Base	ed Traini	าต		
Interactivity Factors	Level 1 Level 2 Level 3 Lev					
Administrative Requirements						
Self pacing		>>>>>>	>>>>>>>	>>>>>>>		
Group training						
On-demand availability		>>>>>>>	>>>>>>>	>>>>>>>		
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>		
Detailed student records		>>>>>>>	>>>>>>>	>>>>>>>		
Test Security		>>>>>>>	>>>>>>>	>>>>>>>		
Multiple test forms			>>>>>>>	>>>>>>>		
Training / Instruction Approach						
Lecture / Text		>>>>>>>	>>>>>>>	>>>>>>		
Live Presenters (guest speakers)						
Self study		>>>>>>>	>>>>>>>>	>>>>>>>		
Demonstration			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>		
Exhibit	-		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>		
Guided Discussion						
Simulation – knowledge based			>>>>>>>	>>>>>>>		
Simulation - hardware						
Problem solving exercises	-		>>>>>>>	>>>>>>		
Learning to Mastery		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Practice / drill		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Structured Review				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Feedback on performance			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Remediation	· ·		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Group activities/collaborative tasks						
Testing Types						
Objective knowledge tests	T	>>>>>>>	>>>>>>>	>>>>>>>		
Essay	1. A.					
Performance test –"paper" exercise	-	•	>>>>>>>	>>>>>>		
Performance test – hardware simulation						
Performance test – hardware						
Oral testing						
No testing/Student course evaluation		>>>>>>>	>>>>>>>>	>>>>>>		
Graphics	V					
2D graphics still		>>>>>>>	>>>>>>>	>>>>>>		
3D graphics still			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
2D animation			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
3D animation				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
2D interactive animation				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
3D interactive animation						
Pre recorded video /films		/	>>>>>>>>	>>>>>>		
Communications		√				
Audio	7	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>		
Indirect discourse						
Assigned reading		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>		
Open Discussion Question and answer opportunities						

Shaded blocks indicate factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor. Technology Interactivity Factors

Protection Conference	Computer Based Training					
Asynchronous Course	Cor	nputer Ba	ased Trai	ining		
Interactivity Factors	Level 1	Level 2	Level 3	Level 4		
Administrative Requirements						
Self pacing		>>>>>>>>	>>>>>>>	>>>>>>		
Group training						
On-demand availability		>>>>>>>	>>>>>>>	>>>>>>		
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>>		
Detailed student records						
Test Security						
Multiple test forms	- ·		>>>>>>>	>>>>>>		
Training / Instruction Approach						
Lecture / Text	1	>>>>>>>	>>>>>>>	>>>>>>		
Live Presenters (guest speakers)			3			
Self study		>>>>>>>	>>>>>>>	>>>>>>		
Demonstration			>>>>>>>	>>>>>>		
Exhibit			>>>>>>>	>>>>>>>		
Guided Discussion	- 12 		1			
Simulation – knowledge based			>>>>>>>	>>>>>>>		
Simulation - hardware			ļ			
Problem solving exercises	-	>>>>>>>	>>>>>>>	>>>>>>>		
Learning to Mastery		>>>>>>>	>>>>>>>	>>>>>>>		
Practice / drill		>>>>>>>	>>>>>>>	>>>>>>		
Structured Review			>>>>>>>	>>>>>>		
Feedback on performance		>>>>>>>	>>>>>>>	>>>>>>>		
Remediation			>>>>>>>	>>>>>>		
Group activities/collaborative tasks						
Testing Types						
Objective knowledge tests		>>>>>>>	>>>>>>>	>>>>>>		
Essay						
Performance test – "paper" exercise			>>>>>>>	>>>>>>>		
Performance test – hardware simulation				>>>>>>>		
Performance test hardware						
Oral testing						
No testing/Student course evaluation		>>>>>>>>	>>>>>>>	>>>>>>>		
Graphics						
2D graphics still	1	>>>>>>>	>>>>>>>>	>>>>>>		
3D graphics still			>>>>>>>	>>>>>>>		
2D animation	· · ·		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>		
3D animation				>>>>>>>		
2D interactive animation				>>>>>>		
3D interactive animation						
Pre recorded video /films			>>>>>>>	>>>>>>		
Communications		V				
Audio	1	>>>>>>>	>>>>>>>>	>>>>>>>		
Indirect discourse						
Assigned reading		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>	>>>>>>		
Open Discussion			~~~~~			
Question and answer opportunities						

Shaded blocks indicate factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Course Cost Estimation Worksheet

	Course Cost Estimation Worksheet: Web Based Training		
	se Name: Army Force Health Protection Course Number: A 0137		
Com			
1	Write the sum from Refined Estimate Worksheet, estimated number of hrs. per hr. of instruction.	Hrs.	93
2	Average hourly labor cost in dollars	\$	\$50.00
3	Multiple line 1 by line 2 and put the results on line 3.	\$	\$4,650.00
4	Actual number of classroom equivalent hours to be converted or developed.	Hrs.	28
5	Compression: If conversion to asynchronous delivery multiply line 4 by .7 (seven tenths) and put the results on line 5. If not a conversion to asynchronous delivery skip line 5.	Hrs.	20
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery OR line 3 by line 4 if not a conversion to asynchronous delivery. Put the results on line 6.	\$	\$91,140.00
·	Do not use lines 7 to 12 for any costs that are to be shared.	la sue de la composición de la	· · · · · · · · · · · · · · · · · · ·
7	Infrastructure Costs	\$	
8	Recurring Costs	\$	
9	Delivery Labor Costs	\$	
10	Travel Costs	\$	
11	Miscellaneous Costs	\$	
12	Add line 7 to 12	\$	\$0.00
13	Total Cost - Add lines 6 and 12.	\$	\$91,140.00
14	Number of potential students.	\$	Unknown
15	Average Cost Per Student Divide line 13 by line 14	\$	Unknown
			·

Course Cost Estimation Worksheet

	Course Cost Estimation Workshe	et: CBT Multimedia	. *	e .
	urse Name: Army Force Health Protection Co	urse Number: A 0137		
1	Write the sum from Refined Estimate Worksheet, es instruction.	stimated number of hrs. per hr. of	Hrs.	93
2	Average hourly labor cost in dollars		\$	\$50.00
3	Multiple line 1 by line 2 and put the results on line 3		\$	\$4,650.00
4	Actual number of classroom equivalent hours to be	converted or developed.	Hrs.	28
5	Compression: If conversion to asynchronous delive and put the results on line 5. If not a conversion to a	Hrs.	20	
6	Multiply line 3 by line 5 if a conversion to asynchron a conversion to asynchronous delivery. Put the resu	\$	\$91,140.00	
Α.,	Do not use lines 7 to 12 for any costs	that are to be shared.		
7	Infrastructure Costs	en e	\$	
8	Recurring Costs		\$	
9	Delivery Labor Costs		\$	
10	Travel Costs		\$	
11	Miscellaneous Costs	and a second and a s	\$	
12	Add line 7 to 12		\$	\$0.00
13	Total Cost - Add lines 6 and 12.		\$	\$91,140.00
14	Number of potential students.		\$	Unknown
15	Average Cost Per Student Divide line 13 by line 14	· · · · · · · · · · · · · · · · · · ·	\$	Unknown

Cost Estimate for a Single Course Name: Army Medical Spee				umber: A (1624			
Executive Management Course								
Technology Selected	Level 1	Level 2	Level 3	Level 4				
WBT		X						
СВТ								
	Low		High					
Other								
	· · ·							
Cost Factors		Values		Source				
1. Labor Hours Year 1		2604			echnology Match Table, gy Interactivity Factors Table			
2. Labor Hours Year 2		1302		1 1				
3. Labor Hours Year 3		1302		1				
4. Labor Hours Year 4		1302		1				
5. Labor Hours Year 5		1302		1				
6. Subtotal	Subtotal		7812		For the purposes of this analysis, we will assume that there is only a 50% turnover course materials in years two through five.			
7. Average Labor Cost per hour		\$50			A			
8. Total labor cost over a 5 year p Multiply line 7 by line 6.	eriod.	\$390,600			······································			
Additional Development Costs	By Year	- L	· · ·					
9. Cost year 1				Data to Su	Ipport Cost Analysis Worksheet			
10. Cost year 2								
11. Cost year 3	*************				· · ·			
12. Cost year 4								
13. Cost year 5	,							
14. Total additional costs. Sum lir and enter on line 14	es 9 to 13	\$0						
15. Total Course Cost. Add lines and enter on line 15.	8 and 14	\$390,600						
16. Average cost over 5 years. Di 15 by 5 and enter on line 16.	vide line	\$78,120						
17. Potential students year 1.		Unknown		From Cou	rse Information Summary Sheet			
18. Total potential students year 1 (multiply line 17 by 5 and enter on		Unknown						
 Average cost per student year (Divide line 15 by line 18 and enter 18) 		Unknown		Round up	to the nearest whole dollar.			

Endodontics for the General Dentist Conversion Analysis ENDODONTICS FOR THE GENERAL DENTIST

Course Purpose:

The course is designed to increase the endodontic knowledge and clinical expertise of Army general dentists so that the dentist can provide a higher quality of endodontic dental care for patients. Emphasis is placed upon practicing within the military environment.

Course Content Stability: Moderate

The majority of the course focuses on advances in the field and research findings. Other presentations (about 1/3) focused on areas that may not be 'new" but are rarely dealt with or seen, to reinforce good clinical practice.

 General Presentation Style:
 Distributive

 The standard method of presentation was lecture.
 Though the students asked few questions, all instructors were willing to accept questions during and immediately their presentations.

Instructional Aids:

Two 35mm slide projectors and wireless microphones and speakers supported all presentations. Hands-on Activities:

One demonstration session was given. This was supported partly by manufacturers of equipment. Some students were able of operate the equipment, most observed.

Degree of Instructional Interaction While opportunity did exist to ask questions and exchange views with the presenters most students seemed to prefer to talk to the presenter after the course or during the breaks. Generally the students observed and some took notes. Yet the level of retention was probably high since the work involved was directly related to what the students do.

Relevant Instructional Value: High The content was clearly focused and within the criteria for a PPSCP course. Students were exposed to new concepts/approaches. This course did not wander off topic - probably due to the

fact that the Endodontics Residency Program conducted it. The course directors simply followed the same good practices followed at the school.

Recommendation

Primary Recommendation: Convert to VTT.

Secondary Recommendation: Convert to WBT.

This course is ideal for Web based training (WBT) as well as VTT. It is coherent and it is not dependent on hands-on activities. On the Web, the course could easily be made highly interactive, while as a VTT course, the actual level of student /instructor interactivity would not be reduced. The major difference is the overall cost. As a Web based training course, the course would cost \$325,500 over five years to provide yearly training for every dentist in the Army at a cost of \$70 a year. VTT could provide the same training at a cost of \$14 per student. Other than cost, the most significant difference between the two approaches is a loss of flexibility if VTT is used. As a Web based training course, the course would be available on demand, at any time, simply by logging on and registering on-line. As a VTT based course, the course would be available once live. For those who were unable to view the course through VTT, it could be provided with a set of VCR tapes. The advantage of VTT is cost and the advantage of WBT is flexibility. Our first choice of VTT is based on lower cost to the Army.

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: Endodontics for the General Dentist			Co		e Num	ber:				
1. Instructional goals of the co art and science of Endodontics. Prov practice.	v urse : Pro vide practica	ovide al ki	e the ge nowled	ene ge a	ral den and ski	tist wi ills tha	th increasec at can be ap	l knowle olied in t	dge of t heir clir	he iical
2 Fragueney of course offering		ш	4	-						
2. Frequency of course offering									Yes	No
 Current length of course in horizontal for the conversion of hours to be conversed. 			19	7			to DL?		X	
			19	8	. Enr	nance	?			X
5. Number of registered students		#	70							
 Number of potential students t could benefit from the course 	nat	#	932							
9. If item 8 = Yes, Specify										
Technology	Level 1	1	Level	2	Leve	el 3	Level 4			
WBT										
CBT										
VTT	Low	X			High					
Other										
Labor Hours Estimation Method	d: Short _	L	Long_	_ (Synch	rono	us _X			
		Cos	st Data							
10. Total Cost Year One		003	St Date			\$ 10	,150			
11. Total Cost Year Two						\$ 11				
12. Total Cost Year Three						\$ 11				
13. Total Cost Year Four			-			\$ 11				
14. Total Cost Year Five		-				\$ 11				
15. Total costs year 1 to 5 (Su	m of lines	s 10) throu	gh	14)		,750			
				<u> </u>			,			
16. Average cost, years 1 to 5 (d	ivide value	e in	line 1	5 b	y 5)	\$ 12	,750			
17. Total potential students over	a five year	r pe	eriod.		,		,			
(multiply the number of poter	ntial studer	nts	(item 6	S al	oove)					
by 5.)					, í	# 46	60			
18. Average cost per potential	student o	over	r 5 yea	r						
period.										
(divide the value in line 15 by	the value	e in	line 17)		\$ 14				
اغالمانه ٨	onal Hard			4	D		1			
Item:		Jwa	16/30	LVV			ea t per unit	Total	Cost	
								rotar		
Proposed Enhancement(s)	Cost				l					
	\$									
	\$									
	\$									
Total Enhancement Costs	\$							101.04		
				-						
and the second							and the second s			

Instructional Formats and Physical Training Requirements

Course Nar Endodontics		entist A0202	
% of Course Using this Instructional Format	Format	Description	Physical Presence Required?
76%	Lecture with questions/answer opportunities	A speaker/speakers present verbal information to an audience. The aud may ask questions regarding that information.	ience No
	Panel Discussion	A selected group (often selected for their expertise or experience in a area) discusses an issue in front of students. Students may ask ques about the ideas being presented.	given stions No
	Poster Session	A group of individuals presents material in a poster format. Students may the material being presented, and ask questions about the material.	v read No
	Small Group Discussion	Small groups of students (2~5) discuss an assigned topic.	?
	Group Discussion	A larger group discusses an issue – usually led by a facilitator – with t emphasis on student participation.	neavy ?
11%	Demonstration	Students observe the application of knowledge. In this case, students ar participating themselves.	re not ?
13%	Student Verbal Presentations	Students present verbal information to the larger group.	?
	Student Procedural Presentations	Students present procedural information to the larger group.	?
	Field Trip	Students visit an instructionally relevant site to observe activities or mee individuals who present information in an applied setting.	t with ?
	Shop Activity	Hands-on technical tasks/procedures.	?
	Lab Activity	Hands-on laboratory tasks/procedures.	?

Course Information Summary Sheet

Course Name: Endodontics for the General Dentist

Course Number: A0202

Length of course - number of hours of instruction: 19

Number of Registered Students: 70

Number of potential students that could benefit from this course: (all dentists)

Instructional goals of the course: Provide the general dentist with increased knowledge of the art and science of Endodontics. Provide practical knowledge and skills that can be applied in their clinical practice.

Frequency of Course Offering: Once a year

Continuing Education Credit Offered? Yes

Number: 32

Check		I LINGON
	Detailed student records	Check
· · ·		
		· · · · · · · · ·
X	Learning to Mastery	1
X		-
	Remediation	
	Group activities/collaborative tasks	
	J	
	Performance test hardware	η.
	Oral testing	
	No testing/Student course eval	
X	3D animation	- <u> </u>
	2D interactive animation	
	3D interactive animation	
	Pre recorded video /films	
	Open Discussion	
	Question and answer	
		Yractice / drill Structured Review X Feedback on performance Remediation Group activities/collaborative tasks Oral activities/collaborative tasks Oral testing No testing/Student course eval Z 3D animation 2D interactive animation 3D interactive animation Pre recorded video /films

(Name) Endodontics for the General Dentist			Technologies					
Administrative Requirements	Check	СВТ	WBT	VTT				
Self pacing								
Group training								
On-demand availability								
Open entry / open exit								
Detailed student records								
Test Security		-						
Multiple test forms								
Training / Instruction Approach								
Lecture / Text	X				-			
Live Presenters (guest speakers)								
Self study								
Demonstration	X							
Exhibit								
Guided Discussion			· .					
Simulation – knowledge based								
Simulation - hardware				1				
Problem solving exercises	+							
Learning to Mastery								
Practice / drill					 ,			
Structured Review				_				
Feedback on performance					· · · · · · · · · · · · · · · · · · ·			
Remediation				-				
Group activities/collaborative tasks								
Testing Types	1							
Objective knowledge tests			1	1				
Essay								
Performance test –"paper" exercise		(-		
Performance test – hardware simulation								
Performance test – hardware								
Oral testing								
No testing/Student course evaluation				1				
Graphics	I							
2D graphics still	X			· · ·	Т	- <u>-</u>		
3D graphics still								
2D animation				-				
3D animation								
2D interactive animation								
3D interactive animation				-				
Pre recorded video /films				-				
Communications	I	I	1	_l	1	1		
Audio					T			
Indirect discourse		· · · ·						
Assigned reading								
Open Discussion								
Question and answer opportunities								

Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Course Name: Endodontics for the General Dentist		lumber: A	JZ02			
Asynchronous Course	WEB Based Training					
Interactivity Factors	Level 1	Level 2	Level 3	Level 4		
Administrative Requirements			<u> </u>			
Self pacing		>>>>>>>	>>>>>>>	>>>>>>>		
Group training	6 S. 1998					
On-demand availability		>>>>>>>	>>>>>>>>	>>>>>>		
Open entry / open exit		>>>>>>>	>>>>>>>>	>>>>>>		
Detailed student records		>>>>>>>	>>>>>>>>	>>>>>>		
Test Security		>>>>>>>	>>>>>>>>	>>>>>>		
Multiple test forms			>>>>>>>>	>>>>>>		
Training / Instruction Approach						
Lecture / Text	X	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>		
Live Presenters (guest speakers)	~					
Self study		>>>>>>>	>>>>>>>	>>>>>>		
Demonstration			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Exhibit	-	<u>X</u>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Guided Discussion	-					
Simulation – knowledge based	-		>>>>>>>			
Simulation - knowledge based			,,,,,,,,,,,	>>>>>>>		
Problem solving exercises	-					
	_		>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Learning to Mastery Practice / drill		>>>>>>	>>>>>>>>	>>>>>>>		
		>>>>>>>	>>>>>>>>>	>>>>>>>		
Structured Review				>>>>>>>		
Feedback on performance			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Remediation			>>>>>>>>>	>>>>>>		
Group activities/collaborative tasks						
Testing Types	······································		I	r		
Objective knowledge tests		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Essay						
Performance test – "paper" exercise	-		>>>>>>>>	>>>>>>		
Performance test – hardware simulation	-					
Performance test – hardware	-					
Oral testing						
No testing/Student course evaluation		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Graphics						
2D graphics still	X	>>>>>>>	>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
3D graphics still			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
2D animation			>>>>>>>	>>>>>>		
3D animation				>>>>>>>		
2D interactive animation				>>>>>>>>		
3D interactive animation						
Pre recorded video /films			>>>>>>>>	>>>>>>		
Communications						
Audio		>>>>>>>>	>>>>>>>>	>>>>>>		
Indirect discourse						
Assigned reading		>>>>>>>	>>>>>>>	>>>>>>>		
Open Discussion	A state of the sta	1	<u> </u>			
Question and answer opportunities						

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Course Name: Endodontics for the General Dentist		lumber: A					
Asynchronous Course	Computer Based Training						
Interactivity Factors	Level 1	Level 2	Level 3	Level 4			
Administrative Requirements							
Self pacing		>>>>>>>	>>>>>>>	>>>>>>			
Group training				(
On-demand availability		>>>>>>>	>>>>>>>	>>>>>>			
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>			
Detailed student records							
Test Security							
Multiple test forms			>>>>>>>	>>>>>>			
Training / Instruction Approach							
Lecture / Text	Х	>>>>>>>	>>>>>>>	>>>>>>			
Live Presenters (guest speakers)							
Self study		>>>>>>>	>>>>>>>	>>>>>>			
Demonstration		Х	>>>>>>>	>>>>>>			
Exhibit			>>>>>>>	>>>>>>			
Guided Discussion							
Simulation – knowledge based			>>>>>>>	>>>>>>			
Simulation - hardware							
Problem solving exercises		>>>>>>>	>>>>>>>	>>>>>>			
Learning to Mastery		>>>>>>>	>>>>>>>	>>>>>>			
Practice / drill		>>>>>>>	>>>>>>>	>>>>>>			
Structured Review			>>>>>>>	>>>>>>			
Feedback on performance		>>>>>>>	>>>>>>>	>>>>>>			
Remediation			>>>>>>>	>>>>>>			
Group activities/collaborative tasks							
Testing Types							
Objective knowledge tests		>>>>>>	>>>>>>>	>>>>>>			
Essay							
Performance test – "paper" exercise			>>>>>>>	>>>>>>			
Performance test – hardware simulation				>>>>>>			
Performance test – hardware							
Oral testing							
No testing/Student course evaluation		>>>>>>>	>>>>>>>	>>>>>>			
Graphics							
2D graphics still	Х	>>>>>>>	>>>>>>>	>>>>>>			
3D graphics still			>>>>>>>	>>>>>>			
2D animation			>>>>>>>	>>>>>>			
3D animation				>>>>>>			
2D interactive animation				>>>>>>			
3D interactive animation							
Pre recorded video /films			>>>>>>>	>>>>>>			
Communications							
Audio		>>>>>>>	>>>>>>>	>>>>>>			
Indirect discourse							
Assigned reading		>>>>>>>	>>>>>>>	>>>>>>			
Open Discussion							
Question and answer opportunities							

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Course Name: Endodontics for the General Dentist	Course Number: A0202 Video Teletraining				
Synchronous Course					
Interactivity Factors		Level 2 High			
Administrative Requirements					
Self pacing					
Group training		>>>>>>>			
On-demand availability					
Open entry / open exit					
Detailed student records	-				
Test Security		>>>>>>>>			
Multiple test forms		>>>>>>>			
Training / Instruction Approach					
Lecture / Text	X	>>>>>>>			
Live Presenters (guest speakers)		>>>>>>>			
Self study					
Demonstration	X	>>>>>>>			
Exhibit	^	>>>>>>>			
Guided Discussion					
Simulation – knowledge based		>>>>>>>			
Simulation - hardware					
Problem solving exercises	-				
Learning to Mastery	-				
Practice / drill	-				
Structured Review					
Feedback on performance	-				
Remediation	_				
	-				
Group activities/collaborative tasks					
Testing Types					
Objective knowledge tests	_				
Essay	_				
Performance test – "paper" exercise	-				
Performance test – hardware simulation	-				
Performance test – hardware	_				
Oral testing					
No testing/Student course evaluation		>>>>>>			
Graphics					
2D graphics still	X	>>>>>>			
3D graphics still		>>>>>>			
2D animation		>>>>>>>			
3D animation		>>>>>>			
2D interactive animation					
3D interactive animation					
Pre recorded video /films		>>>>>>			
Communications					
Audio		>>>>>>			
Indirect discourse					
Assigned reading		>>>>>>			
Open Discussion					
Question and answer opportunities		· · · · · · · · · · · · · · · · · · ·			

Shaded blocks indicates factors NOT supported by that level of technology Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Short Worksheet: Development Time

Sh	ort Worksheet: Refined	Estimate of	f Developm						
Co	Course Name: Endodontics for the General Dentist Media: Web Based Training Level: 2								
		Analysis	Design	Development	Implementation	Sums			
1	Percentage of Time Spent by Task Type by Level	.40	.20	.25	.15				
2	Multiply line 1 by average * hours200					an a			
3	Average hrs. per phase	80	40	50	30	i Maria di			
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3	n an an Air an Air Sug Suastan La Chairtean Air			
5	Adjusted hrs. per phase. Multiply line 3 by line 4	24	20	40	9				
	Total Labor Hours - sum across line 5			2		93			

* Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Short Worksheet: Development Time

Sh		1 Estimate o		ent Hours Per H	our of Instruction				
Cc	Short Worksheet: Refined Estimate of Development Hours Per Hour of Instruction Course Name: Endodontics for the General Dentist Media: Computer Based Training Level: 2								
		Analysis	Design	Development		Sums			
1	Percentage of Time Spent by Task Type by Level	.40	.20	.25	.15				
2	Multiply line 1 by average * hours200					an an Arrange Arrange Angeleration Angeleration			
3	Average hrs. per phase	80	40	50	30	a provinsi a secondaria da secondaria da secondaria da secondaria da secondaria da secondaria da secondaria da Esta de la condición da secondaria da secondar Esta da secondaria da second			
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3				
5	Adjusted hrs. per phase. Multiply line 3 by line 4	24	20	40	9	р. 			
	Total Labor Hours - sum across line 5	· · · · · · · · · · · · · · · · · · ·				93			

* Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Course Cost Estimation Worksheet

	Course Cost Estimate Worksneet	ksheet: Web Base	d Training
		Course Number: A	
1	Write the sum from Refined Estimated number of hrs. per hr. of	Hrs. 93	
2	Average hourly labor cost in dollars		\$ 50
3	Multiple line 1 by line 2 and put the	results on line 3.	\$ 4650
4	Actual number of classroom equiva converted or developed.	lent hours to be	Hrs. 19
5	Compression: If conversion to asyn multiply line 4 by .7 (seven tenths) a on line 5. If not a conversion to asyn skip line 5	Hrs. 14	
6	Multiply line 3 by line 5 if a convers asynchronous delivery OR line 3 by conversion to asynchronous deliver on line 6.	\$ 65,100	
	Do not use lines 7 to 12 for any	costs that are to	be shared.
7	Infrastructure Costs		\$
8	Recurring Costs		\$
9	Delivery Labor Costs		\$
10	Travel Costs		\$
11	Miscellaneous Costs		\$
12	Add line 7 to 12		\$
13	Total Cost - Add lines 6 and 12.		\$
14	Number of potential students		# 932 ¹
15	Average Cost Per Student Divide li	ne 13 by line 14	\$ 70
¢ .			

¹ The course is considered appropriate for all dentists. The estimated number of dentists in the Army in 1999 will be 932.

ooun	se Cost Estimation Worksheet Course Cost Estimate Worksheet: Compute	r Based Training					
	Irse Name: Endodontics for the Course Numb eral Dentist						
1	Write the sum from Refined Estimate Worksheet, estimated number of hrs. per hr. of instruction.	Hrs. 93					
2	Average hourly labor cost in dollars	\$ 50					
3	Multiple line 1 by line 2 and put the results on line	3. \$ 4650					
4	Actual number of classroom equivalent hours to be converted or developed.	e Hrs. 19					
5	Compression: If conversion to asynchronous delivery multiply line 4 by .7 (seven tenths) and put the results on line 5. If not a conversion to asynchronous delivery skip line 5						
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery OR line 3 by line 4 if not a conversion to asynchronous delivery. Put the resu on line 6.	lts \$ 65,100					
i.	Do not use lines 7 to 12 for any costs that ar	e to be shared.					
7	Infrastructure Costs	\$					
8	Recurring Costs	\$					
9	Delivery Labor Costs	\$					
10	Travel Costs	\$					
11	Miscellaneous Costs	\$					
12	Add line 7 to 12	\$					
13	Total Cost - Add lines 6 and 12.	\$					
14	Number of potential students	# 932					
15	Average Cost Per Student: Divide line 13 by line 14 \$ 70						
	997 ¹⁰⁰						

Course Cost Estimation Worksheet

Calculation of Synchronous Training Costs

Course Name: Endodontics for the General Dentist	Course Number: A0202
Labor	Costs:
Development Cost = (320 hrs.) x average hourly	
rate (\$50)	\$ 16,000
Course Managers Studio Cost = (Total studio time	
+ 1 hour for each day the course is offered) x	
number of times course is presented x average	
hourly rate (\$50)	\$ 1150
Non-local Labor Cost = Number of non-local	
presenters) x (length of the course in days +1) x	
number of times offered x average daily rate (\$400	\$ 400
Local Labor Cost + Number of local presenters x	
average hourly rate (\$50) X 2 X number of times	
course is offered.	\$ 1,100
Total Labor Costs	\$ 18,650
Additional Cost (any co	osts not captured above)
Total Per Diem =	
(length of course in days plus one travel day x number of non-local presenters) x	
(local daily per diem rate) x number of time the	
course will be presented.	\$ 500
Total Air Fair = (Average Round Trip Air Fair x	\$ 560
number of non-local presenters) x number of times	
the course will be presented.	\$ -0-
Total dollar amount paid as honorariums	\$ -0-
(Other)	
(
Total Estimated Cost: Add Total Per Diem,	Airfare, Labor Costs, and Additional Costs.
Total Labor Costs	\$ 18,650
Total Per Diem	\$ 500
Total Airfare	\$ -0-
Total paid as honorariums	\$ -0-
(other)	\$ -0-
TOTAL COURSE COST Year 1	\$ 19,150
Cost Per Student = Total course costs divided by	
potential number of students	\$ 21

Course Name: Endodontics for the	ne Gene	ral [Dentist C	ourse Num	ber: A0202	
Technology Selected	Level	1	Level 2	Level 3	Level 4	
WBT						
CBT						
VTT	Low	X		High		
Other						
						I
Cost Factors			Values		So	urce
1. Labor hours year 1		32				
2. Labor hours year 2		16	0	Course [·]	Technology N	Natch Table
3. Labor hours year 3		160			•••	vity Factors Table
4. Labor hours year 4		16	0			-
5. Labor hours year 5		16	0			
6. Subtotal		96				
7. Average labor cost		\$5				
8. Total labor Cost over 5 yr. p	eriod.					
Multiply line 6 by line 7		\$4	8,000			
Additional Development/ Deliv	very Co	ost	By Year			
9. Cost year 1			3,150	Data to :	Support Cost	Analysis Worksheet
10. Cost year 2			3,150			
11. Cost year 3			3,150			·
12. Cost year 4			3,150			
13. Cost year 5			3,150			
14. Total Additional Costs .			,			
Sum lines 9 to 13 and enter	on	\$ 1	5,750			
line 14			,			
15. Total Course Cost.						· · · · · · · · · · · · · · · · · · ·
Add lines 8 and 14 and ente	r on 🛛	\$6	3,750			
line 15						
16. Average cost over 5 years.						
Divide line 15 by 5 and enter	ron	\$ 1	2.750			
line 16.						
17. Potential students year 1		93	32	From Co	ourse Informa	tion Summary Sheet
18. Total potential students year						
5 (multiply line 17 by 5. and	k	46	60			
enter on line 18)						
19. Average cost per student y						
5. (divide line 15 by line 1	8 and	\$ 1	4	Round u	p to the near	est whole dollar
enter on line 19)						

Restorative Dentistry and Dental Materials Conversion Analysis

RESTORATIVE DENTISTRY AND DENTAL MATERIALS

Course Purpose:

To provide a review of current techniques, and recent advances, trends, and developments in restorative dentistry and dental materials.

 Course Content Stability:
 Low

 Due to time limitations, all topics cannot be presented on a yearly basis. Therefore, not only will content change depending on current research and developments, but topics will change as well.

 General Presentation Style:
 Lecture

The entire course is delivered as lectures augmented by slides or overheads. That is, the information was delivered using a lecture format as the primary vehicle in which one (1) instructor presented information to many learners. All students attend all lectures. Their are no breakout sessions

Instructional Aids:

There was extensive use of 35 mm slides providing images of teeth, dental casts, tools, and treatment materials. In addition, each of the instructors provided handouts with supplemental information relevant to the topic they were addressing.

Hands-on Activities: None

Degree of Instructional Interaction:

There were opportunities for the students to ask questions, and the degree to which this interaction was engaged in varied from instructor to instructor. In general, these questions concerned points of clarification. The question/answer periods were generally limited to an exchange between an individual student and the instructor, such that the interaction did not expand into a general discussion period involving several students.

Relevant Instructional Value: High

This course provides a significant amount of information that is relevant to the professional performance of the attendees.

Recommendation:

Convert to Video Teletraining

This course could be converted to almost any distance learning format. However, given that the level of interactivity is low, it is ideal for conversion to Video Teletraining (VTT). As is currently done, the course can be presented once to all participants through VTT. While approximately 120 individuals currently take part, the course is appropriate to some 450 individuals. This approach will provide an extremely low per student cost while expanding the number of students able to access this information. Only one hour of the current instruction is not recommended for conversion to VTT. This hour focuses on administrative and career issues. Recommend that this topic be added to a Web page that could be updated as often as necessary.

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: Restorative Dentistry and Dental Mat				e Numb	er:	A0208			
1. Instructional goals of the cours trends and developments in restorati Foundation for Oral Restoration."									
roundation for oral restoration.		m 111 1							
2. Frequency of course offering	per vear	# 1	1					Yes	No
3. Current length of course in ho		# 28	7	. Conve	⊃rt t			X	
4. Number of hours to be converted # 27 8. Enhance?								~	X
5. Number of registered students		# 120	Ť	. Linia	100	•		<u> </u>	
6. Number of potential students		11 120	+						
could benefit from the course		# 450							
9. If item 8 = Yes, Specify									
Technology	Level 1	Level	2	Level	2	Level 4			
WBT			4	LEVEI	5	Level 4			
CBT									
VTT	Low	X		High					
Other	LOW	^		nign					
Other									
Labor Hours Estimation Metho	d: Short	Lona	Sv	nchron	וסט	s X			
			- ,			- <u> </u>			
	C	Cost Data	a						
10. Total Cost Year One					\$ 36,590				
11. Total Cost Year Two					\$ 28,590				
12. Total Cost Year Three					\$ 28,590				
13. Total Cost Year Four					\$ 28	,590			
Id. Total Cost Year Five				5	\$ 28	,590			
15. Total costs year 1 to 5 (Su	m of lines	10 throu	ıgh	14)	\$ 15	50,950			
16. Average cost, years 1 to 5 (d	livide value	in line 1	5 h	<u>v 5)</u>	15.3	,190			
17. Total potential students over			0.0	<u>y ()</u>	<i>p</i> 00	,130			
(multiply the number of poter			3 al	bove)					
by 5.)		·			# 22	:50			
18. Average cost per potential	student o	ver 5 yea	ar						
period.									
(divide the value in line 15 by	the value	in line 17	')		68				
Additi	ional Hard	waro/So	Ft	aro Por		od			,
Item:		wate/50				t per unit	Total	Cost	
					503	t per unit	TULAI	CUSI	
Proposed Enhancement(s)	Cost			I					,
	\$								
	\$			0.1					
	\$						II		
Total Enhancement Costs	\$								
	Ψ								
Traditust						Ne V			
							132		. <u>.</u>

Instructional Formats and Physical Requirements of Training

Course Nan Restorative I	ne: Dentistry and Dent		urse Number: 208					
% of Course Jsing this nstructional Format	Format		escription	Physical Presence Required?				
95%	Lecture with questions/answer opportunities	A speaker/speakers present verb may ask questions regarding that	nt verbal information to an audience. The audience ng that information.					
	Panel Discussion	A selected group (often selected area) discusses an issue in fror about the ideas being presented.	for their expertise or experience in a given t of students. Students may ask questions	No				
	Poster Session		group of individuals presents material in a poster format. Students may read e material being presented, and ask questions about the material.					
	Small Group Discussion	Small groups of students (2~5) di	?					
	Group Discussion	A larger group discusses an iss emphasis on student participation	ue – usually led by a facilitator – with heavy	?				
(((((((((((((((((((((((((((((((((((((Demonstration	Students observe the application participating themselves.	of knowledge. In this case, students are not	?				
	Student Verbal Presentations	Students present verbal information	on to the larger group.	?				
	Student Procedural Presentations	Students present procedural infor	mation to the larger group.	?				
1	Field Trip	Students visit an instructionally re individuals who present information	elevant site to observe activities or meet with n in an applied setting.	?				
	Shop Activity	Hands-on technical tasks/procedu	ires.	?				
	Lab Activity	Hands-on laboratory tasks/procec	ures.	?				

Course Information Summary Sheet

Course Name: Restorative Dentistry and Dental Materials

Course Number: A0208

Length of course - number of hours of instruction: - 28 hours

Number of Registered Students: 120

Number of potential students that could benefit from this course: 450

Instructional goals of the course: To provide a review of current techniques, recent advances, trends and developments in restorative dentistry and dental materials. Theme "Establishing a Basic Foundation for Oral Restoration."

Frequency of Course Offering: Once a year

Continuing Education Credit Offered? Yes

Number: 28

Administrative Requirements	Check		Check
Self pacing		Detailed student records	
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit			
Training / Instruction Approach			
Lecture / Text	X	Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	
Self study		Structured Review	
Demonstration		Feedback on performance	
Exhibit		Remediation	
Guided Discussion		Group activities / collaborative tasks	
Simulation (roll play, in-basket)			
Problem solving exercises			
Testing Types		· · · · · · · · · · · · · · · · · · ·	
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test – "paper"		No testing/Student course	X
Performance test – hardware			-
Graphics			
2D graphics still	X	3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
		Pre recorded video /films	
Communications			
Audio		Open Discussion	T
Indirect discourse		Question and answer opportunities	
Assigned reading			

4

Course Name: Restorative Dentistry and Dental Materials			Technologies					
Administrative Requirements	Check	СВТ	WBT	VTT	1			
Self pacing								
Group training								
On-demand availability		· · · · · · · · · · · · · · · · · · ·						
Open entry / open exit						-		
Detailed student records		The second second						
Test Security					·			
Multiple test forms								
Training / Instruction Approach								
Lecture / Text	x							
Live Presenters (guest speakers)	^							
Self study			' <u>.</u> ·			-		
Demonstration								
Exhibit								
Guided Discussion								
Simulation – knowledge based								
Simulation - hardware			1					
Problem solving exercises								
Learning to Mastery		·	+					
Practice / drill				-				
Structured Review								
Feedback on performance				_				
Remediation				_				
Group activities/collaborative tasks								
Testing Types								
Objective knowledge tests	T	T	1		Γ	1		
Essay			1					
Performance test –"paper" exercise		· · · ·						
Performance test – hardware simulation				-				
Performance test – hardware								
Oral testing								
No testing/Student course evaluation	x		· · · · ·			-		
Graphics	^							
2D graphics still	X		T	-1	1			
3D graphics still								
2D animation			-					
3D animation								
2D interactive animation		+				-		
3D interactive animation					— ——	+		
Pre recorded video /films								
Communications		L			1			
Audio	1	[1	1		
Indirect discourse								
Assigned reading	+					-		
Open Discussion						-		
Question and answer opportunities						+		

Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Course Name: Restorative Course Number: A0208 Dentistry and Dental Materials									
Asynchronous Course	V	WEB Based Training							
Interactivity Factors	Level 1	Level 2		Level 4					
Administrative Requirements	-								
Self pacing		>>>>>>>	>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>					
Group training									
On-demand availability		>>>>>>>>	>>>>>>>	>>>>>>>					
Open entry / open exit		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>					
Detailed student records		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>					
Test Security		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>					
Multiple test forms	the state of the s		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>					
Fraining / Instruction Approach									
Lecture / Text		>>>>>>>>							
Live Presenters (guest speakers)	X		>>>>>>>>	>>>>>>>					
Self study		>>>>>>>	>>>>>>>	>>>>>>>>					
Demonstration			>>>>>>>	>>>>>>>>					
Exhibit			>>>>>>>>	>>>>>>>>					
Guided Discussion									
Simulation – knowledge based			>>>>>>>	>>>>>>>>					
Simulation - hardware									
Problem solving exercises			>>>>>>>	>>>>>>>>					
Learning to Mastery		>>>>>>>	>>>>>>>	>>>>>>>					
Practice / drill		>>>>>>>	>>>>>>>	>>>>>>>					
Structured Review				>>>>>>>>					
Feedback on performance			>>>>>>>>	>>>>>>>>					
Remediation			>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>					
Group activities/collaborative tasks	$(1,2)^{-1} = (1,2)^{-1}$								
Testing Types	-								
Objective knowledge tests		>>>>>>>	>>>>>>>	>>>>>>>>>					
Essay									
Performance test – "paper" exercise	_		>>>>>>>	>>>>>>>>>>>					
Performance test – hardware simulation	_		the second second						
Performance test – hardware	- Ni								
Oral testing									
No testing/Student course evaluation	X	>>>>>>>	>>>>>>>	>>>>>>>>>					
Graphics		L	· · · · · · · · · · · · · · · · · · ·						
2D graphics still	X	>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>					
3D graphics still			>>>>>>>	>>>>>>>>>>>					
2D animation			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>					
3D animation				>>>>>>>>					
2D interactive animation				>>>>>>>					
3D interactive animation									
Pre recorded video /films			>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>					
Communications			L						
Audio		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>					
Indirect discourse				1					
Assigned reading		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>					
Open Discussion									
Question and answer opportunities									

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Course Name: Restorative Dentistry and Dental Materials	Course Number: A0208							
Asynchronous Course	Computer Based Training							
Interactivity Factors	Level 1	Level 2	Level 3	Level 4				
Administrative Requirements								
Self pacing		>>>>>>>	>>>>>>>	>>>>>>				
Group training								
On-demand availability		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>				
Open entry / open exit		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>				
Detailed student records								
Test Security								
Multiple test forms			>>>>>>>	>>>>>>>				
Training / Instruction Approach								
Lecture / Text	X	>>>>>>>	>>>>>>>	>>>>>>				
Live Presenters (guest speakers)								
Self study		>>>>>>>>	>>>>>>>	>>>>>>				
Demonstration			>>>>>>>	>>>>>>				
Exhibit			>>>>>>>	>>>>>>				
Guided Discussion		and the second						
Simulation – knowledge based			>>>>>>>	>>>>>>				
Simulation - hardware	·							
Problem solving exercises		>>>>>>>>	>>>>>>>	>>>>>>				
Learning to Mastery		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>				
Practice / drill		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>				
Structured Review			>>>>>>>	>>>>>>				
Feedback on performance		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>				
Remediation			>>>>>>>	>>>>>>				
Group activities/collaborative tasks								
Testing Types								
Objective knowledge tests		>>>>>>>	>>>>>>>	>>>>>>				
Essay								
Performance test – "paper" exercise			>>>>>>>	>>>>>>				
Performance test – hardware simulation				>>>>>>				
Performance test – hardware								
Oral testing								
No testing/Student course evaluation	Х	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>				
Graphics		·	·					
2D graphics still	Х	>>>>>>>>	>>>>>>>	>>>>>>				
3D graphics still			>>>>>>>	>>>>>>				
2D animation			>>>>>>>	>>>>>>				
3D animation				>>>>>>				
2D interactive animation				>>>>>>>				
3D interactive animation								
Pre recorded video /films			>>>>>>>	>>>>>>>				
Communications								
Audio		>>>>>>>>	>>>>>>>	>>>>>>				
Indirect discourse								
Assigned reading		>>>>>>>>>	>>>>>>>>	>>>>>>>				
Open Discussion								
Question and answer opportunities								

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support tha factor.

Course Name: Restorative Dentistry and Dental Materials	Course Number:	AU2U8
Synchronous Course	Video Te	letraining
Interactivity Factors	Level 1 Low	
Administrative Requirements		
Self pacing		
Group training		>>>>>>>
On-demand availability		
Open entry / open exit		
Detailed student records		
Test Security		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Multiple test forms		>>>>>>
Training / Instruction Approach		
Lecture / Text	X	>>>>>>
Live Presenters (guest speakers)	~	>>>>>>
Self study		
Demonstration		>>>>>>>
Exhibit		>>>>>>>
Guided Discussion		
Simulation – knowledge based		>>>>>>
Simulation - hardware		
Problem solving exercises		
Learning to Mastery		
Practice / drill		
Structured Review		
Feedback on performance	en e	
Remediation		
Group activities/collaborative tasks		
Testing Types	· · · · ·	
Objective knowledge tests		
Essay		
Performance test –"paper" exercise	-	
Performance test – hardware simulation	-	
Performance test – hardware		
Oral testing		
No testing/Student course evaluation	Х	>>>>>>>
Graphics		
2D graphics still	X	>>>>>>
3D graphics still		>>>>>>>
2D animation		>>>>>>
3D animation		>>>>>>
2D interactive animation		· · · · ·
3D interactive animation	-	
Pre recorded video /films		>>>>>>
Communications	1	
Audio		>>>>>>
Indirect discourse		
Assigned reading		>>>>>>
Open Discussion		
Question and answer opportunities		

Shaded blocks indicates factors NOT supported by that level of technology Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Short Worksheet: Development Time

Sh	Short Worksheet: Refined Estimate of Development Hours Per Hour of Instruction								
	ourse Name: Restorative		Media:	Web Based Tra		/el: 1			
		Analysis	Design	Development	Implementation	Sums			
1	Percentage of Time Spent by Task Type by Level	.40	.20	,25	.15				
2	Multiply line 1 by average * hours100								
3	Average hrs. per phase	40	20	25	15	NG AL			
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3				
5	Adjusted hrs. per phase. Multiply line 3 by line 4	12	10	20	4.5	21			
*	Total Labor Hours - sum across line 5					47			

* Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Short Worksheet: Development Time

Sh	Short Worksheet: Refined Estimate of Development Hours Per Hour of Instruction								
Co	urse Name: Restorative	Dentistry	Media:	Computer Base	d Training Lev	vel: 1			
		Analysis	Design	Development	Implementation	Sums			
1	Percentage of Time Spent by Task Type by Level	.40	.20	,25	.15				
2	Multiply line 1 by average * hours100		ine States						
3	Average hrs. per phase	40	20	25	15				
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3				
5	Adjusted hrs. per phase. Multiply line 3 by line 4.	12	10	20	4.5				
	Total Labor Hours - sum across line 5					47			

* Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Course Cost Estimation Worksheet

	Course Cost Estimate Worksheet: Web Based	I Training
Cou	rse Name: Restorative Dentistry Course Number: A	.0208
1	Write the sum from Refined Estimate Worksheet, estimated number of hrs. per hr. of instruction.	Hrs. 47
2	Average hourly labor cost in dollars	\$ 50
3	Multiple line 1 by line 2 and put the results on line 3.	\$ 2350
4	Actual number of classroom equivalent hours to be converted or developed.	Hrs. 27
5	Compression: If conversion to asynchronous delivery multiply line 4 by .7 (seven tenths) and put the results on line 5. If not a conversion to asynchronous delivery skip line 5	Hrs. 19
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery OR line 3 by line 4 if not a conversion to asynchronous delivery. Put the results on line 6.	\$ 44,650
	Do not use lines 7 to 12 for any costs that are to	be shared.
7	Infrastructure Costs	\$
8	Recurring Costs	\$
9	Delivery Labor Costs	\$
10	Travel Costs	\$
11	Miscellaneous Costs	\$
12	Add line 7 to 12	\$
13	Total Cost - Add lines 6 and 12.	\$
14	Number of potential students	# 450
15	Average Cost Per Student:: Divide line 13 by line 14	\$ 100

	Course Cost Estimate Worksheet	eet: Computer Bas	sed Training
		Course Number: /	
1	Write the sum from Refined Estimat estimated number of hrs. per hr. of	,	Hrs. 47
2	Average hourly labor cost in dollars		\$ 50
3	Multiple line 1 by line 2 and put the	results on line 3.	\$ 2350
4	Actual number of classroom equival converted or developed.		Hrs. 27
5	Compression: If conversion to asyr multiply line 4 by .7 (seven tenths) a on line 5. If not a conversion to asyr skip line 5	and put the results	Hrs. 19
6	Multiply line 3 by line 5 if a convers asynchronous delivery OR line 3 by conversion to asynchronous deliver on line 6.	line 4 if not a	\$ 44,650
	Do not use lines 7 to 12 for any	costs that are to	be shared.
7	Infrastructure Costs		\$
8	Recurring Costs		\$
9	Delivery Labor Costs		\$
10	Travel Costs		\$
11	Miscellaneous Costs		\$
12	Add line 7 to 12		\$
13	Total Cost - Add lines 6 and 12.		\$
14	Number of potential students		# 450
15	Average Cost Per Student:: Divide	line 13 by line 14	\$ 100

Course Cost Estimation Worksheet

.

Calculation of Synchronous Training Costs

Course Name: Restorative Dentistry and Dental	Course Number: A0208
Materials	
l at a v	Ocata
	Costs:
Development Cost = (320 hrs.) x average hourly rate (\$50)	¢ 40.000
	\$ 16,000
Course Managers Studio Cost = (Total studio time + 1 hour for each day the course is offered) x	
number of times course is presented x average	
hourly rate (\$50)	\$ 1550
Non-local Labor Cost = Number of non-local	\$ 1000
presenters) x (length of the course in days +1) x	
number of times offered x average daily rate (\$400	\$ 8,000
Local Labor Cost + Number of local presenters x	
average hourly rate (\$50) X 2 X number of times	
course is offered.	\$ 700
Total Labor Costs	\$ 26,250
Additional Cost (any co	osts not captured above)
Total Per Diem =	
(length of course in days plus one	
travel day x number of non-local presenters) x	
(local daily per diem rate) x number of time the	
course will be presented.	\$ 2,540
Total Airfare = (Average Round Trip Airfare x	
number of non-local presenters) x number of times	
the course will be presented.	\$ 3,900
Total dollar amount paid as honorariums	\$ 3,900
(Other)	
Total Estimated Cost: Add Total Per Diem,	Airfare, Labor Costs, and Additional Costs.
Total Labor Costs	\$ 26,250
Total Per Diem	\$ 2,540
Total Airfare	\$ 3,900
Total paid as honorariums	\$ 3,900
(other)	\$ N/A
TOTAL COURSE COST Year 1	\$ 36,590
Cost Per Student = Total course costs divided by	
potential number of students	\$ 82
And	

Course Name: Restorative Der Materials				ourse Number: A0208						
Technology Selected	Level			Level 3	Level 4					
WBT	X									
CBT										
VTT	Low	Low		High	l					
Other										
	I	I		· · · · · · · · · · · · · · · · · · ·						
Cost Factors			Values		So	urce				
1. Labor hours year 1		89								
2. Labor hours year 2		893		Course T	echnology I	Match Table				
3. Labor hours year 3		89	3		Technology Interactivity Factors Table					
4. Labor hours year 4		893								
5. Labor hours year 5		89	3							
6. Subtotal		446	65							
7. Average labor cost		\$50)							
 Total labor Cost over 5 yr. period. Multiply line 6 by line 7 		\$223,250								
Additional Development/ Deliv	/ery Co		By Year							
9. Cost year 1		\$		Data to S	Data to Support Cost Analysis Worksheet					
10. Cost year 2		\$								
11. Cost year 3		\$								
12. Cost year 4		\$								
13. Cost year 5		\$				· · · · · · · · · · · · · · · · · · ·				
14. Total Additional Costs . Sum lines 9 to 13 and enter on line 14		\$0								
15. Total Course Cost. Add lines 8 and 14 and enter on line 15		\$ 22	23,250							
 Average cost over 5 years. Divide line 15 by 5 and enter on line 16. 		\$ 44,650								
17. Potential students year 1		45	0	From Cou	irse Informa	ation Summary Sheet				
18. Total potential students year5 (multiply line 17 by 5. and enter on line 18)	ł	225	50							
 Average cost per student yr. 1 to (divide line 15 by line 18 and enter on line 19) 			00	Round up	to the near	est whole dollar				

Course Name: Restorative Den Materials						nber: A02	08		
			· · · ·						
Technology Selected	Level	1	Level 2	Level	3	Level 4			
WBT									
CBT	Х								
VTT Low			F						
Other									
Cost Factors			Values				Source		
1. Labor hours year 1		89					Source		
2. Labor hours year 2		89			iror	Toobholo	gy Match Table		
3. Labor hours year 3		89					activity Factors Table		
4. Labor hours year 4		<u>89</u>			i ii iC	Jogy men	activity raciois rable		
5. Labor hours year 5		89 89			•				
6. Subtotal									
		4465							
 Average labor cost Total labor cost over 5 yr. per 		\$50 \$223,250							
Multiply line 6 by line 7	nou.								
Additional Development/ Deliv	0711 (00		Dy Veer						
		\$ \$	by rear	Det	o to	Support	Cost Applysis Markshoot		
				Data		Support	Cost Analysis Worksheet		
10. Cost year 2									
11. Cost year 3					••				
12. Cost year 4 13. Cost year 5		\$ \$							
14. Total Additional Costs .		Ф							
Sum lines 9 to 13 and enter on line 14									
15. Total Course Cost. Add lines 8 and 14 and enter on line 15			23,250						
16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16.			4,650						
17. Potential students year 1		45	0	Froi	тC	Course Info	ormation Summary Sheet		
18. Total potential students year5 (multiply line 17 by 5. and enter on line 18)		225	50						
19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and enter on line 19)			00	Rou	Ind	up to the r	nearest whole dollar.		

Course Name: Restorative Der Materials				ourse Number: A0208						
Technology Selected	11	Level	vel 2 Level 3 Level 4							
WBT										
CBT	· · · · ·									
VTT Low		X			High					
Other										
Cost Factors			Values					Source		
1. Labor hours year 1		52								
2. Labor hours year 2		365		Course	Tech	noloa	y Match Table			
3. Labor hours year 3		365								
4. Labor hours year 4		36				Technology Interactivity Factors Table				
5. Labor hours year 5		36								
6. Subtotal			985							
7. Average labor cost		\$5								
8. Total labor cost over 5 yr. pe	riod.									
Multiply line 6 by line 7			9,250							
Additional Development/ Deliv	erv Co	ost	Bv Ye	ar			•			
9. Cost year 1			0.340		Data to	Supp	ort Co	ost Analysis Worksheet		
10. Cost year 2			0,340							
11. Cost year 3			0,340					1444		
12. Cost year 4			0,340				••••			
13. Cost year 5			0,340							
14. Total Additional Costs .										
Sum lines 9 to 13 and enter	on									
line 14		\$ 5	51,700		2					
15. Total Course Cost.										
Add lines 8 and 14 and enter	on									
line 15		\$ 1	50,950							
16. Average cost over 5 years.										
Divide line 15 by 5 and enter	on									
line 16.			30,190							
17. Potential students year 1		45	0		From Co	ourse	Infor	mation Summary Sheet		
18. Total potential students year										
5 (multiply line 17 by 5 and										
enter on line 18)		22	50							
19. Average cost per student yr										
5. (divide line 15 by line 18	and			Round ι	up to t	he ne	arest whole dollar.			
enter on line 19) Note: For VTT Use 320 hrs prep time for y			68							

Note: For VTT Use 320 hrs prep time for year one and 160 hrs prep time for years 2 to 5 Labor hours use the following

Labor Hours = Prep time + (total studio time + 1 hr for every day the course is offered) + (number of non-local presenters) x (length of course in days + 1 travel day x 8) x (the number of times the course is offered) + (number of local presenters x 2) x number of times the course is offered

Additional Costs = (total air fair + total per diem + total honorariums) x 5

1998 Military Veterinary Medical Seminar Conversion Analysis 1998 Military Veterinary Medical Seminar

The purpose of the course is to update attendees on Veterinary Corps issues and technical skills. The theme of the seminar was "Support to Contingencies-Military and Civilian."

Course Content Stability: Low

The focus is on the latest developments in the area, and therefore the topics change each year. General Presentation Style: Distributive

This course could best be described as a "conference". That is, the information was delivered using a lecture format as the primary vehicle in which one instructor presented information to many learners. Approximately 95% of the instruction was delivered using a basic lecture format. Approximately 2% used film/video as part of the presentation, there was one demonstration/shop activity and one poster session.

Instructional Aids:

Most of the speakers used overhead slides, 35mm slides, or PowerPoint presentation files to aid them in their instruction.

Hands-on Activities: None

Degree of Instructional Interaction: There were opportunities for the students to ask questions, and the degree to which this interaction was engaged in varied from instructor to instructor. In general, these questions concerned points of clarification, and served to allow the learner to better understand how to apply the information in a real world situation. The question/answer periods were generally limited to an exchange between an individual student and the instructor, such that the interaction did not expand into a general discussion period involving several students.

Relevant Instructional Value: Low The assessment or "Low Instructional Value" is based strictly on the assessment that less than 30% of the sessions appeared to support the stated objective/theme of the conference. Of 24 general sessions designed either exclusively for officer attendance or in combination with warrant officers and 91 R/T NCOs, only 11 appeared to relate to the "Contingencies and Disasters" theme. Of the 26 Saturday breakout sessions designed primarily for officers and warrant officers. only six appeared to be related to the theme. Of the 15 sessions on the first day of the course designated for officers and warrant officers, only two appeared to be loosely related to the theme. This equates to 29.2% of the sessions that appeared to relate to the objective. When broken down into hours, this equates to approximately nine of the 30 hours. Additionally, the welcome letter to attendees stated that in addition to the presentations supporting the seminar theme. ... subject matter experts in the functional areas of our VETCOM mission will provide numerous presentations, but they are only intended to be catalysts to promote discussion and information sharing." This course provides a significant amount of information, but with a goal of making the listeners familiar with the topic. Should the students wish to apply any of the information that was provided, it is doubtful that this could be wisely accomplished without further researching the topic independently. The main thing to be gained from attending this course was an opportunity for informal networking, and making contacts among peers.

Recommendation:

Convert portions relating to the theme to Web-Based Training. Those portions that do not meet the objectives of the theme can be eliminated or presented via the web in a non-learning format. Because the content of this course will change every year, the actual portion to be designed as distance learning versus that presented in another format will have to be made during the analysis phase.

This "course" is actually more of a conference insofar as there is no structured set of intended learning outcomes unified by a specific theme. The information itself could easily be presented in the form of Web Based training accompanied by an electronic journal. As such, the entire population could have access to the information, and the presenters could have an "electronic publication" to add to their vitas. In this way, the educational value of the course could be increased insofar as students could participate in interactive activities and be assessed using a distance learning technology.

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: 1998 Military V Seminar	eterinary Me	edical	Course N	lumber: A ()306		
 Instructional goals of the c issues and technical skills. The 							
2. Frequency of course offering	per year	1				Yes	No
3. Current length of course in he		30	7. Conve	ert to DL?		X	
4. Number of hours to be conve		91	8. Enhar				X
5. Number of registered studen	ts	360			····		
6. Number of potential students benefit from the course	that could	500					
9. If item 8 = Yes, Specify		579,40 (, t					
Technology	Level 1	Level 2	Level 3	Level 4			574 A
WBT		X					
СВТ							
VTT	Low		High			••• ••••••••	
Other						· · / · · · ·	
Labor Hours Estimation Metho	d: Short	Long	Synch	ronous	1		
	—			······································			
Cost Data							
10. Total Cost Year One		Т		\$29,295			
11. Total Cost Year Two				\$14,648			
12. Total Cost Year Three				\$14,648			
13. Total Cost Year Four				\$14,648	1		
14. Total Cost Year Five				\$14,648			
15. Total costs year 1 to 5 (Su	im of lines a	10 through	14)	\$87,887	1		
16. Average cost, years 1 to 5 (Divide value	in line 15 b	oy 5)	\$17,578			
17. Total potential students ove number of potential students [ite	m 6 above]	by 5.)		2,500			
18. Average cost per potential (divide the value in line 15 by the			period.	\$35.16			
Additional Hardware/Softwar	e Required		- 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10	·	····		
Item:				Cost per u	unit	Total Cost	
Proposed Enhancements		Cost					
Electronic Journal							
				······			
Total Enhancement Costs							·
		· · · · · · · · · · · · · · · · · · ·	in the second			an tha	·

¹ Only nine of the 30 hours appeared to support the objective and theme of the seminar.

Instructional Formats and Physical Training Requirements

ourse Nar eminar	ne: 1998 Military V	eterinary Medical Course Number: A 0306					
of Course sing this Istructional ormat	Format	Description	Physical Presence Required?				
94%	Lecture with questions/answer opportunities	A speaker/speakers present verbal information to an audience. The audience may ask questions regarding that information.					
	Panel Discussion	A selected group (often selected for their expertise or experience in a given area) discusses an issue in front of students. Students may ask questions about the ideas being presented.	No				
2%	Poster Session	A group of individuals presents material in a poster format. Students may read the material being presented, and ask questions about the material.					
	Small Group Discussion	Small groups of students (2~5) discuss an assigned topic.					
	Group Discussion	A larger group discusses an issue – usually led by a facilitator – with heavy emphasis on student participation.	?				
2%	Demonstration	Students observe the application of knowledge. In this case, students are not participating themselves.					
	Student Verbal Presentations	Students present verbal information to the larger group.					
	Student Procedural Presentations	Students present procedural information to the larger group.	?				
	Field Trip	Students visit an instructionally relevant site to observe activities or meet with individuals who present information in an applied setting.	?				
2%	Shop Activity	Hands-on technical tasks/procedures.	?				
20112222 Marca 1993	Lab Activity	Hands-on laboratory tasks/procedures.	?				

Course Information Summary Sheet

Course Name: 1998 Military Veterinary Medical Seminar

Course Number: A 0306

Length of course - number of hours of instruction: 30

Number of Registered Students: 360

Number of potential students that could benefit from this course: 500

Instructional goals of the course: The purpose of the course is to update attendees on Veterinary Corps issues and technical skills. The theme of the seminar was "Support to Contingencies-Military and Civilian."

Frequency of Course Offering: Annual

Continuing Education Credit Offered? Yes

Number: 15

Administrative Requirements	Check		Check
Self pacing	1	Detailed student records	
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit			
Training / Instruction Approach			
Lecture / Text		Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	
Self study		Structured Review	
Demonstration	1	Feedback on performance	
Exhibit		Remediation	
Guided Discussion		Group activities/collaborative tasks	
Simulation (roll play, in-basket)			
Problem solving exercises			
Testing Types			
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test – "paper"		No testing/Student course eval	1
Performance test – hardware			
Graphics			
2D graphics still	1	3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
		Pre recorded video /films	1
Communications			
Audio		Open Discussion	1
Indirect discourse		Question and answer opportunities	
Assigned reading			

Course 1998 Military Veterinary Medical Seminar	Technologies					
Administrative Requirements	Check	СВТ	WBT	VTT	T	
Self pacing						
Group training		12. A. A.				
On-demand availability						
Open entry / open exit						
Detailed student records						
Test Security	-	·,		-		
Multiple test forms						
Training / Instruction Approach						
Lecture / Text	1					
Live Presenters (guest speakers)						
Self study						
Demonstration						
Exhibit	V					-
Guided Discussion						
Simulation – knowledge based						
Simulation - hardware						
Problem solving exercises						
Learning to Mastery						
Practice / drill						
Structured Review				- · ·		
Feedback on performance						
Remediation						
Group activities/collaborative tasks				- -		
Testing Types		· · · ·				
Objective knowledge tests	T	I	- <u></u>			
Essay						
Performance test "paper" exercise		• •		-		
Performance test – paper exercise						
Performance test – hardware				_		
Oral testing						
No testing/Student course evaluation	1			-		
Graphics	V	l				
2D graphics still		[r	
3D graphics still	V					
2D animation			-			
3D animation						
2D interactive animation						
3D interactive animation			-			
Pre recorded video /films						
Communications	✓					
Audio	- <u>r</u>	· · · · · ·				
Indirect discourse						
Assigned reading						
Open Discussion						
Question and answer opportunities						

Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Course Name: 1998 Military Veterinary Medical Seminar		lumber: A					
Asynchronous Course	WEB Based Training						
Interactivity Factors	Level 1	Level 2	Level 3	Level 4			
Administrative Requirements							
Self pacing		>>>>>>>	>>>>>>>	>>>>>>			
Group training							
On-demand availability		>>>>>>>	>>>>>>>	>>>>>>			
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>			
Detailed student records		>>>>>>>	>>>>>>>	>>>>>>			
Test Security		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Multiple test forms			>>>>>>>	>>>>>>			
Training / Instruction Approach							
Lecture / Text	1	>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Live Presenters (guest speakers)		1					
Self study		>>>>>>>>	>>>>>>>>	>>>>>>			
Demonstration			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>			
Exhibit	-		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>			
Guided Discussion	_						
Simulation – knowledge based			>>>>>>>>	>>>>>>			
Simulation - hardware	-						
Problem solving exercises	· .		>>>>>>>>	>>>>>>>			
Learning to Mastery		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Practice / drill				>>>>>>			
Structured Review		>>>>>>>	>>>>>>>	>>>>>>			
				>>>>>>			
Feedback on performance Remediation			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
			>>>>>>>	>>>>>>			
Group activities/collaborative tasks							
Testing Types	1						
Objective knowledge tests		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Essay		nto 1946 e se ot					
Performance test – "paper" exercise Performance test – hardware simulation			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Performance test – hardware simulation Performance test – hardware	8						
	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -						
Oral testing			:				
No testing/Student course evaluation	√	>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Graphics		T	T	·····			
2D graphics still		>>>>>>>	>>>>>>>	>>>>>>>			
3D graphics still			>>>>>>>	>>>>>>			
2D animation			>>>>>>>	>>>>>>			
3D animation				>>>>>>			
2D interactive animation				>>>>>>			
3D interactive animation							
Pre recorded video /films		1	>>>>>>>	>>>>>>			
Communications							
Audio		>>>>>>>	>>>>>>>	>>>>>>			
Indirect discourse	. 1						
Assigned reading		>>>>>>>	>>>>>>>	>>>>>>			
Open Discussion	. <u> </u>						
Question and answer opportunities							

Technology Interactivity Factors

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Asynchronous Course	Computer Based Training						
Interactivity Factors	Level 1	Level 2	Level 3	Level 4			
Administrative Requirements							
Self pacing		>>>>>>>>	>>>>>>>>	>>>>>>>			
Group training							
On-demand availability		>>>>>>>>	>>>>>>>	>>>>>>>			
Open entry / open exit		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Detailed student records				///////////////////////////////////////			
Test Security							
Multiple test forms	· · ·		>>>>>>>>	>>>>>>>			
Training / Instruction Approach							
Lecture / Text	1	>>>>>>>	>>>>>>>>	>>>>>>>			
Live Presenters (guest speakers)							
Self study		>>>>>>>>	>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Demonstration			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Exhibit		~		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Guided Discussion	· ·		>>>>>>>>	////////			
Simulation – knowledge based			>>>>>>>				
Simulation - knowledge based				>>>>>>			
Problem solving exercises		>>>>>>>	>>>>>>>	>>>>>>			
Learning to Mastery		>>>>>>>	>>>>>>>	>>>>>>			
Practice / drill		>>>>>>>	>>>>>>	>>>>>>			
Structured Review			>>>>>>>	>>>>>>			
Feedback on performance		>>>>>>>	>>>>>>>	>>>>>>>			
Remediation			>>>>>>>	>>>>>>>			
Group activities/collaborative tasks							
Testing Types	· · · · ·	1					
Objective knowledge tests		>>>>>>>	>>>>>>>	>>>>>>			
Essay							
Performance test – "paper" exercise			>>>>>>>	>>>>>>			
Performance test – hardware simulation				>>>>>>			
Performance test – hardware							
Oral testing							
No testing/Student course evaluation	1	>>>>>>>>	>>>>>>>>	>>>>>>			
Graphics			• • • • • • • • • • • • • • • • • • •				
2D graphics still	1	>>>>>>>	>>>>>>>	>>>>>>>			
3D graphics still	Maria da Cara d		>>>>>>>	>>>>>>			
2D animation			>>>>>>>	>>>>>>			
3D animation				>>>>>>			
2D interactive animation				>>>>>>			
3D interactive animation							
Pre recorded video /films		1	>>>>>>>	>>>>>>			
Communications			<u> </u>	L			
Audio		>>>>>>>	>>>>>>>	>>>>>>			
Indirect discourse				l			
Assigned reading		>>>>>>>	>>>>>>>	>>>>>>			
Open Discussion		l					
Question and answer opportunities							

Technology Interactivity Factors

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Short Worksheet: Development Time

	Media: W Based	eb		Level: 2	******
	Analysis	Design	Development	Implementation	Sum
1 Percentage of Time Spent by Task Type by Level	0.40	0.20	0.25	0.15	
2 Multiply line 1 by average * hours					
200					
3 Average hrs. per phase	80.00	40.00	50.00	30.00	
4 Adjustments ** for hours per phase. Use 1 for added time and for less time	0.30	0.50	0.80	0.30	
5 Adjusted hrs. per phase. Multiply line 3 by line 4	24.00	20.00	40.00	9.00	
Total Labor Hours - sum across line 5				1	93.00

Short Worksheet: Development Time

Short Worksheet: Refined Estimate of Development Hours Per Hour of Instruction

	Media: CE	3T Multim	edia	Level: 2		
	Analysis	Design	Development	Implementation	Sum	
1 Percentage of Time Spent by Task Type by Level	0.40	0.20	0.25	0.15		
2 Multiply line 1 by average * hours			ant gran States			
200						
3 Average hrs. per phase	80.00	40.00	50.00	30.00		
Adjustments ** for hours per phase. Use 1 for added time and for less time	0.30	0.50	0.80	0.30		
5 Adjusted hrs. per phase. Multiply line 3 by line 4	24.00	20.00	40.00	9.00		
Total Labor Hours - sum across line 5	· · · ·	· · ·			93.0	

** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Course Cost Estimation Worksheet

	Course Cost Estimation Worksheet: Web Based Training		
Cou Sem	rse Name: 1998 Military Veterinary Medical Course Number: A0416		
1			
	Write the sum from Refined Estimate Worksheet, estimated number of hrs. per hr. of instruction.	Hrs.	93
2	Average hourly labor cost in dollars	\$	50.00
3	Multiple line 1 by line 2 and put the results on line 3.	\$	4,650.00
4	Actual number of classroom equivalent hours to be converted or developed.	Hrs.	9
5	Compression: If conversion to asynchronous delivery multiply line 4 by .7 (seven tenths) and put the results on line 5. If not a conversion to asynchronous delivery skip line 5.	Hrs.	6.3
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery OR line 3 by line 4 if not a conversion to asynchronous delivery. Put the results on line 6.	\$	29,295.00
	Do not use lines 7 to 12 for any costs that are to be shared.	اللين ال	ri an
7	Infrastructure Costs	\$	
8	Recurring Costs	\$	
9	Delivery Labor Costs	\$	
10	Travel Costs	\$	
11	Miscellaneous Costs	\$	
12	Add line 7 to 12	\$	0.00
13	Total Cost - Add lines 6 and 12.	\$	29,295.00
14	Number of potential students.	1	500
15	Average Cost Per Student Divide line 13 by line 14	\$	58.59
		المست. المراجع المراجع	• •

Course Cost Estimation Worksheet

	Course Cost Estimation Worksheet: CBT Multimedia		
	urse Name:1998 Military Veterinary Medical Course Number: A 0306 minar		<u></u>
1	Write the sum from Refined Estimate Worksheet, estimated number of hrs. per hr. of instruction.	Hrs.	93
2	Average hourly labor cost in dollars	\$	50.00
3	Multiple line 1 by line 2 and put the results on line 3.	\$	4,650.00
4	Actual number of classroom equivalent hours to be converted or developed.	Hrs.	9
5	Compression: If conversion to asynchronous delivery multiply line 4 by .7 (seven tenths) and put the results on line 5. If not a conversion to asynchronous delivery skip line 5.	Hrs.	6.3
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery OR line 3 by line 4 if not a conversion to asynchronous delivery. Put the results on line 6.	\$	29,295.00
Alian	Do not use lines 7 to 12 for any costs that are to be shared.		1
7	Infrastructure Costs	\$	
8	Recurring Costs	\$	
9	Delivery Labor Costs	\$	
10	Travel Costs	\$	
11	Miscellaneous Costs	\$	
12	Add line 7 to 12	\$	0.00
13	Total Cost - Add lines 6 and 12.	\$	29,295.00
14	Number of potential students.	#	500
15	Average Cost Per Student Divide line 13 by line 14	\$	58.59
:			· · · · · · · · · · · · · · · · · · ·

Course Name: 1998 Military Vete Seminar	ical	Course N	umber: A (0306	
Technology Selected	Level 1	Level 2	Level 3	Level 4	· · ·
WBT		X			
СВТ					
VTT	Low	I	High		
Other					
Cost Factors		Values	0	Source	
1. Labor Hours Year 1		586	T		echnology Match Table,
					y Interactivity Factors Table
2. Labor Hours Year 2		293		1	
3. Labor Hours Year 3		293		-	
4. Labor Hours Year 4		293		-	
5. Labor Hours Year 5		293		-	
6. Subtotal	1,758			· · · · · · · · · · · · · · · · · · ·	
7. Average Labor Cost per hour	\$50				
8. Total labor cost over a 5 year period.		\$87,900			Landard and the second s
Multiply line 7 by line 6.					
Additional Development Costs	s By Year				
9. Cost year 1		\$0		Data to Su	ipport Cost Analysis Worksheet
10. Cost year 2		\$0			
11. Cost year 3		\$0			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
12. Cost year 4		\$0			
13. Cost year 5		\$0			
14. Total additional costs. Sum li and enter on line 14	nes 9 to 13	\$0			
15. Total Course Cost. Add lines and enter on line 15.	8 and 14	\$87,900			
16. Average cost over 5 years. D 15 by 5 and enter on line 16.	16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16.				
17. Potential students year 1.		500		From Cou	rse Information Summary Sheet
18. Total potential students year (multiply line 17 by 5 and enter on		2500			
19. Average cost per student yea (Divide line 15 by line 18 and ente 18)	\$35		Round up	to the nearest whole dollar.	

Cost Estimate for a Single Course Over a Five Year Period

Military Veterinary Foreign Animal Diagnostics Course Analysis

MILITARY VETERINARY FOREIGN ANIMAL DISEASE DIAGNOSTICS

Course Purpose:

To teach military veterinarians about various foreign animal diseases that are a serious threat to the United States' animal industry through the clinical presentation of these diseases and through lectures on their role in the event of a foreign animal disease outbreak.

Course Content Stability:

High

Although new findings can be presented, the general content of the course remains relatively stable. Changes may be made to reflect new threats from various diseases that may enter the United States.

General Presentation Style:

Lecture/Lab/Hands-on

The course was mostly lecture-format, followed by laboratory sessions. Interjected between the lecture/labs were a variety of seminars, panel discussions, and case studies.

Instructional Aids:

Overhead slides, videos, and lab equipment were used to fully prepare the vets in their abilities to recognize these diseases.

Hands-on Activities:

Hands-on laboratory activities are necessary to develop a full understanding of the progression of each disease. Students see the disease in the live animal and watch clinical signs develop day to day.

Floin

Degree of Instructional Interaction:

Students participated in the evaluation and necropsy of the animals.

Relevant Instructional Value:

The FADDL laboratory is the only location in the US where these diseases can be observed and studied due to their highly contagious nature. This prepares the vets to recognize harmful diseases whose presence could cause serious illness.

Recommendation:

Do not convert the course to a distance learning format.

It is doubtful that this could take the place of actual lecture time since the lab-experience benefits from a contiguous presentation of the relevant material (i.e. the students review the material relevant to a particular lab exercise immediately before participating). Whether any lecture could be *replaced* would have to be decided by a Subject Matter Expert (a veterinarian that teaches the course).

Requirements of Distance Learning Technology

At the present time, students receive reading materials to complete before attending this course. This pre-course material could be converted to a multimedia format with the intent to *supplement* and *enhance* the learning experience. No cost or time savings would be expected from such a conversion.

Patient Administration Symposium Conversion Analysis Patient Administration Symposium

The purpose of this course is to provide conceptual and operational overviews of the changing military health system to leaders in the Patient Administration Community and to provide officers the opportunity to receive hands-on training on new/emerging health systems and applications.

Course Content Stability: Low Due to technological advances, the material presented is based on current systems and trends. Some of the topics will remain the same, but information is updated and new capabilities of systems are demonstrated.

General Presentation Style: Distributive Distributive The course was primarily lecture format with an opportunity for questions and answers. In some cases the lecture was supported by a demonstration.

Instructional Aids:

The majority of the speakers used PowerPoint slides to support their presentations. A significant portion of the speakers also provided the students with handouts. Laptop computers were used in two presentations.

Hands-on Activities:

There were two (7% of course instructional time) hands-on learning experiences focusing on the implementation of new or revised software programs. These could easily be simulated (or emulated) in either a CBT or WBT environment.

Degree of Instructional Interaction There was an opportunity to ask questions following presentations. The exchanges were informational.

Relevant Instructional Value: Moderate

Although the material presented reflected the latest information available, there was a lack of formal objectives and a clear focus in the curriculum.

Recommendation Convert to Web-Based Training.

The instructional value of this course would benefit from delivery on a distance learning technology that allowed for one-to-many communications, and an asynchronous delivery. Hands-on activities in this particular case lend themselves easily to a Web environment since they involved instruction on computer software.

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: Patient Administ	ration Sym	posium	Course N	Number: A0416		
1. Instructional goals of the co health system to leaders in the Pa receive hands-on training on new	atient Admi	nistration C	ommunity a	and to provide office	ews of the cha ers the opport	nging military unity to
2. Frequency of course offering p	or voar	1			Yes	No
3. Current length of course in ho	•	23	7. Conve	art to DL2	X	
4. Number of hours to be conver		23	8. Enhar		^	
5. Number of registered students		54				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
 6. Number of potential students t benefit from the course 		150				
9. If item 8 = Yes, Specify		·····				
Technology	Level 1	Level 2	Level 3	Level 4		·
WBT		X				
СВТ						
VTT	Low		High	1		
Other					, 1817-14	
Labor Hours Estimation Metho	d: Short _)	(Long_	Synchi	ronous		
Cost Data						
10. Total Cost Year One				\$103,463		18 March 1997
11. Total Cost Year Two				\$103,463		1 - 1 - 1 Adv
12. Total Cost Year Three				\$103,463		
13. Total Cost Year Four				\$103,463		1.4.00
14. Total Cost Year Five				\$103,463		
15. Total costs year 1 to 5 (Sur	n of lines 1	10 through	14)	\$517,313		
16. Average cost, years 1 to 5 (E			• •	\$103,463		
17. Total potential students over number of potential students [iten	n 6 above]	by 5.)		750		
18. Average cost per potential (divide the value in line 15 by the			period.	\$690		
Additional Hardware/Software	Required					
ltem:	- 70 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			Cost per unit	Total Cost	
Proposed Enhancements		Cost				#11/nL1
		Cost				

Total Enhancement Costs					Ation	
		1				

Instructional Formats and Physical Training Requirements

		stration Symposium	Course Number: A0416				
% of Course Using this Instructional Format	Format		Description	Physical Presence Required?			
100%	Lecture with questions/answer opportunities	A speaker/speakers present may ask questions regarding	verbal information to an audience. The audience that information.	No			
	Panel Discussion	A selected group (often sele area) discusses an issue in about the ideas being preser	ected for their expertise or experience in a given front of students. Students may ask questions ted.	No			
	Poster Session	A group of individuals preser the material being presented	nts material in a poster format. Students may read , and ask questions about the material.	No			
	Small Group Discussion	Small groups of students (2~	5) discuss an assigned topic.	?			
	Group Discussion	A larger group discusses ar emphasis on student particip	i issue – usually led by a facilitator – with heavy ation.	?			
	Demonstration	Students observe the application participating themselves.	ation of knowledge. In this case, students are not	? •			
	Student Verbal Presentations	Students present verbal infor	mation to the larger group.	?			
	Student Procedural Presentations	Students present procedural	information to the larger group.	?			
	Field Trip	Students visit an instructiona individuals who present inform	ally relevant site to observe activities or meet with mation in an applied setting.	?			
	Shop Activity	Hands-on technical tasks/pro	cedures.	?			
	Lab Activity	Hands-on laboratory tasks/pr	ocedures.	?			

Course Information Summary Sheet

Course Name: Patient Administration Symposium

Course Number: A0416

Length of course - number of hours of instruction: 22.25

Number of Registered Students: 54

Number of potential students that could benefit from this course: 150

Instructional goals of the course: To provide nurse clinicians and middle managers, active duty and civilians with current concepts, trends and issues affecting the delivery of care as the military health care system transitions into the new millennium. The course provides participants with knowledge and information that will enable them to effectively participate in the development of appropriate clinical practices.

Frequency of Course Offering: Annual

Continuing Education Credit Offered? Yes

Number: 26

Administrative Requirements	Check	z	Check
Self pacing		Detailed student records	
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit		······································	
Training / Instruction Approach	- -	Le come ana constante de la come ana constante de la constante de la constante de la constante de la constante	
Lecture / Text		Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	
Self study		Structured Review	
Demonstration		Feedback on performance	
Exhibit		Remediation	
Guided Discussion		Group activities/collaborative tasks	
Simulation (roll play, in-basket)			
Problem solving exercises			
Testing Types			I
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test – "paper"		No testing/Student course eval	
Performance test – hardware			
Graphics		· · ·	
2D graphics still		3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
		Pre recorded video /films	
Communications			_ I
Audio		Open Discussion	
Indirect discourse		Question and answer opportunities	
Assigned reading			
A CONTRACTOR OF A CONTRACTOR			

Course Patient Administration Symposium				chnolog	les	
Administrative Requirements	Check	CBT	WEB	VTT		
Self pacing						
Group training						
On-demand availability						
Open entry / open exit			1			
Detailed student records						
Test Security						
Multiple test forms	1					
Training / Instruction Approach						
Lecture / Text	1					
Live Presenters (guest speakers)						
Self study						
Demonstration				-		-
Exhibit			1			
Guided Discussion						
Simulation – knowledge based	-				-	
Simulation - hardware						
Problem solving exercises		-				
Learning to Mastery						
Practice / drill	1					
Structured Review						
Feedback on performance						
Remediation	-			-		-
Group activities/collaborative tasks		1				
Testing Types					1	1
Objective knowledge tests						
Essay			le tra de la			
Performance test "paper" exercise						
Performance test – hardware simulation			1			
Performance test – hardware			inter de la composition De la composition			
Oral testing						
No testing/Student course evaluation	1					
Graphics				-		
2D graphics still	1					
3D graphics still						
2D animation						
3D animation						
2D interactive animation						
3D interactive animation						
Pre recorded video /films						
Communications						•
Audio						
Indirect discourse						
Assigned reading						
Open Discussion			the second			
Question and answer opportunities	1	1.1			1	

Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Course Name: Patient Administration Symposium	Course N	lumber: A	0410					
Asynchronous Course	WEB Based Training							
Interactivity Factors	Level 1	Level 2	Level 3	Level 4				
Administrative Requirements								
Self pacing		>>>>>>>	>>>>>>>	>>>>>>>				
Group training								
On-demand availability		>>>>>>>	>>>>>>>	>>>>>>>				
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>>				
Detailed student records		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Test Security		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Multiple test forms			>>>>>>>	>>>>>>>				
Training / Instruction Approach								
Lecture / Text	1	>>>>>>>>	>>>>>>>	>>>>>>>				
Live Presenters (guest speakers)								
Self study		>>>>>>>	>>>>>>>	>>>>>>>				
Demonstration			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Exhibit			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Guided Discussion								
Simulation – knowledge based			>>>>>>>	>>>>>>>				
Simulation - hardware								
Problem solving exercises	-		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Learning to Mastery		>>>>>>>						
Practice / drill	- 7	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Structured Review	V		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Feedback on performance			~~~~~	>>>>>>				
Remediation	_		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Group activities/collaborative tasks	·			>>>>>>>				
Testing Types								
Objective knowledge tests		>>>>>>>	>>>>>>>					
Essay				>>>>>>>				
Performance test –"paper" exercise	-		>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Performance test – hardware simulation				///////////////////////////////////////				
Performance test – hardware								
Oral testing	-							
No testing/Student course evaluation		>>>>>>>>	>>>>>>>					
Graphics	▼			>>>>>>>				
2D graphics still		>>>>>>>	>>>>>>>					
3D graphics still	V		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
2D animation								
3D animation	-		>>>>>>>	>>>>>>>>				
2D interactive animation				>>>>>>>				
3D interactive animation				>>>>>>>				
Pre recorded video /films								
Communications		l	>>>>>>>>	>>>>>>>				
Audio								
Indirect discourse		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>				
Assigned reading		>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>				
Open Discussion								
Question and answer opportunities				-				

Technology Interactivity Factors

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Course Name: Patient Administration Symposium		lumber: A	0410					
Asynchronous Course	Computer Based Training							
Interactivity Factors	Level 1	Level 2	Level 3	Level 4				
Administrative Requirements								
Self pacing		>>>>>>>	>>>>>>>	>>>>>>				
Group training								
On-demand availability		>>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Detailed student records								
Test Security								
Multiple test forms			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Training / Instruction Approach				1				
Lecture / Text	1	>>>>>>>	>>>>>>>	>>>>>>				
Live Presenters (guest speakers)			$\sim 10^{-1}$					
Self study		>>>>>>>	>>>>>>>>	>>>>>>				
Demonstration	* 1		>>>>>>>	>>>>>>>				
Exhibit	19 A.		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Guided Discussion								
Simulation – knowledge based			>>>>>>>	>>>>>>				
Simulation - hardware								
Problem solving exercises		>>>>>>>	>>>>>>>	>>>>>>>				
Learning to Mastery		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Practice / drill		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Structured Review			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Feedback on performance		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Remediation			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Group activities/collaborative tasks	-							
Testing Types								
Objective knowledge tests	1	>>>>>>>						
Essay		111111111	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Performance test –"paper" exercise								
Performance test – paper exercise	-		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Performance test – hardware	-			>>>>>>>				
Oral testing	-							
No testing/Student course evaluation		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>						
Graphics	✓	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	>>>>>>>	>>>>>>>				
			T	· · · · · · · · · · · · · · · · · · ·				
2D graphics still	~	>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
3D graphics still 2D animation	-		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
	ten te		>>>>>>>	>>>>>>				
3D animation				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
2D interactive animation				>>>>>>>				
3D interactive animation								
Pre recorded video /films			>>>>>>>	>>>>>>>>				
Communications	.							
Audio		>>>>>>>>	>>>>>>>	>>>>>>>				
Indirect discourse								
Assigned reading		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>>>				
Open Discussion								
Question and answer opportunities								

Technology Interactivity Factors

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Short Worksheet: Development Time

Short Worksheet: Refined Estimate of Development Hours Per Hour of Instruction

	Media: We	eb Based	Level: 2		
	Analysis	Design	Development	Implementation	Sums
1 Percentage of Time Spent by Task Type by Level	0.40	0.20	0.25	0.15	
2 Multiply line 1 by average * hours					
200			an de la companya de La companya de la comp	and a second second Second second	
3 Average hrs. per phase	80.00	40.00	50.00	30.00	s./ .
4 Adjustments ** for hours per phase. Use 1 for added time and for less time	0.30	0.50	0.80	0.30	
5 Adjusted hrs. per phase. Multiply line 3 by line 4	24.00	20.00	40.00	9.00	
Total Labor Hours - sum across line 5		and a second s			93.00
Average hours per hour of instruction					I

٦

Short Worksheet: Development Time

Short Worksheet: Refined Estimate of Development Hours Per Hour of Instruction

Course Name: Patient Administration Symposium

	Media: CE	BT Multim	Level: 2		
	Analysis	Design	Development	Implementation	Sums
1 Percentage of Time Spent by Task Type by Level	0.40	0.20	0.25	0.15	
2 Multiply line 1 by average * hours	ć	1. 1. 1.	1.15 A.	1997 - 1997 -	
200	· · · · ·	- <u></u>			
3 Average hrs. per phase	80.00	40.00	50.00	30.00	
4 Adjustments ** for hours per phase. Use 1 for added time and for less time	0.30	0.50	0.80	0.30	
5 Adjusted hrs. per phase. Multiply line 3 by line 4	24.00	20.00	40.00	9.00	
Total Labor Hours - sum across line 5			and a second s		93.0
Average hours per hour of instruction	Ki	L		· · · · · · · · · · · · · · · · · · ·	L

** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Course Cost Estimation Worksheet

E. Space of the	Course Cost Estimation Worksheet: Web Based Training	and the second	
Cou	rse Name: Patient Administration Symposium Course Number: A0416		· · · · · · · · · · · · · · · · · · ·
1	Write the sum from Refined Estimate Worksheet, estimated number of hrs. per hr. of instruction.	Hrs.	93
2	Average hourly labor cost in dollars	\$	\$50.00
3	Multiple line 1 by line 2 and put the results on line 3.	\$	\$4,650.00
4	Actual number of classroom equivalent hours to be converted or developed.	Hrs.	23
5	Compression: If conversion to asynchronous delivery multiply line 4 by .7 (seven tenths) and put the results on line 5. If not a conversion to asynchronous delivery skip line 5.	Hrs.	16.1
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery OR line 3 by line 4 if not a conversion to asynchronous delivery. Put the results on line 6.	\$	\$74,865.00
12	Do not use lines 7 to 12 for any costs that are to be shared.		
7	Infrastructure Costs	\$	1
8	Recurring Costs	\$	
9	Delivery Labor Costs	\$	
10	Travel Costs	\$	
11	Miscellaneous Costs	\$	
12	Add line 7 to 12	\$	\$0.00
13	Total Cost - Add lines 6 and 12.	\$	\$74,865.00
14	Number of potential students.	\$	150
15	Average Cost Per Student Divide line 13 by line 14	\$	\$499.10

Course Cost Estimation Worksheet

18. ¹	Course Cost Estimation Worksheet: Computer Based Training		
Со	urse Name: Patient Administration Symposium Course Number: Patient Administration Symposium		
1	Write the sum from Refined Estimate Worksheet, estimated number of hrs. per hr. of instruction.	Hrs.	93
2	Average hourly labor cost in dollars	\$	\$50.00
3	Multiple line 1 by line 2 and put the results on line 3.	\$	\$4,650.00
4	Actual number of classroom equivalent hours to be converted or developed.	Hrs.	23
5	Compression: If conversion to asynchronous delivery multiply line 4 by .7 (seven tenths) and put the results on line 5. If not a conversion to asynchronous delivery skip line 5.	Hrs.	16.1
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery OR line 3 by line 4 if not a conversion to asynchronous delivery. Put the results on line 6.	\$	\$74,865.00
1	Do not use lines 7 to 12 for any costs that are to be shared.		
7	Infrastructure Costs	\$	
8	Recurring Costs	\$	
9	Delivery Labor Costs	\$	
10	Travel Costs	\$	
11	Miscellaneous Costs	\$	
12	Add line 7 to 12	\$	\$0.00
13	Total Cost - Add lines 6 and 12.	\$	\$74,865.00
14	Number of potential students.	\$	150
15	Average Cost Per Student Divide line 13 by line 14	\$	\$499.10
		•	

Course Name: Patient Administra	osium	Course N	umber: A04	416	
Technology Selected	Level 1	Level 2	Level 3	Level 4	
WBT		X			
CBT					
VTT	Low		High		
Other					
Cost Factors		Values		Source	
1. Labor Hours Year 1		2,069		Course Te	chnology Match Table,
2. Labor Hours Year 2		2,069			y Interactivity Factors Table
3. Labor Hours Year 3		2,069			
4. Labor Hours Year 4		2,069		_	
5. Labor Hours Year 5	. Labor Hours Year 5			_	
6. Subtotal					
7. Average Labor Cost per hour	\$50	100 - 21 - 20			
8. Total labor cost over a 5 year Multiply line 7 by line 6.	period.	\$517,313			
Additional Development Cost	s By Year				
9. Cost year 1		\$0		Data to Su	pport Cost Analysis Worksheet
10. Cost year 2		\$0			
11. Cost year 3		\$0			······
12. Cost year 4		\$0			
13. Cost year 5		\$0			
14. Total additional costs. Sum I and enter on line 14	nes 9 to 13	\$0			
15. Total Course Cost. Add lines and enter on line 15.	\$517,313				
16. Average cost over 5 years. E 15 by 5 and enter on line 16.	\$103,463				
17. Potential students year 1.	150		From Cour	rse Information Summary Sheet	
18. Total potential students year (multiply line 17 by 5 and enter or	750				
 Average cost per student yea (Divide line 15 by line 18 and entername 18) 	\$690	61 10 <u>00</u> -	Round up	to the nearest whole dollar.	

Cost Estimate for a Single Course Over a Five Year Period

Health Facility Life Cycle Acquisition Conversion Analysis

JOINT HEALTH FACILITY LIFE CYCLE ACQUISITION

Course Purpose:

To provide a Tri-Service interactive forum where individuals involved in Facilities Management can inform each other of processes and changes in the professional environment, improve current operations by defining and refining all aspects of our facility life cycle management functions, and play a determining role in the future by establishing a truly collaborative Tri-service work environment.

Course Content Stability: Low to Moderate

While some items are static, the information changes concerning new processes and methods. Reported
rates of change varied from 10% to 85% depending on which of seven tracks a student was assigned.General Presentation Style:Interactive/Collaborative

The course was primarily small group discussion and problem solving exercises. Approximately 25% of information was delivered to the group in a lecture format.

Instructional Aids: The majority of the speakers used Power Point slides or a 35mm slide projector to support their

presentations. Flip Charts were used throughout to present small group findings to the larger audience. Hands-on Activities:

None

Degree of Instructional Interaction:

The format of this course emphasized student interaction, so that participants provided the majority of the instruction and reinforcement to each other.

Relevant Instructional Value: High

This course provided a unique environment for instruction. Student interaction took place in a highly structured format, with each student participating in a particular curriculum based on personal requests. Recommendation:

Partial Conversion: Convert Newcomers' Orientation to Web Based Training

The heavy emphasis on student interaction and problem solving exercises in this course makes it, as a whole, a poor candidate for a distance learning medium. However one portion of the course seems appropriate for Web Based Training. The Newcomers' Orientation is a distinct and separate section designed to provide an overview of each phase of the health facilities life cycle process. It is divided into several blocks of instruction that focus on each phase of the process. Its' primary purpose is to provide an understanding of the overall process. Students are pre-selected to attend the Newcomers' Orientation. Each is a newcomer to the Health Facility Planning Process, or a person who may have some experience but has not attended the course. By placing this course on the Web new personnel assigned to Health Facility Planning, regardless of service, will be able to take the course immediately, rather than having to wait for the next conference. While the cost of the course is relatively high, the benefits to the service may outweigh the cost of conversion.

. ---

DISTANCE LEARNING CONV									
Course Name: Health Facility Life Cy Acquisition: Newcomers' Orientation		Co	urs	e Numb	ber:	A0421			
Acquisition. Newcomers Orientation	Паск								
1. Instructional goals of the cou	Irse: To p	rovide par	ticip	ants wi	th an	overview of	each pha	ase of	the
medical facility life cycle process.		•							
2. Frequency of course offering p		# 1						Yes	No
3. Current length of course in hou		# 20	7			to DL?		Х	
4. Number of hours to be convert	ed	# 20	8	. Enha	ance	?			X
5. Number of registered students		# 30							
6. Number of potential students th	nat								
could benefit from the course		# 50							
9. If item 8 = Yes, Specify			_				[
Technology	Level 1		2	Level	3	Level 4			
WBT		X							
CBT VTT	1			Link					
Other	Low			High					
Other									
Labor Hours Estimation Method	: Short _	X_ Long		Synch	nron	ous			
		Cost Data	3						
10. Total Cost Year One						,100			
11. Total Cost Year Two		611 0 1				,550			
12. Total Cost Year Three						,550			
13. Total Cost Year Four						.550			
14. Total Cost Year Five						,550			
15. Total costs year 1 to 5 (Sur	n of lines	10 throι	ıgh	14)	\$ 19	5,300			
10	·		_ ,						
16. Average cost, years 1 to 5 (di			o b	y 5)	\$ 39	,060			
17. Total potential students over a (multiply the number of poten			2 -						
by 5.)	liai sluuei	its (item o	o ai		# 2	50			
18. Average cost per potential s	student o	ver 5 ves	r		# 23	50			
period.		i ci o yea	.,						
(divide the value in line 15 by	the value	in line 17	')		\$ 78	2			
			,		, . .				
Additio	onal Hard	ware/So	ftw	are Re	quir	ed	J		
Item:					Cos	t per unit	Total C	ost	
Proposed Enhancement(s)	Cost						I		
	\$								
	\$								
	\$								
Total Enhancement Costs	\$								

2

Instructional Formats and Physical Training Requirements

Newcomers	me: lity Life Cycle Acqu ' Orientation Track		
% of Course Using this Instructional Format	Format	Description	Physical Presence Required?
70%	Lecture with questions/answer opportunities	A speaker/speakers present verbal information to an audience. The audience may ask questions regarding that information.	No
	Panel Discussion	A selected group (often selected for their expertise or experience in a given area) discusses an issue in front of students. Students may ask questions about the ideas being presented.	No
	Poster Session	A group of individuals presents material in a poster format. Students may read the material being presented, and ask questions about the material.	No
	Small Group Discussion	Small groups of students (2~5) discuss an assigned topic.	?
2.5%	Group Discussion	A larger group discusses an issue – usually led by a facilitator – with heavy emphasis on student participation.	?
5%	Demonstration	Students observe the application of knowledge. In this case, students are not participating themselves.	?
10%	Student Verbal Presentations	Students present verbal information to the larger group.	?
	Student Procedural Presentations	Students present procedural information to the larger group.	?
	Field Trip	Students visit an instructionally relevant site to observe activities or meet with individuals who present information in an applied setting.	?
12.5%	Shop Activity	Hands-on technical tasks/procedures.	?
	Lab Activity	Hands-on laboratory tasks/procedures.	?

Note: Demonstration and Shop Activities are paper or computer based and can be simulated or performed through Web Based Training

Course Information Summary Sheet

Course Name: Health Facility Life Cycle Acquisition: Newcomers' Orientation Track

Course Number: A0421

Length of course - number of hours of instruction: 20

Number of Registered Students: 30

Number of potential students that could benefit from this course: 50

Instructional goals of the course: To provide participants with an overview of each phase of the medical facility life cycle process.

Frequency of Course Offering: Once a year

Continuing Education Credit Offered? No

Number: N/A

Administrative Requirements	Check		Check
Self pacing		Detailed student records	
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit			
Training / Instruction Approach			
Lecture / Text	X	Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	X
Self study		Structured Review	
Demonstration	X	Feedback on performance	
Exhibit		Remediation	
Guided Discussion		Group activities/collaborative tasks	
Simulation (roll play, in-basket)			
Problem solving exercises	X		
Testing Types		.:	
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test – "paper"		No testing/Student course eval	X
Performance test – hardware			
Graphics			<u> </u>
2D graphics still	X	3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
		Pre recorded video /films	X
Communications			
Audio		Open Discussion	
Indirect discourse		Question and answer opportunities	
Assigned reading			

(Name) Health Facility Life Cycle Acquisition			Technologies			
Newcomers' Orientation Track	Check	СВТ	MOT	VTT	1	
Administrative Requirements Self pacing	Check	СЫ	WBT	VTT		
Group training						
On-demand availability						
Open entry / open exit						
Detailed student records						
				_		
Test Security						
Multiple test forms				_		
Training / Instruction Approach						
Lecture / Text	X					
Live Presenters (guest speakers)			1			
Self study						
Demonstration Exhibit	X		-			
Guided Discussion						
Simulation – knowledge based						
Simulation - hardware						
Problem solving exercises	X					
Learning to Mastery						
Practice / drill	X					
Structured Review				_		
Feedback on performance						
Remediation						
Group activities/collaborative tasks						
Testing Types		·····				
Objective knowledge tests						
Essay			•			
Performance test –"paper" exercise						
Performance test – hardware simulation						
Performance test – hardware		de la constante				
Oral testing		1. A				
No testing/Student course evaluation	X				<u> </u>	
Graphics						
2D graphics still	X					
3D graphics still	-		_			
2D animation						
3D animation						
2D interactive animation						
3D interactive animation	-			_		
Pre recorded video /films	X					
Communications	-1					
Audio						
Indirect discourse						
Assigned reading						
Open Discussion						
Question and answer opportunities						

4. Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Technology Interactivity Factors

Asynchronous Course	WEB Based Training					
Interactivity Factors	Level 1	Level 2	Level 3	Level 4		
Administrative Requirements						
Self pacing		>>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Group training						
On-demand availability		>>>>>>>>	>>>>>>>>			
Open entry / open exit		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Detailed student records		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Test Security		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>		
Multiple test forms	_			>>>>>>		
Training / Instruction Approach			>>>>>>>	>>>>>>		
Lecture / Text						
	X	>>>>>>>>	>>>>>>>>	>>>>>>		
Live Presenters (guest speakers)						
Self study		>>>>>>>>	>>>>>>>>	>>>>>>		
Demonstration		X	>>>>>>>	>>>>>>>		
Exhibit			>>>>>>>	>>>>>>		
Guided Discussion	- Alter and a					
Simulation – knowledge based			>>>>>>>	>>>>>>>		
Simulation - hardware						
Problem solving exercises		<u> </u>	>>>>>>>	>>>>>>>		
Learning to Mastery		>>>>>>>	>>>>>>>	>>>>>>		
Practice / drill		>>>>>>>	>>>>>>>	>>>>>>		
Structured Review				>>>>>>		
Feedback on performance			>>>>>>>	>>>>>>		
Remediation			>>>>>>>	>>>>>>		
Group activities/collaborative tasks						
Testing Types						
Objective knowledge tests		>>>>>>>>	>>>>>>>>	>>>>>>		
Essay						
Performance test "paper" exercise			>>>>>>>	>>>>>>		
Performance test – hardware simulation						
Performance test – hardware						
Oral testing						
No testing/Student course evaluation		>>>>>>>>>	>>>>>>>	>>>>>>		
Graphics		la	· · · · · · · · · · · · · · · · · · ·			
2D graphics still	X	>>>>>>>>	>>>>>>>	>>>>>>		
3D graphics still			>>>>>>>	>>>>>>		
2D animation			>>>>>>>	>>>>>>		
3D animation				>>>>>>		
2D interactive animation				>>>>>>		
3D interactive animation						
Pre recorded video /films		Х	>>>>>>>>	>>>>>>		
Communications			!			
Audio		>>>>>>>>	>>>>>>>	>>>>>>		
Indirect discourse						
Assigned reading		>>>>>>>				
Open Discussion			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Question and answer opportunities	_					

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Acquisition: Newcomers' Orientation Track Asynchronous Course	Computer Based Training					
		[_		
Interactivity Factors	Level 1	Level 2	Level 3	Level 4		
Administrative Requirements						
Self pacing		>>>>>>>	>>>>>>>	>>>>>>		
Group training						
On-demand availability		>>>>>>>	>>>>>>>	>>>>>>		
Ореп entry / open exit		>>>>>>>>	>>>>>>>	>>>>>>		
Detailed student records						
Test Security	_					
Multiple test forms	-		>>>>>>	>>>>>>>		
Training / Instruction Approach						
Lecture / Text	X	>>>>>>>	>>>>>>>	>>>>>>		
Live Presenters (guest speakers)				ſ		
Self study		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>>		
Demonstration		X	>>>>>>>	>>>>>>		
Exhibit	-		>>>>>>>	>>>>>>		
Guided Discussion			· · · ·			
Simulation – knowledge based			>>>>>>>	>>>>>>		
Simulation - hardware	· · ·			· · ·		
Problem solving exercises	X	>>>>>>>	>>>>>>>	>>>>>>		
Learning to Mastery		>>>>>>>	>>>>>>>	>>>>>>		
Practice / drill	X	>>>>>>>	>>>>>>>	>>>>>>		
Structured Review			>>>>>>>	>>>>>>		
Feedback on performance		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Remediation			>>>>>>>	>>>>>>>		
Group activities/collaborative tasks						
Testing Types	1	1				
Objective knowledge tests		>>>>>>>	>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Essay	-					
Performance test – "paper" exercise Performance test – hardware simulation			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
	-			>>>>>>>		
Performance test – hardware	-					
Oral testing No testing/Student course evaluation						
<u> </u>	X	>>>>>>>	>>>>>>>	>>>>>>		
Graphics 2D graphics still		1				
3D graphics still	X	>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
2D animation			>>>>>>	>>>>>>>		
3D animation			>>>>>>	>>>>>>		
2D interactive animation	-			>>>>>>>		
3D interactive animation				>>>>>>>		
Pre recorded video /films		V	~~~~~	~~~~~		
Communications		X	>>>>>>>	>>>>>>		
Audio	T	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>			
Indirect discourse			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>		
Assigned reading		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	~~~~~		
Open Discussion			>	>>>>>>>		
Question and answer opportunities						

Technology Interactivity Factors

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Short Worksheet: Development Time

	ort Worksheet: Refined urse Name: Health Facil					
00		• •	•	b Based Training		
		Analysis	Design	Development	Implementation	Sums
1	Percentage of Time Spent by Task Type by Level	.40	.20	.25	.15	
2	Multiply line 1 by average * hours 200					2000 2010
3	Average hrs. per phase. Multiply line 1 by line 2	80	40	50	30	
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3	
5	Adjusted hrs. per phase. Multiply line 3 by line 4	24	20	40	9	
*	Total Labor Hours - sum across line 5					93

* Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Short Worksheet: Development Time

Sh	Short Worksheet: Refined Estimate of Development Hours Per Hour of Instruction								
Сс	Course Name: Health Facility Life Cycle Acquisition: Newcomers' Orientation Track								
Media: Computer Based Training Level: 2									
		Analysis	Design	Development	Implementation	Sums			
1	Percentage of Time Spent by Task Type by Level	.40	.20	.25	.15				
2	Multiply line 1 by average * hours200								
3	Average hrs. per phase	80	40	50	30				
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3				
5	Adjusted hrs. per phase. Multiply line 3 by line 4	24	20	40	9				
	Total Labor Hours - sum across line 5					93			

* Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Course Cost Estimation Worksheet

	Course Cost Estimate Worksh	eet: Web Based	I Training
		urse Number: A	
1	Write the sum from Refined Estimate estimated number of hrs. per hr. of ins	,	Hrs. 93
2	Average hourly labor cost in dollars		\$ 50
3	Multiple line 1 by line 2 and put the res	sults on line 3.	\$ 4650
4	Actual number of classroom equivaler converted or developed.		Hrs. 20
5	Compression: If conversion to asynch multiply line 4 by .7 (seven tenths) and on line 5. If not a conversion to asynch skip line 5	l put the results pronous delivery	Hrs. 14
6	Multiply line 3 by line 5 if a conversior asynchronous delivery OR line 3 by line conversion to asynchronous delivery. on line 6.	ie 4 if not a	\$ 65,100
	Do not use lines 7 to 12 for any c	osts that are to	be shared.
7	Infrastructure Costs		\$
8	Recurring Costs		\$
9	Delivery Labor Costs		\$
10	Travel Costs		\$
11	Miscellaneous Costs		\$
12	Add line 7 to 12	, <u>1977</u>	\$
13	Total Cost - Add lines 6 and 12.		\$ 65,100
14	Number of potential students		# 50
15	Average Cost Per Student Divide line	13 by line 14	\$ 1,302
			and and a second se Second second

Course	Cost	Estimation	Worksheet
--------	------	------------	-----------

	Course Cost Estimate Worksheet	neet: Computer Bas	sed Training
		Course Number: A	
1	Write the sum from Refined Estimates estimated number of hrs. per hr. of	,	Hrs. 93
2	Average hourly labor cost in dollars	5	\$ 50
3	Multiple line 1 by line 2 and put the	results on line 3.	\$ 4650
4	Actual number of classroom equiva converted or developed.		Hrs. 20
5	Compression: If conversion to asyr multiply line 4 by .7 (seven tenths) a on line 5. If not a conversion to asyr skip line 5	and put the results	Hrs. 14
6	Multiply line 3 by line 5 if a convers asynchronous delivery OR line 3 by conversion to asynchronous deliver on line 6.	/ line 4 if not a	\$ 65,100
	Do not use lines 7 to 12 for any	y costs that are to	be shared.
7	Infrastructure Costs		\$
8	Recurring Costs		\$
9	Delivery Labor Costs		\$
10	Travel Costs		\$
11	Miscellaneous Costs		\$
12	Add line 7 to 12		\$
13	Total Cost - Add lines 6 and 12.		\$ 65,100
14	Number of potential students		# 50
15	Average Cost Per Student Divide li	ine 13 by line 14	\$ 1,302
		: '	

Separate worksheets are needed for each technology. Follow the instructions given on the worksheet.

Cost Estimate for a Single Course Over a Five Year Period

Course Name: Health Facility Life Cycle Acquisition: Newcomers' Orientation Trac				Сс	ourse Numb	er: A0421		
Technology Selected	Leve	11	Level	2	Level 3	Level 4		
WBT			X					
CBT	-							
VTT	Low				High			
Other								
Cost Factors		r	Values			So	urce	
1. Labor hours year 1		13	02					
2. Labor hours year 2			51		- Course T	echnology I	Match Table	
3. Labor hours year 3			51		Course Technology Match Table			
4. Labor hours year 4			51					
5. Labor hours year 5			51		_			
6. Subtotal			06		-			
7. Average labor cost		\$ 5						
8. Total labor Cost over 5 yr. p	eriod							
Multiply line 6 by line 7	chou.	\$ 195,300						
Additional Development/ Deli	verv C	ost	By Yea	r				
9. Cost year 1		\$	-0-		Data to S	unnort Cos	Analysis Worksheet	
10. Cost year 2		\$	-0-					
11. Cost year 3		\$	-0-					
12. Cost year 4		\$	-0-					
13. Cost year 5		\$	-0-				a a constant	
14. Total Additional Costs			<u> </u>					
Sum lines 9 to 13 and enter line 14	on	\$	-0-					
15. Total Course Cost. Add lines 8 and 14 and ente line 15	er on	\$ ^	195,300					
 Average cost over 5 years. Divide line 15 by 5 and enter line 16. 	r on		39,060					
17. Potential students year 1		50)		From Cou	irse Informa	ation Summary Sheet	
18. Total potential students yea5 (multiply line 17 by 5. an enter on line 18)	d	25	0				-	
 Average cost per student y (divide line 15 by line 1 enter on line 19) 		\$7	782		Round up	to the near	est whole dollar	

AMEDD Worldwide Personnel Management Course Conversion Analysis

1998 AMEDD WORLDWIDE PERSONNEL MGMT. COURSE

Course Purpose:

To provide current information regarding personnel policies and instruction in fundamental personnel management technical skills, as well as to accentuate peacetime responsibilities of the unit human resource manager.

L(0)\//

Course Content Stability:

Course content constantly changes to reflect automation and innovation changes in the work environment.

General Presentation Style: Lecture

This course could best be described as a "conference". That is, the information was delivered using a lecture format as the primary vehicle in which one instructor presented information to many learners. There were two panel discussions and three seminars as part of the breakout sessions.

Instructional Aids: Overheads and PowerPoint slides.

Hands-on Activities:

None

Degree of Instructional Interaction: Question/Answer periods accompanied the lectures and panel discussion. Informational exchanges took place during the seminar.

Relevant Instructional Value: Moderate

This course provides a significant amount of information, but with a goal of making the listeners familiar with the topic. Should the students wish to apply any of the information that was provided, it is doubtful that this could be accomplished without doing some follow-up work. Recommendation:

Convert to Web Based Training

This course is an informational exchange that could effectively be delivered by any distance learning format that supported "one-to-many" communications and allowed for visual aides. The most cost effective mode, and the one recommended is Level 1 Web Based Training. This requires eliminating the panel discussions and the three seminars from conversion. These sessions, which made up less than 9% of the sessions, were neither mandatory nor attended by all participants.

While the students had the opportunity to ask questions after most presentations, the questions, overall, focused on clarification. This type of interaction can be easily handled through Web, or Computer Based Training.

Given the large numbers of presenters and the number of contact hours involved (54), VTT proved to be significantly less cost effective (\$518 per student) as compared to Web Based Training ((\$298 per student).

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: AMEDD Worldwide Personnel	Course Number:
Mgmt. Course	A0423

1. Instructional goals of the course: Provide current information regarding personnel policies and Instruction in fundamental personnel management technical skills, as well as accentuate the peacetime responsibilities of the unit Human Resource Managers.

2. Frequency of course offering	per year:	biannual			Yes	No
3. Current length of course in hou	irs	# 62	7. Conve	ert to DL?	X	
4. Number of hours to be convert	ed	# 54	8. Enhar	nce?		X
5. Number of registered students		# 300				
 Number of potential students the course 	nat	# 300				
9. If item 8 = Yes, Specify					a constant a la constant a	
Technology	Level 1	Level 2	Level 3	Level 4		
WBT	X					
CBT						
			Llinda			
VTT	Low		High			

Labor Hours Estimation Method: Short _X_ Long__ Synchronous

	Cost Data		
10. Total Cost Year One		\$ 89,300	
11. Total Cost Year Two		\$ 89,300	
12. Total Cost Year Three	\$ 89,300		
13. Total Cost Year Four	\$ 89,300		
 14. Total Cost Year Five 	\$ 89,300		
15. Total costs year 1 to 5 (Sur	\$ 446,500		
16. Average cost, years 1 to 5 (di		\$ 89,300	
17. Total potential students over			
(multiply the number of poten	tial students (item 6 above)		
by 5.)	# 1,500		
18. Average cost per potential	student over 5 year		
period.			
(divide the value in line 15 by	the value in line 17)	\$ 298	
	onal Hardware/Software R		
Item:		Cost per unit	Total Cost
Proposed Enhancement(s)	Cost		
	\$		
	\$,	
	\$		
Total Enhancement Costs	\$		
	·		
			and the second

Instructional Formats and Physical Training Requirements

	ne: rldwide Personnel		Course Number: A0423			
of Course sing this structional ormat	Format	Descr	iption	Physical Presence Required?		
92%	Lecture with questions/answer opportunities	A speaker/speakers present verbal info may ask questions regarding that inform	rmation to an audience. The audience nation.	No		
4%	Panel Discussion	A selected group (often selected for the area) discusses an issue in front of s about the ideas being presented.	neir expertise or experience in a given tudents. Students may ask questions	No		
	Poster Session	A group of individuals presents material the material being presented, and ask q	in a poster format. Students may read uestions about the material.	No		
5%	Small Group Discussion	Small groups of students (2~5) discuss an assigned topic.				
	Group Discussion	A larger group discusses an issue – u emphasis on student participation.	isually led by a facilitator with heavy	?		
	Demonstration	Students observe the application of known participating themselves.	owledge. In this case, students are not	?		
	Student Verbal Presentations	Students present verbal information to t	he larger group.	?		
	Student Procedural Presentations	Students present procedural information	n to the larger group.	?		
	Field Trip	Students visit an instructionally relevan individuals who present information in a	t site to observe activities or meet with n applied setting.	?		
	Shop Activity	Hands-on technical tasks/procedures.		?		
	Lab Activity	Hands-on laboratory tasks/procedures.		?		

Note: The following instructional approaches will not be used for determining the Distance Learning Technology, Level of Interactivity, or Cost.

- Panel Discussions made up less than 4% of the course and were not mandatory.
- Seminars (small group discussions) made up less than 5% of the course and were not mandatory.

3

Course Information Summary Sheet

Course Name: AMEDD Worldwide Personnel Mgmt. Course

Course Number: A0423

Length of course - number of hours of instruction: 62

Number of Registered Students: 300

Number of potential students that could benefit from this course: 300

Instructional goals of the course: Provide current information regarding personnel policies and Instruction in fundamental personnel management technical skills, as well as accentuate the peacetime responsibilities of the unit Human Resource Managers.

Frequency of Course Offering: Biannual

Continuing Education Credit Offered? No

Number: N/A

Administrative Requirements	Check		Check
Self pacing		Detailed student records	
Group training		Test Security	
On-demand availability	-	Multiple test forms	
Open entry / open exit			
Training / Instruction Approach			·· I ·····
Lecture / Text	X	Learning to Mastery	· · · · ·
Live Presenters (guest speakers)		Practice / drill	
Self study		Structured Review	
Demonstration		Feedback on performance	
Exhibit		Remediation	
Guided Discussion		Group activities/collaborative tasks	-
Simulation (roll play, in-basket)		· · · · · · · · · · · · · · · · · · ·	
Problem solving exercises			
Testing Types	1	L	
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test –"paper"		No testing/Student course eval.	X
Performance test – hardware			
Graphics			
2D graphics still	X	3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
· · · · · · · · · · · · · · · · · · ·		Pre recorded video /films	
Communications			
Audio		Open Discussion	
Indirect discourse		Question and answer	-
Assigned reading			

(Name) AMEDD Worldwide Personnel Mgmt. C	Course	Technologies				
Administrative Requirements	Check	CBT	WBT	VTT	1	
Self pacing			1			
Group training						
On-demand availability	+					
Open entry / open exit	1					
Detailed student records				-		
Test Security				-		
Multiple test forms						
Training / Instruction Approach	-					
Lecture / Text	X	•	-			
Live Presenters (guest speakers)						
Self study			· · · · · · · · · · · · · · · · · · ·			
Demonstration						
Exhibit				<u> </u>	<u> </u>	
Guided Discussion						
Simulation – knowledge based						
Simulation - hardware						<u> </u>
Problem solving exercises					<u></u>	
Learning to Mastery						
Practice / drill				-		
Structured Review		.				
Feedback on performance						_
Remediation						
Group activities/collaborative tasks						
Testing Types						
Objective knowledge tests	r r					
Essay						
Performance test –"paper" exercise						
Performance test – hardware simulation						
Performance test – hardware						
Oral testing						
No testing/Student course evaluation	Х					
Graphics	^					
2D graphics still	X					T
3D graphics still						
2D animation						<u> </u>
3D animation						
2D interactive animation						<u> </u>
3D interactive animation						
Pre recorded video /films						
ommunications						
Audio		· · · · · · · · · · · · · · · · · · ·				
Indirect discourse						
Assigned reading						
Open Discussion						
Question and answer opportunities						

4. Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Technology Interactivity Factors

Personnel Mgmt. Course	A0423				
Asynchronous Course	V	VEB Base	ed Traini	na	
Interactivity Factors	Level 1	Level 2	Level 3		
Administrative Requirements					
Self pacing		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>	
Group training					
On-demand availability		>>>>>>>	>>>>>>>	>>>>>>>	
Open entry / open exit		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Detailed student records		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	
Test Security		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Multiple test forms			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>	
Training / Instruction Approach					
Lecture / Text	X	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>	
Live Presenters (guest speakers)	^				
Self study					
Demonstration		>>>>>>>	>>>>>>>	>>>>>>	
Exhibit		· · · · · · · · · · · · · · · · · · ·	>>>>>>>	>>>>>>	
Guided Discussion			>>>>>>>>	>>>>>>	
Simulation – knowledge based			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>	
Simulation - hardware	-				
Problem solving exercises			>>>>>>>>	>>>>>>>	
Learning to Mastery		>>>>>>>	>>>>>>>	>>>>>>>	
Practice / drill		>>>>>>>>	>>>>>>>	>>>>>>>	
Structured Review	_			>>>>>>	
Feedback on performance			>>>>>>>	>>>>>>>	
Remediation			>>>>>>>	>>>>>>	
Group activities/collaborative tasks					
Testing Types					
Objective knowledge tests		>>>>>>>	>>>>>>>	>>>>>>	
Essay					
Performance test – "paper" exercise			>>>>>>>	>>>>>>>	
Performance test – hardware simulation					
Performance test – hardware					
Oral testing					
No testing/Student course evaluation	X	>>>>>>>	>>>>>>>	>>>>>>	
Graphics			····		
2D graphics still	X	>>>>>>>	>>>>>>>	>>>>>>	
3D graphics still			>>>>>>>	>>>>>>	
2D animation			>>>>>>>	>>>>>>	
3D animation				>>>>>>	
2D interactive animation	1			>>>>>>	
3D interactive animation					
Pre recorded video /films			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>	
Communications				1	
Audio		>>>>>>>	>>>>>>>	>>>>>>	
Indirect discourse					
Assigned reading		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>>	
Open Discussion					
Question and answer opportunities					

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Course Name: AMEDD Worldwide Personnel Mgmt. Course	Course Number: A0423								
Asynchronous Course	Cor	nputer B	ased Tra	ining					
Interactivity Factors	Level 1	Level 2	Level 3	Level					
Administrative Requirements									
Self pacing		>>>>>>>	>>>>>>>>	>>>>>>					
Group training									
On-demand availability		>>>>>>>	>>>>>>>>	>>>>>>>					
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>					
Detailed student records									
Test Security	- 1								
Multiple test forms			>>>>>>>	>>>>>>					
Training / Instruction Approach									
Lecture / Text	Х	>>>>>>>	>>>>>>>	>>>>>>					
Live Presenters (guest speakers)		h	1						
Self study		>>>>>>>	>>>>>>	>>>>>>					
Demonstration			>>>>>>>	>>>>>>					
Exhibit			>>>>>>>	>>>>>>>					
Guided Discussion									
Simulation – knowledge based			>>>>>>>>	>>>>>>>					
Simulation - hardware				!					
Problem solving exercises		>>>>>>>	>>>>>>>	>>>>>>>					
Learning to Mastery		>>>>>>>	>>>>>>>	>>>>>>					
Practice / drill		>>>>>>>	>>>>>>	>>>>>>					
Structured Review			>>>>>>>	>>>>>>>					
Feedback on performance		>>>>>>>	>>>>>>>	>>>>>>					
Remediation			>>>>>>>	>>>>>>					
Group activities/collaborative tasks									
Testing Types									
Objective knowledge tests		>>>>>>	>>>>>>>	>>>>>>					
Essay									
Performance test – "paper" exercise			>>>>>>>	>>>>>>>					
Performance test – hardware simulation				>>>>>>					
Performance test – hardware									
Oral testing									
No testing/Student course evaluation	Х	>>>>>>>>	>>>>>>>	>>>>>>>					
Graphics	~	L	L						
2D graphics still	Х	>>>>>>>	>>>>>>>	>>>>>>					
3D graphics still			>>>>>>>	>>>>>>					
2D animation			>>>>>>>>	>>>>>>					
3D animation				>>>>>>>					
2D interactive animation				>>>>>>>					
3D interactive animation									
Pre recorded video /films			>>>>>>>>	>>>>>>					
Communications			L						
Audio		>>>>>>>	>>>>>>>	>>>>>>					
Indirect discourse									
		>>>>>>>>	>>>>>>>	>>>>>>					
	•								

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Course Name: AMEDD Worldwide Personnel Mgmt. Course	Course Number: A0423	
Synchronous Course	Video Te	letraining
Interactivity Factors	Level 1 Low	
Administrative Requirements		
Self pacing		• •
Group training		>>>>>>
On-demand availability		
Open entry / open exit	 A state of the Apple of the App	
Detailed student records		
Test Security		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Multiple test forms		>>>>>>
Training / Instruction Approach		
Lecture / Text	X	>>>>>>
Live Presenters (guest speakers)		>>>>>>>
Self study		
Demonstration		>>>>>>>>
Exhibit		>>>>>>>
Guided Discussion		
Simulation – knowledge based		>>>>>>>
Simulation - hardware		
Problem solving exercises		
Learning to Mastery		
Practice / drill		
Structured Review		
Feedback on performance		
Remediation	-	
Group activities/collaborative tasks		
Testing Types		
Objective knowledge tests		
Essay	The second se	· · · · ·
Performance test – "paper" exercise		
Performance test – hardware simulation	- · · ·	
Performance test – hardware		
Oral testing		
No testing/Student course evaluation	X	>>>>>>>
Graphics		
2D graphics still	X	>>>>>>>
3D graphics still		>>>>>>
2D animation		>>>>>>>
3D animation		>>>>>>>
2D interactive animation		
3D interactive animation		
Pre recorded video /films		>>>>>>
Communications		
Audio		>>>>>>
Indirect discourse		
Assigned reading		>>>>>>>
Open Discussion		
Question and answer opportunities		

Shaded blocks indicates factors NOT supported by that level of technology Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Short Worksheet: Development Time

Sh	ort Worksheet: Refined	Estimate of	f Developm	ent Hours Per He	our of Instruction	
Co	urse Name: AMEDD Wo	rldwide Persor	inel Mgmt. Co			evel: 1
		Analysis	Design	Development	Implementation	Sums
1	Percentage of Time Spent by Task Type by Level	.40	.20	.25	.15	
2	Multiply line 1 by average * hours100					
3	Average hrs. per phase	40	20	25	15	
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3	
5	Adjusted hrs. per phase. Multiply line 3 by line 4.	12	10	20	4.5	
	Total Labor Hours - sum across line 5		•			47

* Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Short Worksheet: Development Time

	ort Worksheet: Refined ourse Name: AMEDD W				Computer Based T	raining
		Analysis	Design	Development	Implementation	Sums
1	Percentage of Time Spent by Task Type by Level	.40	.20	.25	.15	
2	Multiply line 1 by average * hours100		42 			
3	Average hrs. per phase	40	20	25	15	
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3	a la Deve
5	Adjusted hrs. per phase. Multiply line 3 by line 4.	12	10	20	4.5	
	Total Labor Hours - sum across line 5					47

* Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

	Course Cost Estimate Worksheet	: Web Based	Training
1		e Number:	
1	Write the sum from Refined Estimate Wor estimated number of hrs. per hr. of instruct	· · ·	Hrs. 47
2	Average hourly labor cost in dollars		\$ 50
3	Multiple line 1 by line 2 and put the results	s on line 3.	\$ 2350
4	Actual number of classroom equivalent ho converted or developed.		Hrs. 54
5	Compression: If conversion to asynchronomultiply line 4 by .7 (seven tenths) and put on line 5. If not a conversion to asynchrony skip line 5	it the results	Hrs. 38
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery OR line 3 by line 4 conversion to asynchronous delivery. Put on line 6.		\$ 89,300
	Do not use lines 7 to 12 for any cost	s that are to t	oe shared.
7	Infrastructure Costs		\$
8	Recurring Costs		\$
9	Delivery Labor Costs		\$
10	Travel Costs		\$
11	Miscellaneous Costs		\$
12	Add line 7 to 12		\$
13	Total Cost - Add lines 6 and 12.		\$ 89,300
14	Number of potential students		# 300
15	Average Cost Per Student Divide line 13	by line 14	\$ 298
· · · ·			

Course Cost Estimation Worksheet

•

	Course Cost Estimation Worksheet	et: Computer Bas	sed Training
	Irse Name: AMEDD Worldwide C	ourse Number:	
1	Write the sum from Refined Estimate estimated number of hrs. per hr. of in	Worksheet,	Hrs. 47
2	Average hourly labor cost in dollars		\$ 50
3	Multiple line 1 by line 2 and put the re	esults on line 3.	\$ 2350
4	Actual number of classroom equivale converted or developed.		Hrs. 54
5	Compression: If conversion to async multiply line 4 by .7 (seven tenths) ar on line 5. If not a conversion to async skip line 5	id put the results	Hrs. 38
6	Multiply line 3 by line 5 if a conversion asynchronous delivery OR line 3 by line 5 on version to asynchronous delivery on line 6.	ine 4 if not a	\$ 89,300
	Do not use lines 7 to 12 for any o	costs that are to	be shared.
7	Infrastructure Costs		\$
8	Recurring Costs	and the second	\$
9	Delivery Labor Costs		\$
10	Travel Costs		\$
11	Miscellaneous Costs		\$
12	Add line 7 to 12		\$
13	Total Cost - Add lines 6 and 12.		\$ 89,300
14	Number of potential students		# 300
15	Average Cost Per Student. Divide line	e 13 by line 14	\$ 298

Course Cost Estimation Worksheet

Course Name: AMEDD Worldwin Mgmt. Course	de Pers	onn	el C	Course Number: A0423					
Technology Selected	Leve	1	Level 2		Level 3	Level 4			
WBT	X								
CBT									
VTT	Low		I		High				
Other									
Cost Factors			Values			S	ource		
1. Labor hours year 1		17	86						
2. Labor hours year 2			86		Course T	echnology	Match Table		
3. Labor hours year 3			86		Technology Interactivity Factors Table				
4. Labor hours year 4			86		-				
5. Labor hours year 5		17		-					
6. Subtotal			30						
7. Average labor cost		\$5					. <u></u>		
8. Total labor Cost over 5 yr. pe	eriod.								
Multiply line 6 by line 7		\$ 446,500							
Additional Development/ Deliv	verv Co	ost	Bv Year		-				
9. Cost year 1			-0-		Data to S	upport Cos	st Analysis Worksheet		
10. Cost year 2			-0-						
11. Cost year 3			-0-						
12. Cost year 4		\$	-0-						
13. Cost year 5			-0-						
14. Total Additional Costs . Sum lines 9 to 13 and enter line 14	on	\$	-0-		-				
15. Total Course Cost. Add lines 8 and 14 and ente line 15	r on	\$∠	146,500						
 Average cost over 5 years. Divide line 15 by 5 and enter line 16. 	on		39,300						
17. Potential students year 1		30	00		From Col	ırse Inform	ation Summary Sheet		
 Total potential students year (multiply line 17 by 5. and enter on line 18) 	ł	15	00						
 Average cost per student yr (divide line 15 by line 18 enter on line 19) 		\$ 2	298		Round up	to the nea	rest whole dollar		

Cost Estimate for a Single Course Over a Five Year Period

Army Medical Evacuation Conference Conversion Analysis

ARMY MEDICAL EVACUATION COURSE

Course Purpose: To use the Doctrine, Training, Organization, Leadership, Material format to facilitate an exchange of ideas and help improve the US Army Evacuation System across the operational spectrum.

Course Content Stability: Moderate

The is a central core of stable information, which is adjusted based on current trends in the AMEDD. In addition, the agenda is adapted based on courses critiques from previous years. General Presentation Style:

The course was structured with three or four lecture sessions each morning which all participants attended as a group, and a "round robin" format in the afternoon with one-hour small group sessions each repeated four times. All individuals attended one iteration of each of the small "working groups". The purpose of this format was to encourage involvement of participants in discussion and problem solving. For many of these sessions, a knowledgeable senior officer was "seeded" in each group to facilitate discussion and, when needed, provide a historical/doctrinal perspective regarding the issue at hand.

Instructional Aids:

The majority (95%) of course instructors used overhead slides or a PowerPoint presentation to assist them. Approximately 50% used handouts to supplement their presentations. There was limited use of video.

Hands-on Activities: None

Degree of Instructional Interaction:

There was a high degree of active participation in the majority of the general sessions with comments, questions, and suggestions regarding the question at hand. The round robin working groups encouraged involvement of participants in discussion and problem-solving.

Relevant Instructional Value: High The topics presented addressed the most current issues in the evacuation field, to include recent doctrinal changes, aircraft modernization, battlefield communications, organizational structure and employment, and a review of final drafts of two revised field manuals.

Recommendation

Prepare pre-course instruction for Distance Learning.

Due to the amount of interaction, and small group discussions during this course, it is not recommended that the entire course be converted to distance learning. Only VTT would be near appropriate. But given the highly interactive nature of the course it would have to be offered six times for the current number of students, with special preparation for each breakout session. However, pre-course materials focusing on the topics to be discussed in the "round robin" sessions (excluding rank specific workshops) would better prepare the students to make valuable contributions, and further facilitate the success of these activities at a very minimal per student cost (\$1.80).

DISTANCE LEARNING CONVERSION REPORT FORM

	ation	Co	urs	e Nun	ber: /	\0437			
Conference									
A location of the set of the									
1. Instructional goals of the col	Irse: 101	use the Do	ctrii	ne, Ira	aining,	Organizatio	n, Leade	ership,	
across the operational spectrum	ye or lueas	s and help i	mp	rove ti	ne us	Army Evacu	lation Sy	/stem	
deress the operational spectrum.						· · · · · · · · · · · · · · · · · · ·			
2. Frequency of course offering	er vear:	# 1						Yes	No
			7	Co	nvert	to DI ?		105	
			L					x	
					101100	•			
	nat								
		# 250							
9. If item 8 = Yes, Specify: Ele	ctronic Jo	ournal for	pre	-cour	se ins	truction/pre	eparatio	n	
Technology						Level 4	1		
WBT					ω				
CBT									
VTT	Low			High	!				
Other									
		- 1					L	·	
Labor Hours Estimation Method	: Short	Long	S	Synch	irono	us			
				-					
	(Cost Data	1						
10. Total Cost Year One					\$45	0			
VTT Low Other Other abor Hours Estimation Method: Short Long Cost Date 0. Total Cost Year One 1. Total Cost Year Two 2. Total Cost Year Three 3. Total Cost Year Four 4. Total Cost Year Five 5. Total costs year 1 to 5 (Sum of lines 10 thro 6. Average cost, years 1 to 5 (divide value in line 10)					\$45	0			
12. Total Cost Year Three									
13. Total Cost Year Four					\$45	0			
4. Total Cost Year Five					\$45	0			
15. Total costs year 1 to 5 (Sun	n of lines	10 throu	gh	14)	\$ 2,2	250		• ••	
16. Average cost, years 1 to 5 (di	vide value	e in line 15	5 by	/ 5)	\$ 45	0			
	tial studer	nts (item 6	i at	oove)					
					# 12	50			
	student o	ver 5-yea	r						
-									
(divide the value in line 15 by	the value	in line 17)		\$ 1.8	30		-	
، نانله له ۵									
	onal Hard	ware/Sof	tWa	are K			-	<u> </u>	
item.					LOS	t per unit	Iotal	Cost	
Dran and Enderson (1)	01					·······			
	Cost			-					
		<i>c</i> .							
Instruction/preparation		over five	yea	ars					
echnology Level 1 Level 2 Level 3 Level 4 WBT Image: Second and Concerns of Concer									
I Utal Enhancement Costs	\$ 2,250	over five y	/ea	rs					
					5				

Course Information Summary Sheet

Course Name: Army Medical Evacuation Conference

Course Number: A0437

Length of course - number of hours of instruction: 35

Number of Registered Students: 125

Number of potential students that could benefit from this course: 250

Instructional goals of the course: To use the Doctrine, Training, Organization, Leadership, Material format to facilitate an exchange of ideas and help improve the US Army Evacuation System across the operational spectrum.

Frequency of Course Offering: Once a year

Continuing Education Credit Offered? Yes

Number:

Administrative Requirements	Check		Chec
Self pacing		Detailed student records	
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit			
Training / Instruction Approach			
Lecture / Text	X	Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	
Self study		Structured Review	
Demonstration		Feedback on performance	
Exhibit		Remediation	
Guided Discussion	X	Group activities/collaborative tasks	
Simulation (roll play, in-basket)			
Problem solving exercises			
Testing Types			
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	-
Performance test – "paper"		No testing/Student course eval.	
Performance test – hardware			
Graphics			
2D graphics still	X	3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
		Pre recorded video /films	X
Communications			
Audio		Open Discussion	X
Indirect discourse		Question and answer	X
Assigned reading			

Course Army Medical Evacuation Confer		ODT		chnolog	1	1
Administrative Requirements	Check	CBT	WBT	VTT		
Self pacing						
Group training						
On-demand availability						
Open entry / open exit						
Detailed student records						
Test Security			•			
Multiple test forms						
Training / Instruction Approach						
Lecture / Text	X					
Live Presenters (guest speakers)						
Self study						-
Demonstration						
Exhibit						
Guided Discussion	X				-	
Simulation – knowledge based						
Simulation - hardware						
Problem solving exercises						-
Learning to Mastery						
Practice / drill			-			
Structured Review						-
Feedback on performance			-	-		
Remediation				·		
Group activities/collaborative tasks						
Testing Types				[
Objective knowledge tests		l				
Essay						
Performance test – "paper" exercise						
Performance test – hardware simulation						
Performance test – hardware						
Oral testing						_
No testing/Student course evaluation	X					
Graphics						
2D graphics still	X					
3D graphics still						
2D animation						
3D animation						
2D interactive animation			+			
3D interactive animation						
Pre recorded video /films	X					
Communications		I		1		
Audio			1	1	1	
Indirect discourse						
Assigned reading	-					
Open Discussion	X					
Question and answer opportunities	X					

Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Course Name: Army Medical I Conference	E: Army Medical Evacuation Course Number: A0437						
Technology Selected	Leve	11	Level 2	2	Level 3	Level 4	Do Not Convert
WBT							X
CBT							
VTT	Low		·		High		
Other							
Cost Factors			Values			Sol	Irce
1. Labor hours year 1		0	Fuldoo			000	
2. Labor hours year 2		0			Course T	echnology M	latch Table
3. Labor hours year 3		0					ity Factors Table
4. Labor hours year 4		0				gy moraolivi	iy ruolors rubit
5. Labor hours year 5		0			-		
6. Subtotal							
7. Average labor cost		\$5	0				
8. Total labor Cost over 5-yr.	period						
Multiply line 6 by line 7	penou.	\$ C)				
Additional Development/ De	livery Co	nst	By Year	-			
9. Cost year 1	iivory o		450		Data to S	unnort Cost	Analysis Worksheet
10. Cost year 2			450				Analysis Worksheet
11. Cost year 3			150				
12. Cost year 4			150				
13. Cost year 5			150				
14. Total Additional Costs.		φ-					
Sum lines 9 to 13 and enter line 14	er on	\$2	2,250				
15. Total Course Cost. Add lines 8 and 14 and en line 15		\$2	2,250				
 Average cost over 5 years Divide line 15 by 5 and en- line 16. 			150				
17. Potential students year 1		25	50		From Cou	ırse Informat	tion Summary Sheet
 Total potential students ye (multiply line 17 by 5. a enter on line 18) 	nd	12	50				
19. Average cost per student5. (divide line 15 by line enter on line 19)		\$ 1	1.80				

Cost Estimate for a Single Course Over a Five Year Period

U.S. Army Health Care Logistics Conference Conversion Analysis

US ARMY HEALTH CARE LOGISTICS

Course Purpose:

The training of medical logistics professionals to enhance medical readiness overall and the efficient support provisions of medical logistics to the Army health care system. To train Army medical logisticians to be successful in a highly complex and sophisticated environment which spans the medical support of a Force Projection Army to the unique mix of military and private sector logistics practices necessary to support today's Military Health System. To provide a forum for junior officers to gain considerable insight into the numerous professional opportunities afforded them in the medical logistics field.

Course Content Stability: Moderate Approximately 60% of the course content changes yearly.

General Presentation Style: Distributive

The information was delivered using a lecture format as the primary vehicle in which one instructor presented information to many learners.

Instructional Aids:

Presentations were supported by slides, overheads, Power Point presentations, and some video. Hands-on Activities:

None

Degree of Instructional Interaction:

Question and answer periods followed each of the lectures. These were informational exchanges. In addition, there was a high level of informational exchange during the poster session. These exchanges had high instructional value in that they were directly tied to the course goal of improving research skills.

Relevant Instructional Value: High

The majority of presentations were focused directly on the needs of health care logisticians or provided needed general background.

Recommendation: Convert to Web-Based Training.

The US Army Health care Logistics Conference was a large conference with 450+ registered attendees and 55 presenters. The majority of breakout sessions were offered twice to allow participants to attend each presentation without conflicting with other presentations. Excluding strictly conference related activities the course contained 50 hours of instruction, 13 hours in the plenary sessions and 33 hours in breakout sessions. Because of the large number of presenters, VTT would prove expensive as well as extremely difficult to organize and manage. Web Based Training is an ideal conversion medium for this course. The use of WBT or CBT would require significant effort to reorganize the content into logical blocks. While the number of potential participants is very near actual participants (500 to 450), potential cost savings and increased flexibility would make this conversion attractive.

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: US Army Health Care	e Logistics	Cou	rse	e Num	ber:	A0438			
1. Instructional goals of the cours readiness overall and the efficient su To train Army medical logisticians to which spans the medical support of a sector logistics practices necessary t	pport provisi be successf I Force Proje o support too	ons of meo ul in a high ection Army day's Milita	fica ly c / to ry	al logis comple the ur Health	tics to x and nique Syste	o the Army h I sophisticate mix of milita em. To prov	ealth care ed environ ry and priv ide a forur	syste ment /ate m for	em.
junior officers to gain considerable in	sight into the	e numerous	s pi	rofessi	onal o	opportunities	afforded I	hem	in
the medical logistics field.		<u> </u>							
 Frequency of course offering Current length of course in hor 		# 1 # 50	7	0.00		to DL?		Yes	No
4. Number of hours to be conver		# 50 # 50	7. 8.					Х	v
5. Number of registered students		# 30 # 450	0.		ance	<u>;</u>			X
6. Number of potential students t		# 400			-				
could benefit from the course		# 500							
codid benefit from the codise		# 300							
9. If item 8 = Yes, Specify:									
Technology	Level 1	Level 2	2	Leve	3	Level 4	1		
WBT		X	-						
CBT									
VTT	Low			High					
Other				<u>. ngn</u>					
	- 1								
Labor Hours Estimation Method	d: Short _)	(_ Long_		Sync	hron	ous			
10. Total Cost Year One	<u> </u>	ost Data			¢ 10	0 750			
11. Total Cost Year Two						2,750 ,650			
12. Total Cost Year Three						,050 ,650			
13. Total Cost Year Four						,650 ,650			
14. Total Cost Year Five						,030 ,650			
15. Total costs year 1 to 5 (Su	m of lines	10 throw	wh	11)		,030 5 3,350			
	in or intes		jii	14)	φ 55	5,550			
16. Average cost, years 1 to 5 (d	ivide value	in line 15	h١	(5)	\$ 11	0,670			
17. Total potential students over			,		ΨΠ	0,070			
(multiply the number of poter			ab	ove)					
by 5.)		(······		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	# 25	00			
18. Average cost per potential	student ov	ver 5-year	r						
period.		-							
(divide the value in line 15 by	the value	in line 17)			\$ 22	2			
	onal Hard	ware/Soft	Wá	are Re					
Item:					Cos	t per unit	Total C	ost	
Proposed Enhancement(-)	Cost								
Proposed Enhancement(s)	Cost								
	\$								
	\$								
Total Enhancement Costs	\$ \$								
	1 m								

2

Instructional Formats and Physical Training Requirements

r

Course Nai	me: US Army Hea	Ith Care Logistics Course Number: A0438	
% of Course Using this Instructional Format	Format	Description	Physical Presence Required?
91%	Lecture with questions/answer opportunities	A speaker/speakers present verbal information to an audience. The audience may ask questions regarding that information.	No
3%	Panel Discussion	A selected group (often selected for their expertise or experience in a given area) discusses an issue in front of students. Students may ask questions about the ideas being presented.	No
	Poster Session	A group of individuals presents material in a poster format. Students may read the material being presented, and ask questions about the material.	No
	Small Group Discussion	Small groups of students (2~5) discuss an assigned topic.	?
6%	Group Discussion	A larger group discusses an issue – usually led by a facilitator – with heavy emphasis on student participation.	?
	Demonstration	Students observe the application of knowledge. In this case, students are not participating themselves.	?
	Student Verbal Presentations	Students present verbal information to the larger group.	?
	Student Procedural Presentations	Students present procedural information to the larger group.	?
	Field Trip	Students visit an instructionally relevant site to observe activities or meet with individuals who present information in an applied setting.	?
	Shop Activity	Hands-on technical tasks/procedures.	?
	Lab Activity	Hands-on laboratory tasks/procedures.	?

Panel Discussions and Group discussions Comprised less than 9% of the conference and were also conducted as breakout sessions, and therefore not required for all students. Because these sessions were not required of all students they will not be considered critical factors for the remainder of the conversion analysis.

Course Information Summary Sheet

Course Name: US Army Health Care Logistics

Course Number: A0438

Length of course - number of hours of instruction:

Number of Registered Students: 450

Number of potential students that could benefit from this course: 500

Instructional goals of the course: The training of medical logistics professionals to enhance medical readiness overall and the efficient support provisions of medical logistics to the Army health care system. To train Army medical logisticians to be successful in a highly complex and sophisticated environment which spans the medical support of a Force Projection Army to the unique mix of military and private sector logistics practices necessary to support today's Military Health System. To provide a forum for junior officers to gain considerable insight into the numerous professional opportunities afforded them in the medical logistics field.

Frequency of Course Offering: Once a Year

Continuing Education Credit Offered? None

Number: N/A

Administrative Requirements	Check	"Check" if observed or documen	Chec
Self pacing		Detailed student records	Oneci
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit			-
raining / Instruction Approach			
Lecture / Text	X	Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	-
Self study		Structured Review	-
Demonstration		Feedback on performance	
Exhibit		Remediation	
Guided Discussion		Group activities/collaborative tasks	
Simulation (roll play, in-basket)			-
Problem solving exercises			
esting Types			
Objective knowledge tests		Performance test hardware	1
Essay		Oral testing	
Performance test – "paper"		No testing/Student course eval.	X
Performance test – hardware			
Graphics			
2D graphics still	X	3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
		Pre recorded video /films	X
Communications			
Audio		Open Discussion	
Indirect discourse		Question and answer	

(Name) US Army Health Care Logistics		Technologies				
Administrative Requirements	Check	СВТ	WBT	VTT		
Self pacing						+-
Group training						1
On-demand availability						
Open entry / open exit						
Detailed student records						-
Test Security						
Multiple test forms	-			-		
Training / Instruction Approach						_
Lecture / Text	X		-			
Live Presenters (guest speakers)						
Self study						
Demonstration	-			_		-
Exhibit				-		
Guided Discussion			1			
Simulation – knowledge based						
Simulation - hardware			1		L	
Problem solving exercises						
Learning to Mastery				-		
Practice / drill		-			· · · · ·	
Structured Review						
Feedback on performance						
Remediation	-					
Group activities/collaborative tasks		steria das				
Testing Types						
Objective knowledge tests		T		·	1	
Essay			19.00			
Performance test – "paper" exercise				1.1		
Performance test – hardware simulation						
Performance test – hardware						-
Oral testing	-					
No testing/Student course evaluation	X					-
Graphics	<u> </u>	1			L	
2D graphics still	X		1			
3D graphics still						
2D animation						
3D animation					+ · · · ·	
2D interactive animation						
3D interactive animation			1			-
Pre recorded video /films	X		+			
Communications		L				
Audio	1	1		·T· ·· ··	Т	
Indirect discourse						
Assigned reading	-					
Open Discussion						-
Question and answer opportunities		Alan an Utan 19 M Utan Alan an				

Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Course Name: US Army Health Care Logistics	Course Number: A0438 WEB Based Training				
Asynchronous Course					
Interactivity Factors	Level 1	Level 2	Level 3	Level 4	
Administrative Requirements					
Self pacing		>>>>>>>	>>>>>>>	>>>>>>>	
Group training					
On-demand availability		>>>>>>>>	>>>>>>>	>>>>>>>	
Open entry / open exit		>>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Detailed student records		>>>>>>>	>>>>>>>	>>>>>>>	
Test Security		>>>>>>>	>>>>>>>	>>>>>>>	
Multiple test forms			>>>>>>>	>>>>>>	
Training / Instruction Approach					
Lecture / Text	X	>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Live Presenters (guest speakers)					
Self study		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Demonstration			>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Exhibit	-		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	
Guided Discussion	-				
Simulation – knowledge based	-		>>>>>>>>	>>>>>>	
Simulation - hardware	-				
Problem solving exercises			>>>>>>>>	>>>>>>>	
Learning to Mastery	-	>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Practice / drill		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Structured Review				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Feedback on performance			>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Remediation	-		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Group activities/collaborative tasks					
Testing Types	6.		(i)		
Objective knowledge tests	1	>>>>>>>>	>>>>>>>>	>>>>>>	
Essay					
Performance test –"paper" exercise	-		>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Performance test – hardware simulation	-				
Performance test – hardware					
Oral testing					
No testing/Student course evaluation	Х	>>>>>>>>	>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Graphics	^				
2D graphics still	X	>>>>>>>>	>>>>>>>>	>>>>>>>	
3D graphics still	^		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
2D animation			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
3D animation	-			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
2D interactive animation	-				
3D interactive animation	-			>>>>>>	
Pre recorded video /films	-	V	~~~~~		
		X	>>>>>>>	>>>>>>	
Audio		~~~~~	~~~~~		
Indirect discourse		>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>	
Assigned reading		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>	
Open Discussion					
Question and answer opportunities	19 (19 (19 (19 (19 (19 (19 (19 (19 (19 (

Shaded blocks indicate factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Course Name: US Army Health Care Logistics	Course Number: A0438					
Asynchronous Course	Con	Computer Based Training				
Interactivity Factors	Level 1	Level 2	Level 3	Level 4		
Administrative Requirements						
Self pacing		>>>>>>>	>>>>>>>	>>>>>>>		
Group training						
On-demand availability		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>		
Detailed student records						
Test Security	-					
Multiple test forms			>>>>>>>	>>>>>>		
Training / Instruction Approach						
Lecture / Text	X	>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Live Presenters (guest speakers)	Sec. 1					
Self study		>>>>>>>	>>>>>>>	>>>>>>		
Demonstration			>>>>>>>	>>>>>>>		
Exhibit			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Guided Discussion	· ·					
Simulation – knowledge based	-		>>>>>>>	>>>>>>>		
Simulation - hardware	-					
Problem solving exercises		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Learning to Mastery		>>>>>>>	>>>>>>>	>>>>>>>		
Practice / drill		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Structured Review			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Feedback on performance		>>>>>>>	>>>>>>>	>>>>>>>		
Remediation			>>>>>>>	>>>>>>>		
Group activities/collaborative tasks						
Testing Types						
Objective knowledge tests		>>>>>>>	>>>>>>>	>>>>>>		
Essay				{		
Performance test – "paper" exercise			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Performance test – hardware simulation				>>>>>>>		
Performance test – hardware	-					
Oral testing	- New York, New York,					
No testing/Student course evaluation	Х	>>>>>>>	>>>>>>>	>>>>>>		
Graphics		1		I		
2D graphics still	X	>>>>>>>	>>>>>>>	>>>>>>>		
3D graphics still			>>>>>>>	>>>>>>		
2D animation			>>>>>>>	>>>>>>>		
3D animation				>>>>>>		
2D interactive animation				>>>>>>>		
3D interactive animation						
Pre recorded video /films		Х	>>>>>>	>>>>>>		
Communications		~	I	I		
Audio		>>>>>>>	>>>>>>>	>>>>>>		
Indirect discourse			l	l		
Assigned reading		>>>>>>>	>>>>>>>	>>>>>>>		
Open Discussion						
Question and answer opportunities						

Shaded blocks indicate factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Course Name: US Army Health Care Logistics	Course Number: A0438			
Synchronous Course	Video Te	eletraining		
Interactivity Factors	Level 1 Low	Level 2 High		
Administrative Requirements				
Self pacing				
Group training		>>>>>>>		
On-demand availability	and the second			
Open entry / open exit				
Detailed student records				
Test Security	-	>>>>>>>>>		
Multiple test forms		>>>>>>>		
Training / Instruction Approach				
Lecture / Text	X	>>>>>>>		
Live Presenters (guest speakers)	<u> </u>	>>>>>>>		
Self study				
Demonstration		>>>>>>>		
Exhibit		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Guided Discussion				
Simulation – knowledge based		>>>>>>>		
Simulation - hardware				
Problem solving exercises				
Learning to Mastery				
Practice / drill	-			
Structured Review				
Feedback on performance				
Remediation				
Group activities/collaborative tasks		·		
Testing Types				
Objective knowledge tests				
Essay				
Performance test –"paper" exercise				
Performance test – hardware simulation				
Performance test – hardware				
Oral testing				
No testing/Student course evaluation	X	>>>>>>>		
Graphics		I		
2D graphics still	X	>>>>>>>		
3D graphics still	<u>````````````````````````````````</u>	>>>>>>>		
2D animation		>>>>>>>		
3D animation		>>>>>>>		
2D interactive animation		L		
3D interactive animation				
Pre recorded video /films	X	>>>>>>		
Communications		I		
Audio		>>>>>>		
Indirect discourse				
Assigned reading		>>>>>>		
Open Discussion				
Question and answer opportunities				

Shaded blocks indicates factors NOT supported by that level of technology Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Short Worksheet: Development Time

Sh	Short Worksheet: Refined Estimate of Development Hours Per Hour of Instruction							
Co	Course Name: US Army Health Care Logistics Media: WEB Based Training Level: 2							
	Analysis Design Development Implementation Sums							
1	Percentage of Time Spent by Task Type by Level	.40	.20	.25	.15	June		
2	Multiply line 1 by average * hours200		рени 1997 - С.			a state		
3	Average hrs. per phase	80	40	50	30			
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3			
5	Adjusted hrs. Per phase. Multiply line 3 by line 4.	24	20	40	9			
	Total Labor Hours - sum across line 5					93		

* Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Short Worksheet: Development Time

Sh	Short Worksheet: Refined Estimate of Development Hours Per Hour of Instruction							
Co	Course Name: US Army Health Care Logistics Media: Computer Based Training Level: 2							
		Analysis	Design	Development	Implementation	Sums		
1	Percentage of Time Spent by Task Type by Level	.40	.20	.25	.15	ann tha chairte an tha ann tha chairte an thairte an an tha chairte an thairte an thairte an thairte an thairte an thairte an thairte an thairte		
2	Multiply line 1 by average * hours	andra Andreas Andreas Andreas	Bet grown Digwy Affin grown Affin grown					
3	Average hrs. per phase	80	40	50	30	i gagitan Arte		
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3			
5	Adjusted hrs. Per phase. Multiply line 3 by line 4.	24	20	40	9			
	Total Labor Hours - sum across line 5					93		

* Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Course Cost Estimation Worksheet

	Course Cost Estimate Wo	rksheet: Web Base	ed Training
Cou Logis	rse Name: US Army Health Care	Course Number: /	
1	Write the sum from Refined Estimated number of hrs. per hr. of		Hrs. 93
2	Average hourly labor cost in dollar	S	\$ 50
3	Multiple line 1 by line 2 and put the	e results on line 3.	\$ 4650
4	Actual number of classroom equiva converted or developed.		Hrs. 50
5	Compression: If conversions to asy delivery multiply line 4 by .7 (sever the results on line 5. If not a conve asynchronous delivery skip line 5	n tenths) and put	Hrs. 35
6	Multiply line 3 by line 5 if a converse asynchronous delivery OR line 3 b conversion to asynchronous delive on line 6.	y line 4 if not a	\$ 162,750
	Do not use lines 7 to 12 for an	y costs that are to	be shared.
7	Infrastructure Costs		\$
8	Recurring Costs		\$
9	Delivery Labor Costs		\$
10	Travel Costs		\$
11	Miscellaneous Costs		\$
12	Add line 7 to 12		\$
13	Total Cost - Add lines 6 and 12.	, population	\$ 162,750
14	Number of potential students		# 500
15	Average Cost Per Student Divide	line 13 by line 14	\$ 326
		······································	

	Course Cost Estimate Worksh		
Cou Logist		Course Number: /	\0438
1	Write the sum from Refined Estimat estimated number of hrs. per hr. of i	,	Hrs. 93
2	Average hourly labor cost in dollars		\$ 50
3	Multiple line 1 by line 2 and put the	results on line 3.	\$ 4650
4	Actual number of classroom equival converted or developed.	ent hours to be	Hrs. 50
5	Compression: If conversion to asyn multiply line 4 by .7 (seven tenths) a on line 5. If not a conversion to asyr skip line 5	ind put the results	Hrs. 35
6	Multiply line 3 by line 5 if a conversion asynchronous delivery OR line 3 by conversion to asynchronous delivery on line 6.	line 4 if not a	\$ 162,750
	Do not use lines 7 to 12 for any	costs that are to	be shared.
7	Infrastructure Costs		\$
8	Recurring Costs		\$
9	Delivery Labor Costs		\$
10	Travel Costs		\$
11	Miscellaneous Costs		\$
12	Add line 7 to 12		\$
13	Total Cost - Add lines 6 and 12.		\$ 162,750
14	Number of potential students		# 500
15	Average Cost Per Student Divide lin	\$ 326	
		MINA	

Course Cost Estimation Worksheet

2. Labor hours year 2 1953 Course Technology Match Table 3. Labor hours year 3 1953 Technology Interactivity Factors Table 4. Labor hours year 4 1953 Technology Interactivity Factors Table 5. Labor hours year 5 1953 Technology Interactivity Factors Table 6. Subtotal 11,067 Technology Interactivity Factors Table 7. Average labor cost \$50 Status 8. Total labor Cost over 5-yr. period. Multiply line 6 by line 7 \$553,350 Additional Development/ Delivery Cost By Year 9 9. Cost year 1 \$0 Data to Support Cost Analysis Worksheet 10. Cost year 2 \$0 11. Cost year 3 11. Cost year 5 \$0 12. Cost year 4 \$0 13. Cost year 5 \$0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$0 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$110,670 \$110,670 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. \$10 \$2500 17. Potential students year 1 500 From Course Information Summary Sheet 18. Total potential students year 1 500 From Course Information Summary Sheet	Course Name: US Army Health				ourse Numb	oer: A0438	
CBT Low High Other Isomorphic construction High Cost Factors Values Source 1. Labor hours year 1 3255 2. Labor hours year 2 1953 3. Labor hours year 3 1953 4. Labor hours year 4 1953 5. Labor hours year 5 1953 6. Subtotal 11.067 7. Average labor cost \$50 8. Total labor Cost over 5-yr. period Multiply line 6 by line 7 \$ 553,350 Additional Development/ Delivery Cost By Year 9 9. Cost year 1 \$ 0 10. Cost year 2 \$ 0 11. Cost year 3 \$ 0 12. Cost year 4 \$ 0 13. Cost year 5 \$ 0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$ 0 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$ 110,670 17. Potential students year 1 500 500 From Course Information Summary Sheet 17. Potential students year 1 500 18. Total potential students year 1 500 19. Average cost per student yr. 1 to 5. (multiply line 17 by 5. and ente	Technology Selected	Leve	11	Level 2	Level 3	Level 4	
VTT Low High Other High Cost Factors Values Source 1. Labor hours year 1 3255 Course Technology Match Table 3. Labor hours year 2 1953 Technology Interactivity Factors Table 4. Labor hours year 3 1953 Technology Interactivity Factors Table 5. Labor hours year 4 1953 Technology Interactivity Factors Table 6. Subtotal 11,067 Technology Interactivity Factors Table 7. Average labor cost \$50 8 8. Total labor Cost over 5-yr. period. \$553,350 Multiply line 6 by line 7 \$553,350 Additional Development/ Delivery Cost By Year 9 9. Cost year 1 \$0 Data to Support Cost Analysis Worksheet 10. Cost year 2 \$0 11. Cost year 3 \$0 12. Cost year 4 \$0 13. Cost year 5 \$0 14. Total Additional Costs. \$0 Sum lines 9 to 13 and enter on line 14 \$10,670 15. Total Course Cost. \$110,670 16. Average cost over 5 years. \$110,670 17. Potential students year 1 \$00 18. Total potential students year 1 \$00 19. Total potential students year 1 \$00 17. Pot	WBT			Х			
Other Values Source 1 Labor hours year 1 3255 2. Labor hours year 2 1953 Course Technology Match Table 3. Labor hours year 3 1953 Technology Interactivity Factors Table 4. Labor hours year 4 1953 Technology Interactivity Factors Table 5. Labor hours year 5 1953 Technology Interactivity Factors Table 6. Subtotal 11,067 Technology Interactivity Factors Table 7. Average labor cost \$50 Stotal 10,067 8. Total labor Cost over 5-yr. period. Multiply line 6 by line 7 \$553,350 Additional Development/ Delivery Cost By Year 9. Cost year 1 \$0 Data to Support Cost Analysis Worksheet 10. Cost year 2 \$0 11. Cost year 3 \$0 12. Cost year 4 \$0 13. Cost year 5 \$0 13. Cost year 5 \$0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$10,670 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$10,670 \$110,670 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 18 \$10,670 \$110,670 17. Potential students year 1 500 From Course Inf	CBT						
Other Values Source 1. Labor hours year 1 3255 Course Technology Match Table 2. Labor hours year 3 1953 Technology Interactivity Factors Table 4. Labor hours year 3 1953 Technology Interactivity Factors Table 5. Labor hours year 4 1953 Technology Interactivity Factors Table 6. Subtotal 11,067 Technology Interactivity Factors Table 7. Average labor cost \$50 \$50 8. Total labor Cost over 5-yr. period. \$553,350 Multiply line 6 by line 7 \$0 9. Cost year 1 \$0 10. Cost year 2 \$0 11. Cost year 3 \$0 12. Cost year 4 \$0 13. Cost year 5 \$0 14. Total Additional Costs. \$0 Sum lines 9 to 13 and enter on line 14 \$0 15. Total Course Cost. \$110,670 16. Average cost over 5 years. \$10,670 17. Potential students year 1 500 17. Potential students year 1 500 18. Total potential students year 1 500 19. Average cost per student yr. 1 to 5. (multiply line 17 by 5. and enter on line 18)	VTT	Low			Hiah	J	
1. Labor hours year 1 3255 2. Labor hours year 2 1953 3. Labor hours year 3 1953 4. Labor hours year 4 1953 5. Labor hours year 5 1953 6. Subtotal 11,067 7. Average labor cost \$50 8. Total labor Cost over 5-yr. period. Multiply line 6 by line 7 \$553,350 Additional Development/ Delivery Cost By Year 9. Cost year 1 \$0 10. Cost year 2 \$0 11. Cost year 3 \$0 12. Cost year 4 \$0 13. Cost year 5 \$0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$10,670 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$110,670 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. \$110,670 17. Potential students year 1 500 <i>From Course Information Summary Sheet</i> 18. Total potential students year 1 500 <i>From Course Information Summary Sheet</i> 19. Average cost per student yr. 1 to 5. (multiply line 17 by 5. and enter on line 18) 2500 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$222 Round up to the nearest whole dollar <td>Other</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Other						
1. Labor hours year 1 3255 2. Labor hours year 2 1953 3. Labor hours year 3 1953 4. Labor hours year 4 1953 5. Labor hours year 5 1953 6. Subtotal 11,067 7. Average labor cost \$50 8. Total labor Cost over 5-yr. period. Multiply line 6 by line 7 \$553,350 Additional Development/ Delivery Cost By Year 9. Cost year 1 \$0 10. Cost year 2 \$0 11. Cost year 3 \$0 12. Cost year 4 \$0 13. Cost year 5 \$0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$10,670 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$110,670 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. \$110,670 17. Potential students year 1 500 <i>From Course Information Summary Sheet</i> 18. Total potential students year 1 500 <i>From Course Information Summary Sheet</i> 19. Average cost per student yr. 1 to 5. (multiply line 17 by 5. and enter on line 18) 2500 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$222 Round up to the nearest whole dollar <td></td> <td>1</td> <td></td> <td></td> <td>1</td> <td></td> <td></td>		1			1		
1. Labor hours year 1 3255 2. Labor hours year 2 1953 3. Labor hours year 3 1953 4. Labor hours year 4 1953 5. Labor hours year 5 1953 6. Subtotal 11,067 7. Average labor cost \$50 8. Total labor Cost over 5-yr. period. Multiply line 6 by line 7 \$553,350 Additional Development/ Delivery Cost By Year 9 9. Cost year 1 \$0 Data to Support Cost Analysis Worksheet 10. Cost year 2 \$0 11. Cost year 3 \$0 12. Cost year 4 \$0 13. Cost year 5 \$0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$0 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$110,670 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. \$110,670 17. Potential students year 1 500 From Course Information Summary Sheet 18. Total potential students year 1 500 From Course Information Summary Sheet 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$222 Round up to the nearest whole dollar	Cost Factors			Values		So	urce
3. Labor hours year 3 1953 Technology Interactivity Factors Table 4. Labor hours year 4 1953 5. Labor hours year 5 1953 6. Subtotal 11,067 7. Average labor cost \$50 8. Total labor Cost over 5-yr. period. Multiply line 6 by line 7 \$ 553,350 Additional Development/ Delivery Cost By Year 9. Cost year 1 9. Cost year 1 \$ 0 10. Cost year 2 \$ 0 11. Cost year 3 \$ 0 12. Cost year 4 \$ 0 13. Cost year 5 \$ 0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$ 0 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$ 110,670 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. \$ 110,670 17. Potential students year 1 500 From Course Information Summary Sheet 18. Total potential students year 1 500 From Course Information Summary Sheet 19. Average cost per student yr. 1 to 5. (divide line 15 by 1ine 18 and \$ 222 Round up to the nearest whole dollar	1. Labor hours year 1		32	55			
3. Labor hours year 3 1953 Technology Interactivity Factors Table 4. Labor hours year 4 1953 5. Labor hours year 5 1953 6. Subtotal 11,067 7. Average labor cost \$50 8. Total labor Cost over 5-yr. period. Multiply line 6 by line 7 \$ 553,350 Additional Development/ Delivery Cost By Year 9. Cost year 1 \$ 0 9. Cost year 1 \$ 0 Data to Support Cost Analysis Worksheet 10. Cost year 2 \$ 0 11. Cost year 3 \$ 0 11. Cost year 4 \$ 0 13. Cost year 5 \$ 0 12. Cost year 4 \$ 0 13. Cost year 5 \$ 0 13. Cost year 5 \$ 0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$ 553,350 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$ 110,670 \$ 110,670 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. \$ 110,670 \$ 110,670 17. Potential students year 1 500 From Course Information Summary Sheet 18. Total potential students year 1 500 From Course Information Summary Sheet 18. Total potential students year 1 to 5 (multiply line 17 by 5. and enter on line 18) <	2. Labor hours year 2		19	53	Course T	echnology N	Natch Table
5. Labor hours year 5 1953 6. Subtotal 11,067 7. Average labor cost \$50 8. Total labor Cost over 5-yr. period. Multiply line 6 by line 7 \$553,350 Additional Development/ Delivery Cost By Year 9 9. Cost year 1 \$0 10. Cost year 2 \$0 11. Cost year 3 \$0 12. Cost year 4 \$0 13. Cost year 5 \$0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$0 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$10,670 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. \$110,670 17. Potential students year 1 500 <i>From Course Information Summary Sheet</i> 18. Total potential students year 1 to 5 (multiply line 17 by 5. and enter on line 18) 2500 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$222 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$222	3. Labor hours year 3		19	53			
6. Subtotal 11,067 7. Average labor cost \$50 8. Total labor Cost over 5-yr. period. Multiply line 6 by line 7 \$553,350 Additional Development/ Delivery Cost By Year 9 9. Cost year 1 \$0 Data to Support Cost Analysis Worksheet 10. Cost year 2 \$0 11. Cost year 3 \$0 12. Cost year 4 \$0 13. Cost year 5 \$0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$0 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$553,350 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. \$110,670 17. Potential students year 1 500 From Course Information Summary Sheet 18. Total potential students year 1 500 2500 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$222 Round up to the nearest whole dollar	4. Labor hours year 4		19	53			
7. Average labor cost \$50 8. Total labor Cost over 5-yr. period. Multiply line 6 by line 7 \$ 553,350 Additional Development/ Delivery Cost By Year 9 9. Cost year 1 \$ 0 Data to Support Cost Analysis Worksheet 10. Cost year 2 \$ 0 11. Cost year 3 \$ 0 12. Cost year 4 \$ 0 13. Cost year 5 \$ 0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$ 0 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$ 553,350 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. \$ 110,670 17. Potential students year 1 500 <i>From Course Information Summary Sheet</i> 18. Total potential students year 1 to 5 (multiply line 17 by 5. and enter on line 18) 2500 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$ 222 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$ 222	5. Labor hours year 5	1.000	19	53			
7. Average labor cost \$50 8. Total labor Cost over 5-yr. period. Multiply line 6 by line 7 \$ 553,350 Additional Development/ Delivery Cost By Year 9 9. Cost year 1 \$ 0 Data to Support Cost Analysis Worksheet 10. Cost year 2 \$ 0 11. Cost year 3 \$ 0 12. Cost year 4 \$ 0 13. Cost year 5 \$ 0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$ 0 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$ 553,350 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. \$ 110,670 17. Potential students year 1 500 From Course Information Summary Sheet 18. Total potential students year 1 500 500 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$ 222 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$ 222	6. Subtotal		11	,067			
Multiply line 6 by line 7\$ 553,350Additional Development/ Delivery Cost By Year9. Cost year 1\$ 010. Cost year 2\$ 011. Cost year 3\$ 012. Cost year 4\$ 013. Cost year 5\$ 014. Total Additional Costs. Sum lines 9 to 13 and enter on line 14\$ 015. Total Course Cost. Add lines 8 and 14 and enter on line 15\$ 016. Average cost over 5 years. Divide line 15 by 5 and enter on line 16.\$ 110,67017. Potential students year 1500From Course Information Summary Sheet18. Total potential students year 1 o 5 (multiply line 17 by 5. and enter on line 18)250019. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$ 222Round up to the nearest whole dollar	7. Average labor cost						
Additional Development/ Delivery Cost By Year 9. Cost year 1 \$ 0 Data to Support Cost Analysis Worksheet 10. Cost year 2 \$ 0 11. Cost year 3 \$ 0 12. Cost year 4 \$ 0 13. Cost year 5 \$ 0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$ 0 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$ 553,350 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. \$ 110,670 17. Potential students year 1 500 From Course Information Summary Sheet 18. Total potential students year 1 500 From Course Information Summary Sheet 18. Total potential students year 1 to 5 (multiply line 17 by 5. and enter on line 18) 2500 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$ 222 Round up to the nearest whole dollar	8. Total labor Cost over 5-yr. p	eriod.	¢ r	52.250			
9. Cost year 1 \$ 0 Data to Support Cost Analysis Worksheet 10. Cost year 2 \$ 0 11. Cost year 3 \$ 0 12. Cost year 4 \$ 0 13. Cost year 5 \$ 0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$ 0 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$ 0 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. \$ 110,670 17. Potential students year 1 500 From Course Information Summary Sheet 18. Total potential students year 1 500 From Course Information Summary Sheet 18. Total potential students year 1 to 5 (multiply line 17 by 5. and enter on line 18) 2500 Round up to the nearest whole dollar	Multiply line 6 by line 7		\$ C	53,350			
10. Cost year 2 \$ 0 11. Cost year 3 \$ 0 12. Cost year 4 \$ 0 13. Cost year 5 \$ 0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$ 0 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$ 553,350 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. \$ 110,670 17. Potential students year 1 500 18. Total potential students year 1 to 5 (multiply line 17 by 5. and enter on line 18) 500 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$ 222 Round up to the nearest whole dollar	Additional Development/ Deliv	very Co	ost	By Year			
10. Cost year 2 \$ 0 11. Cost year 3 \$ 0 12. Cost year 4 \$ 0 13. Cost year 5 \$ 0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$ 0 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$ 553,350 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. \$ 110,670 17. Potential students year 1 500 From Course Information Summary Sheet 18. Total potential students year 1 to 5 (multiply line 17 by 5. and enter on line 18) 2500 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$ 222 Round up to the nearest whole dollar	9. Cost year 1		\$ C)	Data to S	Support Cost	Analysis Worksheet
12. Cost year 4 \$ 0 13. Cost year 5 \$ 0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$ 0 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$ 553,350 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. \$ 110,670 17. Potential students year 1 500 From Course Information Summary Sheet 18. Total potential students year 1 500 Even Course Information Summary Sheet 18. Total potential students year 1 500 From Course Information Summary Sheet 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$ 222 Round up to the nearest whole dollar	10. Cost year 2		\$ ()			
13. Cost year 5 \$ 0 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 \$ 0 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 \$ 553,350 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. \$ 110,670 17. Potential students year 1 500 From Course Information Summary Sheet 18. Total potential students year 1 500 From Course Information Summary Sheet 18. Total potential students year 1 to 5 (multiply line 17 by 5. and enter on line 18) 2500 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$ 222 Round up to the nearest whole dollar	11. Cost year 3		\$ C)			
 14. Total Additional Costs. Sum lines 9 to 13 and enter on line 14 15. Total Course Cost. Add lines 8 and 14 and enter on line 15 16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16. 17. Potential students year 1 18. Total potential students year 1 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$222 Round up to the nearest whole dollar 	12. Cost year 4		\$ C)			n na
Sum lines 9 to 13 and enter on line 14\$ 015. Total Course Cost. Add lines 8 and 14 and enter on line 15\$ 553,35016. Average cost over 5 years. Divide line 15 by 5 and enter on line 16.\$ 110,67017. Potential students year 1500From Course Information Summary Sheet18. Total potential students year 1 to 5 (multiply line 17 by 5. and enter on line 18)250019. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and\$ 222Round up to the nearest whole dollar	13. Cost year 5		\$ C)			
line 14Image: Second secon	14. Total Additional Costs.						The first state of the second state of the sec
15. Total Course Cost. Add lines 8 and 14 and enter on line 15\$ 553,35016. Average cost over 5 years. Divide line 15 by 5 and enter on line 16.\$ 110,67017. Potential students year 1500From Course Information Summary Sheet18. Total potential students year 1 5 (multiply line 17 by 5. and enter on line 18)250019. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and\$ 222Round up to the nearest whole dollar	Sum lines 9 to 13 and enter	on	\$ C)			
Add lines 8 and 14 and enter on line 15\$ 553,35016. Average cost over 5 years. Divide line 15 by 5 and enter on line 16.\$ 110,67017. Potential students year 1500From Course Information Summary Sheet18. Total potential students year 1 to 5 (multiply line 17 by 5. and enter on line 18)250019. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and\$ 222Round up to the nearest whole dollar							
line 15Image: line 1516. Average cost over 5 years. Divide line 15 by 5 and enter on line 16.\$ 110,67017. Potential students year 1500From Course Information Summary Sheet18. Total potential students year 1 to 5 (multiply line 17 by 5. and enter on line 18)250019. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$ 222Round up to the nearest whole dollar							
16. Average cost over 5 years. Divide line 15 by 5 and enter on line 16.\$ 110,67017. Potential students year 1500From Course Information Summary Sheet18. Total potential students year 1 to 5 (multiply line 17 by 5. and enter on line 18)250019. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and\$ 222Round up to the nearest whole dollar		r on	\$ 5	553,350			
Divide line 15 by 5 and enter on line 16.\$ 110,67017. Potential students year 1500From Course Information Summary Sheet18. Total potential students year 1 to 5 (multiply line 17 by 5. and enter on line 18)250019. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$ 222Round up to the nearest whole dollar							
line 16.From Course Information Summary Sheet17. Potential students year 1500From Course Information Summary Sheet18. Total potential students year 1 to 5 (multiply line 17 by 5. and enter on line 18)250019. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$ 222Round up to the nearest whole dollar							
 17. Potential students year 1 18. Total potential students year 1 to 5 (multiply line 17 by 5. and enter on line 18) 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$222 Round up to the nearest whole dollar 		r on	\$ 1	10,670			
 18. Total potential students year 1 to 5 (multiply line 17 by 5. and enter on line 18) 19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$222 Round up to the nearest whole dollar 							
5 (multiply line 17 by 5. and enter on line 18)250019. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$ 222Round up to the nearest whole dollar			50	0	From Coι	urse Informa	tion Summary Sheet
enter on line 18)19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$222Round up to the nearest whole dollar	•		25	00			
19. Average cost per student yr. 1 to 5. (divide line 15 by line 18 and \$222Round up to the nearest whole dollar		ג	25	00			
5. (divide line 15 by line 18 and \$222 Round up to the nearest whole dollar	,	. 1					
			¢ ^	000	Dound	to the no	oot whole deller
enter on line 19)		o anu	Ψ2			o to the hear	est whole dollar

Cost Estimate for a Single Course Over a Five Year Period

NOTE: 40% of the course content does not change from year to year. Estimated labor hours for years 2 to 5 are adjusted for this factor.

Phyllis J. Verhonick Research Course Conversion Analysis

PHYLLIS J. VERHONICK RESEARCH COURSE

Course Purpose:
To provide Army Nurse Corps Officers, other military officers, and civilian nurses engaged in
multidisciplinary and/or collaborative research with a course of instruction to nurture the generation,
dissemination, and use of research to continuously improve clinical practice.
> To provide a vehicle for those with intermediate or advanced research skills to exchange information
on research theory, methodology, and funding, as well as to present study findings.
Course Content Stability:
Invited speakers address topics relevant to general research topics (ethics, outcomes issues, etc.), while
completed research abstracts change to reflect the latest research.
General Presentation Style: Distributive
The information was delivered using a lecture format as the primary vehicle in which one instructor
presenters information to many learners. There was a poster session as well in which presented stood
by exhibits of their research, and were available to answer questions to those who attended.
Instructional Aids:
Presenters were supported by PowerPoint slides that were projected either from a 35mm slide projector,
or directly from a computer. One speaker used a brief videotape to support the lecture.
Hands-on Activities:
None
Degree of Instructional Interaction:
Question and answer periods followed each of the lectures. These were informational exchanges. In
addition, there was a high level of informational exchange during the poster session. These exchanges
had high instructional value in that they were directly tied to the course goal of improving research skills.
Relevant Instructional Value: High
The course content was clearly focused, and presented the students with serious issues relevant to
research at a general level, as well as several examples of on-going and recently completed research.
The instructional approach allowed the research results to be viewed not only in terms of their intrinsic
value to the nursing profession, but also within the parameters of the mechanics of research.
Recommendation:
Convert to Web-Based Training.
The instructional value of this course, although presently high, would benefit from delivery on a distance
learning technology that allowed for one-to-many communications, and an asynchronous delivery. Web
based training was identified as the most cost effective means given the number of presenters and
potential students, supplemented by an electronic bulletin board for the benefit of student presenters.
potential students, supplemented by an electronic bulletin board for the benefit of student presenters.
While a Web based training program would be of benefit to the 2400 patential participants (I
While a Web based training program would be of benefit to the 3400 potential participants, the student
presenters, who would become submitters in a Web based training environment, would receive little
benefit. To assure that the student submitters receive the type of feedback that would benefit their
research, a Web Based "bulletin board" can be established for student presenters through one of the
numerous web sites maintained by the Army.
A drawback to an electronic bulletin board is that it can be very time consuming to those having to answer
numerous questions, over an extended period of time. Since Web based training will allow participants to
sign-in at any time, a bulletin board used as an integral part of the course, would require that submitters,
whether or not students, answer questions in a timely manner throughout the life of the course. This
would be a significant added responsibility that many individuals, military or civilian, may not be willing or
able to assume.
Given the potential number of users, and that student presenters have other responsibilities, student
presenters should be free to determine their own level of participation on the bulletin board. Participation
in the bulletin board should be voluntary and not considered a required portion of the course.

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: Phyllis J. Verhonick Research	Course Number: A0513
Course	

1. Instructional goals of the course : To provide Army Nurse Corps Officers, other military officers, and civilian nurses engaged in multidisciplinary and/or collaborative research with a course of instruction to nurture the generation, dissemination, and use of research to continuously improve clinical practice. To provide a vehicle for those with intermediate or advanced research skills to exchange information on research theory, methodology, and funding, as well as to present study findings.

2. Frequency of course offering per year:	# 1		Yes	No
3. Current length of course in hours	# 26	7. Convert to DL?	X	
4. Number of hours to be converted	# 26	8. Enhance?	X	1
5. Number of registered students	# 100			1
6. Number of potential students that				
could benefit from the course	# 3400			

9. If item 8 = Yes, Specify: Establish electronic bulletin board

Technology	Level 1	Level 2	Level 3	Level 4
WBT	X			
CBT				
VTT	Low		High	
Other				

Labor Hours Estimation Method: Short _X_ Long_ Synchronous _

Cost Data	
10. Total Cost Year One	\$ 42,770
11. Total Cost Year Two	\$ 42,770
12. Total Cost Year Three	\$ 42,770
13. Total Cost Year Four	\$ 42,770
14. Total Cost Year Five	\$ 42,770
15. Total costs year 1 to 5 (Sum of lines 10 through 14)	\$ 213,850
16. Average cost, years 1 to 5 (divide value in line 15 by 5)	\$ 42,770
17. Total potential students over a five-year period. (multiply the number of potential students (item 6 above)	
by 5.)	# 17,000
<i>18. Average cost per potential student over 5-year period.</i>	
(divide the value in line 15 by the value in line 17)	\$ 12.58

Addi	tional Hardware/S	oftware Required	· · · · · · · · · · · · · · · · · · ·
Item:		Cost per unit	Total Cost
Proposed Enhancement(s)	Cost		
	\$		
	\$		
	\$		
Total Enhancement Costs	\$		
· · ·			

Instructional Formats and Physical Training Requirements

/****

Course Na Course	me: Phyllis J.	Verhonick Research Course Number: A0513	
% of Course Using this Instructional Format	Format	Description	Physical Presence Required?
88%	Lecture with questions/answer opportunities	A speaker/speakers present verbal information to an audience. The audience may ask questions regarding that information.	No
	Panel Discussion	A selected group (often selected for their expertise or experience in a given area) discusses an issue in front of students. Students may ask questions about the ideas being presented.	No
7%	Poster Session	A group of individuals presents material in a poster format. Students may read the material being presented, and ask questions about the material.	No
	Small Group Discussion	Small groups of students (2~5) discuss an assigned topic.	?
5%	Group Discussion	A larger group discusses an issue – usually led by a facilitator – with heavy emphasis on student participation.	?
	Demonstration	Students observe the application of knowledge. In this case, students are not participating themselves.	?
	Student Verbal Presentations	Students present verbal information to the larger group.	?
	Student Procedural Presentations	Students present procedural information to the larger group.	?
	Field Trip	Students visit an instructionally relevant site to observe activities or meet with individuals who present information in an applied setting.	?
	Shop Activity	Hands-on technical tasks/procedures.	?
	Lab Activity	Hands-on laboratory tasks/procedures.	?

Course Information Summary Sheet

Course Name: Phyllis J. Verhonick Research Course

Course Number: A0513

Length of course - number of hours of instruction: 26

Number of Registered Students: 100

Number of potential students that could benefit from this course: 3400

Instructional goals of the course: To provide Army Nurse Corps Officers, other military officers, and civilian nurses engaged in multidisciplinary and/or collaborative research with a course of instruction to nurture the generation, dissemination, and use of research to continuously improve clinical practice.

To provide a vehicle for those with intermediate or advanced research skills to exchange information on research theory, methodology, and funding, as well as to present study findings.

Frequency of Course Offering: Biannually

Continuing Education Credit Offered?	Yes	
--------------------------------------	-----	--

Number: 29.4

Administrative Requirements	Check		Check
Self pacing		Detailed student records	
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit			
Training / Instruction Approach			
Lecture / Text	X	Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	
Self study		Structured Review	
Demonstration		Feedback on performance	
Exhibit	X	Remediation	
Guided Discussion	X	Group activities/collaborative tasks	
Simulation (roll play, in-basket)			
Problem solving exercises			
Testing Types			
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test – "paper"		No testing/Student course eval.	X
Performance test – hardware			
Graphics		I	
2D graphics still	X	3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
		Pre recorded video /films	
Communications			
Audio		Open Discussion	
Indirect discourse		Question and answer	
Assigned reading			

Note: In order to provide student submitters with a level of interactivity comparable to the poster session and feedback possible after verbal presentations, an electronic bulletin board is proposed. Therefore factors related to group discussion (open discussion) or poster sessions (question and answer) will not be considered as limiting factors in the selection of a technology.

Video uses for portion of one presentation (>5%), not considered in the selection of a technology.

Course	Τ	echr	10	logy	Μ	atch	Table
-	-					_	

Course Phyllis J. Verhonick Research Co	urse			chnolog	es	
Administrative Requirements	Check	CBT	WBT	VTT		
Self pacing						
Group training						
On-demand availability						
Open entry / open exit						
Detailed student records						
Test Security						
Multiple test forms						
Training / Instruction Approach						
Lecture / Text	X		1			
Live Presenters (guest speakers)		•				
Self study						
Demonstration						-
Exhibit	X					
Guided Discussion	X					
Simulation – knowledge based						
Simulation - hardware						
Problem solving exercises						
Learning to Mastery						
Practice / drill					· · · · · · · · · · · · · · · · · · ·	
Structured Review						-
Feedback on performance				-		
Remediation						
Group activities/collaborative tasks						••••
Testing Types	1					
Objective knowledge tests					[
Essay		1. N. A. A. A.				
Performance test – "paper" exercise				- <u>-</u>		-
Performance test – hardware simulation				- · · · ·		
Performance test – hardware		an a				
Oral testing	-	- -			· · · · ·	
No testing/Student course evaluation	X					
Graphics						
2D graphics still	X	[T			·
3D graphics still	^					
2D animation						
3D animation						
2D interactive animation	+					
3D interactive animation	-					
Pre recorded video /films						
Communications						
Audio		ľ	1	1	[
Indirect discourse			i			-
Assigned reading						
Open Discussion						+
Question and answer opportunities				· · · · · · · · · · · · · · · · · · ·		

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Course Name: Phyllis J. Verhonick Research Course	Course N	umber: A	515				
Asynchronous Course	WEB Based Training						
Interactivity Factors	Level 1	Level 2	Level 3	Level 4			
Administrative Requirements							
Self pacing		>>>>>>>	>>>>>>>	>>>>>>>			
Group training							
On-demand availability		>>>>>>>>	>>>>>>>	>>>>>>			
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>>			
Detailed student records		>>>>>>>	>>>>>>>	>>>>>>			
Test Security		>>>>>>>	>>>>>>>	>>>>>>			
Multiple test forms			>>>>>>>	>>>>>>>			
Training / Instruction Approach							
Lecture / Text	X	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>>			
Live Presenters (guest speakers)							
Self study		>>>>>>>>	>>>>>>>>	>>>>>>			
Demonstration	1000		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Exhibit		v	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Guided Discussion	-	X					
Simulation – knowledge based			>>>>>>>	>>>>>>			
Simulation - hardware	-						
Problem solving exercises	-		>>>>>>>>	>>>>>>			
Learning to Mastery		>>>>>>>>					
Practice / drill		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>>			
Structured Review				>>>>>>>			
Feedback on performance	-			>>>>>>>			
Remediation	-		>>>>>>>>>	>>>>>>>			
Group activities/collaborative tasks			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>			
Testing Types							
Objective knowledge tests	T			1			
Essay	[>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>	>>>>>>			
Performance test – "paper" exercise Performance test – hardware simulation	-		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>			
Performance test – hardware							
Oral testing No testing/Student course evaluation							
Graphics	X	>>>>>>>>	>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
2D graphics still							
3D graphics still	Х	>>>>>>>	>>>>>>>	>>>>>>>			
2D animation	an a		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
3D animation	_		>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
2D interactive animation	-			>>>>>>>			
3D interactive animation							
Pre recorded video /films Communications			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
	1			1			
Audio		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Indirect discourse							
Assigned reading		>>>>>>>>	>>>>>>>>	>>>>>>			
Open Discussion							
Question and answer opportunities							

Shaded blocks indicate factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Course Name: Phyllis J. Verhonick Research Course	Course Number: A0513						
Asynchronous Course	Computer Based Training						
Interactivity Factors	Level 1	Level 2	Level 3	Level 4			
Administrative Requirements							
Self pacing		>>>>>>>	>>>>>>>	>>>>>>			
Group training			1				
On-demand availability	-	>>>>>>>	>>>>>>>	>>>>>>>			
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>			
Detailed student records							
Test Security							
Multiple test forms			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Training / Instruction Approach							
Lecture / Text	X	>>>>>>>	>>>>>>>	>>>>>>			
Live Presenters (guest speakers)							
Self study		>>>>>>>	>>>>>>>>	>>>>>>			
Demonstration			>>>>>>>	>>>>>>>			
Exhibit	·		>>>>>>>	>>>>>>			
Guided Discussion							
Simulation – knowledge based			>>>>>>>	>>>>>>			
Simulation - hardware				jan er ster ste			
Problem solving exercises		>>>>>>>	>>>>>>>>	>>>>>>			
Learning to Mastery		>>>>>>>	>>>>>>>>	>>>>>>			
Practice / drill		>>>>>>>	>>>>>>>	>>>>>>			
Structured Review	1. A.		>>>>>>>>	>>>>>>>			
Feedback on performance		>>>>>>>	>>>>>>>	>>>>>>			
Remediation			>>>>>>>	>>>>>>			
Group activities/collaborative tasks							
Testing Types							
Objective knowledge tests		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Essay							
Performance test – "paper" exercise			>>>>>>	>>>>>>>			
Performance test – hardware simulation				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Performance test – hardware							
Oral testing							
No testing/Student course evaluation	X	>>>>>>>	>>>>>>>	>>>>>>			
Graphics		· · · · · · · · · · · · · · · · · · ·					
2D graphics still	X	>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
3D graphics still	·		>>>>>>>	>>>>>>>			
2D animation			>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
3D animation				>>>>>>			
2D interactive animation				>>>>>>			
3D interactive animation							
Pre recorded video /films			>>>>>>>	>>>>>>			
Communications		T					
Audio		>>>>>>>	>>>>>>>	>>>>>>			
Indirect discourse	land a strategy of the strateg	an saidh Anns an saidh		· .			
Assigned reading		>>>>>>>	>>>>>>>	>>>>>>			
Open Discussion	1.						
Question and answer opportunities							

Shaded blocks indicate factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Course Name: Phyllis J. Verhonick Research Course	Course Number:	AU513
Synchronous Course	Video Te	eletraining
Interactivity Factors	Level 1 Low	Level 2 High
	Level 1 Low	Level 2 right
Administrative Requirements	·	
Self pacing		
Group training		>>>>>>>
On-demand availability		and the second
Open entry / open exit		
Detailed student records	. · ·	
Test Security		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Multiple test forms		>>>>>>>
Training / Instruction Approach		
Lecture / Text	X	>>>>>>>
Live Presenters (guest speakers)		>>>>>>>
Self study		
Demonstration		>>>>>>>
Exhibit		>>>>>>>
Guided Discussion		Х
Simulation – knowledge based		>>>>>>>>
Simulation - hardware		
Problem solving exercises	-	
Learning to Mastery		
Practice / drill		
Structured Review		
Feedback on performance		
Remediation		
Group activities/collaborative tasks		the sector of th
Testing Types		
Objective knowledge tests		
Essay	_	
Performance test –"paper" exercise		
Performance test – hardware simulation		
Performance test – hardware sinulation		
Oral testing	-	
	V	>>>>>>>
No testing/Student course evaluation Graphics	X	>>>>>>>
	1 <u>v</u>	
2D graphics still	X	>>>>>>
3D graphics still 2D animation		>>>>>>
		>>>>>>
3D animation		>>>>>>>
2D interactive animation		
3D interactive animation		
Pre recorded video /films		>>>>>
Communications		
Audio		>>>>>>
Indirect discourse		
Assigned reading		>>>>>>
Open Discussion		
Question and answer opportunities		

Shaded blocks indicates factors NOT supported by that level of technology Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Short Worksheet: Development Time

	-			Media: WEB Ba	ased Training Leve	el: 1
		Analysis	Design	Development	Implementation	Sums
1	Percentage of Time Spent by Task Type by Level	.40	.20	.25	.15	
2	Multiply line 1 by average * hours100					
3	Average hrs. per phase	40	20	25	15	a shahadadha shi gan shi tutha shi ga
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3	
5	Adjusted hrs. Per phase. Multiply line 3 by line 4.	12	10	20	4.5	
	Total Labor Hours - sum across line 5				577	47

* Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Short Worksheet: Development Time

	ort Worksheet: Refined ourse Name: Phyllis J V				our of Instruction	
			Med	lia: Computer Ba	sed Training Lev	el: 1
		Analysis	Design	Development	Implementation	Sums
1	Percentage of Time Spent by Task Type by Level	.40	.20	.25	.15	
2	Multiply line 1 by average * hours			an a		لىدۇلىرى مەمىرى ئىلىرى ئەربىلى
3	Average hrs. per phase	40	20	25	15	
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3	
5	Adjusted hrs. Per phase. Multiply line 3 by line 4.	12	10	20	4.5	
	Total Labor Hours - sum across line 5			· · · ·		47

* Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Course	Cost	Estimation	Worksheet
--------	------	------------	-----------

	Course Cost Estimate Wo	orksheet: Web Base	ed Training
	rse Name: Phyllis J. Verhonick	Course Number: A05	
Rese	earch Course	- + -) / /	
1	Write the sum from Refined Estimated number of hrs. per hr. o		Hrs. 47
2	Average hourly labor cost in dollar	S	\$ 50
3	Multiple line 1 by line 2 and put the	e results on line 3.	\$ 2350
4	Actual number of classroom equive converted or developed.		Hrs. 26
5	Compression: If conversions to as delivery multiply line 4 by .7 (sever the results on line 5. If not a conve asynchronous delivery skip line 5	n tenths) and put	Hrs. 18.2
6	Multiply line 3 by line 5 if a converse asynchronous delivery OR line 3 be conversion to asynchronous deliver on line 6.	y line 4 if not a	\$ 42770
	Do not use lines 7 to 12 for an	y costs that are to	be shared.
7	Infrastructure Costs		\$
8	Recurring Costs		\$
9	Delivery Labor Costs		\$
10	Travel Costs		\$
11	Miscellaneous Costs		\$
12	Add line 7 to 12		\$
13	Total Cost - Add lines 6 and 12.		\$ 42,770
14	Number of potential students		# 3,400
15	Average Cost Per Student Divide	line 13 by line 14	\$ 12.58
		n an	

	se Cost Estimation Worksheet Course Cost Estimate Worksheet: Computer Ba	sed Training
	Irse Name: Phyllis J. Verhonick Course Number: A05 earch Course	13
1	Write the sum from Refined Estimate Worksheet, estimated number of hrs. per hr. of instruction.	Hrs. 47
2	Average hourly labor cost in dollars	\$ 50
3	Multiple line 1 by line 2 and put the results on line 3.	\$ 2350
4	Actual number of classroom equivalent hours to be converted or developed.	Hrs. 26
5	Compression: If conversion to asynchronous delivery multiply line 4 by .7 (seven tenths) and put the results on line 5. If not a conversion to asynchronous delivery skip line 5	Hrs. 18.2
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery OR line 3 by line 4 if not a conversion to asynchronous delivery. Put the results on line 6.	\$ 42770
	Do not use lines 7 to 12 for any costs that are to	be shared.
7	Infrastructure Costs	\$
8	Recurring Costs	\$
9	Delivery Labor Costs	\$
10	Travel Costs	\$
11	Miscellaneous Costs	\$
12	Add line 7 to 12	\$
13	Total Cost - Add lines 6 and 12.	\$ 42,770
14	Number of potential students	# 3,400
15	Average Cost Per Student Divide line 13 by line 14	\$ 12.58

Course Cost Estimation Worksheet

Course Name: Phyllis J. Verhonic Course	k Rese	arch	1	Co	urse Numbe	r: A0513	
Technology Selected	Leve	1	Level 2	2	Level 3	Level 4	
WBT	X						
СВТ							
VTT	Low				High	1	
Other							
Cost Factors			Values			Sc	ource
1. Labor hours year 1		85	5.4				
2. Labor hours year 2			5.4		Course T	echnoloav	Match Table
3. Labor hours year 3			5.4				vity Factors Table
4. Labor hours year 4			5.4		-	.,	
5. Labor hours year 5			5.4		-		
6. Subtotal		42					
7. Average labor cost		\$ 5					
8. Total labor Cost over 5-yr. pe	Prind	· · · ·	-				
Multiply line 6 by line 7	snou.	\$ 213,850					
Additional Development/ Deliv	erv Co	ost	By Year	-			
9. Cost year 1	<u></u>	\$ C			Data to S	unnort Cos	t Analysis Worksheet
10. Cost year 2		\$ C					
11. Cost year 3		\$ C					
12. Cost year 4		\$ C					·
13. Cost year 5		\$ C					
14. Total Additional Costs.		+ -					•
Sum lines 9 to 13 and enter line 14	on	\$ C)				
15. Total Course Cost. Add lines 8 and 14 and enter line 15	r on	\$ 2	213,859				
16. Average cost over 5 years. Divide line 15 by 5 and enter line 16.	on		12,770				
17. Potential students year 1		34	100		From Col	urse Inform	ation Summary Sheet
 Total potential students year (multiply line 17 by 5. and enter on line 18) 	I	17	,000				
19. Average cost per student yr 5. (divide line 15 by line 18 enter on line 19)		\$1:	2.58				

Cost Estimate for a Single Course Over a Five Year Period

Military Nursing Practice Course Conversion Analysis

MILITARY NURSING PRACTICE COURSE

Purpose

The purpose of this course is to provide nurse clinicians and middle managers (active duty and civilian) with current concepts, trends, and issues affecting the delivery of care as the military health care system transitions into the new millennium. To provide students with powerful learning tools, knowledge and information that will enable them to effectively participate in the development of appropriate clinical practices.

Course Content Stability: Low Topics and subject matter vary with course theme. That is, trends and practices change and the content changes to reflect these modifications.

General Presentation Style: Distributive

The format of the course provided for dissemination of information in primarily a lecture format, with speakers offering experiential data regarding both management and clinical care topics appropriate to the level of intended audience.

Instructional Aids: Speakers generally spoke from PowerPoint slides projected from an overhead, a 35mm slide

projector, or a computer. Hands-on Activities:

None

Degree of Instructional Interaction

There was discussion solicited during and after most presentations. The exchanges were primarily informational.

Relevant Instructional Value:

The course content was clearly focused, and presented the students with serious issues relevant to the course objectives.

Recommendation Convert to Web-Based Training.

The instructional value of this course, although presently high, would benefit from delivery on a distance learning technology that allowed for one-to-many communications, and an asynchronous delivery. In this way, the forum that allows for the exchange of ideas would be available year-round. For example, a "bulletin board" on the Web would provide a vehicle where questions could be posted, and individuals could provide their insight after they have had some time to reflect, consult others, etc. Furthermore, younger officers would benefit from exposure to these "conversations" just from observing them develop over time. Since approximately 50% of the course can change on an annual basis, the best mode of delivery would be Web Based Training. An additional benefit from converting the course would make it possible for everyone to be exposed to all the information in the three breakout sessions (nine sessions instead of three).

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: Military Nursing	ary Nursing Practice Course Course		Number: A0515				
1. Instructional goals of the con	u rse: Top ndo ond io	provide nurs	se clinicians	and middle manag	gers, active du	ty and	
civilians with current concepts, tre transitions into the new millenniun	nus anu is	sues affecti urse provide	ng the deliv	ery of care as the	military health	care system	
enable them to effectively particip	ate in the cou	levelopmer	t of appropri	riate clinical practic	anu mormatic es	n that will	
2. Frequency of course offering p	-	1			Yes	No	
3. Current length of course in hou		35	7. Conve		Х		
4. Number of hours to be convert	ed	35	8. Enhan	ce?		X	
5. Number of registered students		80					
Number of potential students the benefit from the course	hat could	2,200					
9. If item 8 = Yes, Specify	·n					···	
Technology	Level 1	Level 2	Level 3	Level 4			
WBT	Level I	X	Levers	Level 4	1999		
СВТ							
VTT	Low		High				
Other							
Labor Hours Estimation Method	Short	Long	Synchr				
	<u></u>	<u></u>	Oynem				
Cost Data	·						
10. Total Cost Year One				\$112,550			
11. Total Cost Year Two				\$56,250			
12. Total Cost Year Three				\$56,250		····· ·	
13. Total Cost Year Four				\$56,250			
14. Total Cost Year Five				\$56,250			
15. Total costs year 1 to 5 (Sun	of lines a	10 through	14)	\$337,550			
		`				· · · ·	
16. Average cost, years 1 to 5 (D	ivide value	in line 15 b	oy 5)	\$67,510			
17. Total potential students over a				11,000			
number of potential students [item							
18. Average cost per potential			period.	\$31			
(divide the value in line 15 by the	value in lin	e 17.)					
Additional Hardware/Software	Required			······		- 310	
ltem:				Cost per unit	Total		
					Cost		
Proposed Enhancements		Cost					
		0051	the second s				
		· · · · ·					
				p			
Total Enhancement Costs	·····				·	-	
Total Elinancement Costs							

Instructional Formats and Physical Training Requirements

ourse Nar	ne: Military Nursing	g Practice Course Course Number: A0515	
of Course sing this structional srmat	Format	Description	Physical Presence Required?
100%	Lecture with questions/answer opportunities	A speaker/speakers present verbal information to an audience. The audience may ask questions regarding that information.	No
	Panel Discussion	A selected group (often selected for their expertise or experience in a given area) discusses an issue in front of students. Students may ask questions about the ideas being presented.	No
	Poster Session	A group of individuals presents material in a poster format. Students may read the material being presented, and ask questions about the material.	No
	Small Group Discussion	Small groups of students (2~5) discuss an assigned topic.	?
	Group Discussion	A larger group discusses an issue – usually led by a facilitator – with heavy emphasis on student participation.	?
	Demonstration	Students observe the application of knowledge. In this case, students are not participating themselves.	?
	Student Verbal Presentations	Students present verbal information to the larger group.	?
	Student Procedural Presentations	Students present procedural information to the larger group.	?
	Field Trip	Students visit an instructionally relevant site to observe activities or meet with individuals who present information in an applied setting.	?
	Shop Activity	Hands-on technical tasks/procedures.	?
	Lab Activity	Hands-on laboratory tasks/procedures.	?

Course Information Summary Sheet

Course Name: Military Nursing Practice Course

Course Number: A0515

Length of course - number of hours of instruction: 34.5

Number of Registered Students: 80

Number of potential students that could benefit from this course: 2,200

Instructional goals of the course: To provide nurse clinicians and middle managers, active duty and civilians with current concepts, trends and issues affecting the delivery of care as the military health care system transitions into the new millennium. The course provides participants with knowledge and information that will enable them to effectively participate in the development of appropriate clinical practices.

Frequency of Course Offering: Annual

Continuing Education Credit Offered? Yes

Number: 34.2

For each item listed, check I row marked "Check" if observed or documented. Administrative Requirements Check Check Self pacing Detailed student records Group training Test Security On-demand availability Multiple test forms Open entry / open exit Training / Instruction Approach Lecture / Text 1 Learning to Mastery Live Presenters (guest speakers) Practice / drill Self study Structured Review Demonstration Feedback on performance Exhibit Remediation Guided Discussion Group activities/collaborative tasks Simulation (roll play, in-basket) Problem solving exercises **Testing Types** Objective knowledge tests Performance test hardware Essav Oral testing Performance test - "paper" No testing/Student course eval 1 Performance test - hardware Graphics 2D graphics still S 3D animation 3D graphics still 2D interactive animation 2D animation 3D interactive animation Pre recorded video /films Communications Audio Open Discussion Indirect discourse Question and answer opportunities Assigned reading

Course Military Nursing Practice Course		0.07		chnolog	T	
Administrative Requirements	Check	СВТ	WEB	VTT		
Self pacing						
Group training						
On-demand availability						
Open entry / open exit						
Detailed student records						
Test Security						
Multiple test forms						
Training / Instruction Approach						
Lecture / Text	1					
Live Presenters (guest speakers)						
Self study						1
Demonstration						-
Exhibit	-					
Guided Discussion						1
Simulation – knowledge based					+	
Simulation - hardware						
Problem solving exercises						
Learning to Mastery						
Practice / drill			-			
Structured Review						
Feedback on performance			-			
Remediation						
Group activities/collaborative tasks						
Testing Types				1		
Objective knowledge tests					1	1
Essay						1
Performance test – "paper" exercise						+
Performance test – hardware simulation						
Performance test – hardware						
Oral testing	-					
No testing/Student course evaluation	1					
Graphics		I				
2D graphics still	1	T			1	1
3D graphics still						
2D animation	-					
3D animation			-		-	
2D interactive animation						
3D interactive animation						
Pre recorded video /films						
Communications		I	.1			
Audio		Τ				1
Indirect discourse					+	
Assigned reading					-	
Open Discussion					+	
Question and answer opportunities						

Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Course				
Asynchronous Course	V	VEB Base	ed Traini	ng
Interactivity Factors	Level 1	Level 2	Level 3	Level 4
Administrative Requirements				
Self pacing		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Group training		a trans		
On-demand availability		>>>>>>>	>>>>>>>	>>>>>>>
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>>
Detailed student records		>>>>>>>	>>>>>>>	>>>>>>>
Test Security		>>>>>>>>	>>>>>>>	>>>>>>>>>
Multiple test forms			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Training / Instruction Approach				
Lecture / Text	1	>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Live Presenters (guest speakers)				
Self study		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Demonstration			>>>>>>>	>>>>>>>
Exhibit			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Guided Discussion	-			
Simulation – knowledge based	-		>>>>>>>	>>>>>>
Simulation - hardware				
Problem solving exercises			>>>>>>>	>>>>>>>
Learning to Mastery		>>>>>>>	>>>>>>>	>>>>>>>
Practice / drill		>>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Structured Review		1		>>>>>>>
Feedback on performance	- Maria I	·	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Remediation	-		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>
Group activities/collaborative tasks	-			
Testing Types				
Objective knowledge tests		>>>>>>>	>>>>>>>	>>>>>>>>
Essay				
Performance test – "paper" exercise		•	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Performance test – hardware simulation	- ·			
Performance test – hardware				
Oral testing				
No testing/Student course evaluation		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Graphics	♥			
2D graphics still		>>>>>>>	>>>>>>>	>>>>>>>
3D graphics still			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2D animation			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
3D animation				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2D interactive animation	-			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
3D interactive animation				
Pre recorded video /films			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Communications				
Audio		>>>>>>>	>>>>>>>	>>>>>>>>
Indirect discourse				
Assigned reading		>>>>>>>>	>>>>>>>	>>>>>>>
· · · · · · · · · · · · · · · · · · ·	and the second s			
Open Discussion Question and answer opportunities		i alta i		

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Course Name: Military Nursing Practice Course		umber: A		• • • • • • • • • • • • • • • • • • • •
Asynchronous Course	Con	nputer B	ased Trai	ning
Interactivity Factors	Level 1	Level 2	Level 3	Level 4
Administrative Requirements				
Self pacing		>>>>>>>	>>>>>>>	>>>>>>>
Group training	an traction and the second			
On-demand availability		>>>>>>>	>>>>>>>	>>>>>>>
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>>
Detailed student records		a de la composición d	and a start of the	
Test Security				
Multiple test forms	· · · · · · · · · · · · · · · · · · ·		>>>>>>>>	>>>>>>>
Training / Instruction Approach				
Lecture / Text	1	>>>>>>>>	>>>>>>>	>>>>>>
Live Presenters (guest speakers)				
Self study		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>>
Demonstration	×		>>>>>>>	>>>>>>
Exhibit	-		>>>>>>>	>>>>>>
Guided Discussion				
Simulation – knowledge based	-		>>>>>>>	>>>>>>>
Simulation - hardware				
Problem solving exercises		>>>>>>>	>>>>>>>	>>>>>>
Learning to Mastery		>>>>>>>	>>>>>>>	>>>>>>>
Practice / drill		>>>>>>>>	>>>>>>>	>>>>>>>
Structured Review			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>
Feedback on performance		>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Remediation			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Group activities/collaborative tasks				
Testing Types			•	
Objective knowledge tests		>>>>>>>	>>>>>>>	
Essay				>>>>>>>
Performance test –"paper" exercise				
Performance test – hardware simulation			>>>>>>>	>>>>>>
				>>>>>>>
Performance test – hardware	and a second sec			
Oral testing				
No testing/Student course evaluation	_ ✓	>>>>>>>	>>>>>>>	>>>>>>>
Graphics			T	
2D graphics still	√	>>>>>>>	>>>>>>>	>>>>>>>
3D graphics still			>>>>>>>	>>>>>>
2D animation			>>>>>>>	>>>>>>
3D animation				>>>>>>>
2D interactive animation				>>>>>>>
3D interactive animation				
Pre recorded video /films			>>>>>>>	>>>>>>
Communications				
Audio		>>>>>>>>	>>>>>>>	>>>>>>
Indirect discourse				
Assigned reading		>>>>>>>>	>>>>>>>>	>>>>>>>
Open Discussion				
Question and answer opportunities				

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Short Worksheet: Development Time

Short Worksheet: Refined Estimate of Development Hours Per Hour of Instruction

	Media: W	eb Based	Level: 2		
	Analysis	Design	Development	Implementation	Sums
Percentage of Time Spent by Task Type by Level	0.40	0.20	0.25	0.15	
2 Multiply line 1 by average * hours	· · ·			in and a second se	
200		:			1.0
Average hrs. per phase	80.00	40.00	50.00	30.00	
Adjustments ** for hours per phase. Use 1 for added time and for less time	0.30	0.50	0.80	0.30	
Adjusted hrs. per phase. Multiply line 3 by line 4	24.00	20.00	40.00	9.00	
Total Labor Hours - sum across line 5			1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -		93.0
Average hours per hour of instruction				6	

Short Worksheet: Development Time

Short Worksheet: Refined Estimate of Development Hours Per Hour of Instruction

Course Name: Military Nursing Practice Course Media: CBT Multimedia Level: 2 Analysis Design Development Implementation Sums 1 Percentage of Time Spent by Task Type 0.40 0.20 0.25 0.15 by Level 2 Multiply line 1 by average * hours 200 3 Average hrs. per phase 80.00 40.00 50.00 30.00 4 Adjustments ** for hours per phase. Use 1._ for added time and ._ for less time 0.30 0.50 0.80 0.30 5 Adjusted hrs. per phase. Multiply line 3 24.00 20.00 40.00 9.00 by line 4 Total Labor Hours - sum across line 5 93.00 , jêr * Average hours per hour of instruction

** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Course Cost Estimation Worksheet

	Course Cost Estimation Worksheet: Web Based Training	32.11	· · · · · · · · · · · · · · · · · · ·
Cour	se Name: Military Nursing Practice Course Course Number: A0515		
1	Write the sum from Refined Estimate Worksheet, estimated number of hrs. per hr. of instruction.	Hrs.	93
2	Average hourly labor cost in dollars	\$	50.00
3	Multiple line 1 by line 2 and put the results on line 3.	\$	4,650.00
4	Actual number of classroom equivalent hours to be converted or developed.	Hrs.	35
5	Compression: If conversion to asynchronous delivery multiply line 4 by .7 (seven tenths) and put the results on line 5. If not a conversion to asynchronous delivery skip line 5.	Hrs.	24.2
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery OR line 3 by line 4 if not a conversion to asynchronous delivery. Put the results on line 6.	\$	112,297.50
el a di Ma	Do not use lines 7 to 12 for any costs that are to be shared.	ener of	
7	Infrastructure Costs	\$	
8	Recurring Costs	\$	······································
9	Delivery Labor Costs	\$	
10	Travel Costs	\$	
11	Miscellaneous Costs	\$	
12	Add line 7 to 12	\$	0.00
13	Total Cost - Add lines 6 and 12.	\$	112,297.50
14	Number of potential students.	#	2,200
15	Average Cost Per Student Divide line 13 by line 14	\$	51.04
		· · ·	• • • •

Course Cost Estimation Worksheet

A:	Course Cost Estimation Worksheet: CBT Multimedia		
Co	urse Name: Military Nursing Practice Course Course Number: A0515		
1	Write the sum from Refined Estimate Worksheet, estimated number of hrs. per hr. of instruction.	Hrs.	93
2	Average hourly labor cost in dollars	\$	50.00
3	Multiple line 1 by line 2 and put the results on line 3.	\$	4,650.00
4	Actual number of classroom equivalent hours to be converted or developed.	Hrs.	35
5	Compression: If conversion to asynchronous delivery multiply line 4 by .7 (seven tenths) and put the results on line 5. If not a conversion to asynchronous delivery skip line 5.	Hrs.	24.2
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery OR line 3 by line 4 if not a conversion to asynchronous delivery. Put the results on line 6.	\$	112,297.50
	Do not use lines 7 to 12 for any costs that are to be shared.		
7	Infrastructure Costs	\$	
8	Recurring Costs	\$	
9	Delivery Labor Costs	\$	
10	Travel Costs	\$	
11	Miscellaneous Costs	\$	
12	Add line 7 to 12	\$	0.00
13	Total Cost - Add lines 6 and 12.	\$	112,297.50
14	Number of potential students.	#	2,200
15	Average Cost Per Student Divide line 13 by line 14	\$	51.04
:			:

Course Name: Military Nursing F	Practice Cou	rse	Course N	umber: A0	515
Technology Selected	Level 1	Level 2	Level 3	Level 4	
WBT		X			
CBT	1				
VTT	Low	1	High		
Other					
Cost Factors		Values		Source	
1. Labor Hours Year 1		2251		Course Te	chnology Match Table, y Interactivity Factors Table
2. Labor Hours Year 2		1125		Labor hou	rs reduced because 50% of the
3. Labor Hours Year 3		1125		course is s	stable.
4. Labor Hours Year 4		1125			
5. Labor Hours Year 5		1125			
6. Subtotal		6752			
7. Average Labor Cost per hour		\$50			
8. Total labor cost over a 5 year Multiply line 7 by line 6.	period.	\$337,590			
Additional Development Cost	s By Year				
9. Cost year 1		\$0		Data to Su	ipport Cost Analysis Worksheet
10. Cost year 2		\$0			······································
11. Cost year 3		\$0			
12. Cost year 4		\$0			
13. Cost year 5		\$0			
14. Total additional costs. Sum l and enter on line 14	ines 9 to 13	\$0			
15. Total Course Cost. Add lines and enter on line 15.	s 8 and 14	\$337,590			
16. Average cost over 5 years. I 15 by 5 and enter on line 16.	Divide line	\$67,518			
17. Potential students year 1.		2200		From Cou	rse Information Summary Sheet
18. Total potential students year (multiply line 17 by 5 and enter or		11000			
19. Average cost per student yea(Divide line 15 by line 18 and enter18)		\$31		Round up	to the nearest whole dollar.

Cost Estimate for a Single Course Over a Five Year Period

Army Nurse Corps Company Grade Leadership Course Conversion Analysis ARMY NURSE CORPS COMPANY GRADE LEADERSHIP COURSE

Course Purpose

This course provides participants an interactive forum in which to develop their own personal framework for the AMEDD vision that supports leadership development. The stated purpose of the course is to prepare company grade nurse leaders to participate in the evolution of the military health care system.

Course Content Stability:

The content of this course changes from year to year to reflect the changing needs of the Army and the leadership issues relevant to the Army Nurse Corps.

General Presentation Style: Distributive/Collaborative

This course consisted of several lecture-style presentations, on-site visits to the Pentagon and Fort Detrick, and a small discussion group activity spread out over a 3-day period. During the discussion group periods, participants used the information that was presented to them during lectures to prepare a brief for Brigadier General Simmons on issues of concern and their possible solutions. The briefing took place on the final day of the course. It should be noted that this small discussion group/briefing activity was not included in the list of objectives for the course, nor was the time accounted for in the course schedule. However, because this seemed such an integral part of this course, it was included in our analysis. Finally, there were several scheduled 'networking events' in the form of working lunches and a dinner during which senior level nurses from various positions and branches of the military were available to answer questions and to offer career guidance.

Instructional Aids:

35mm and PowerPoint slides were used during lectures providing both visual aides and outlined information. A video was used to supplement one lecture. In addition, each of the instructors provided handouts with supplemental information relevant to the topic they were addressing. Hands-on Activities:

None

Degree of Instructional Interaction

During lecture presentations, students asked questions looking for elaboration of the information presented. These questions tended to feed off of one another, at times opening up into a discussion among the students guided by the lecturer. During field trips, the students met with individuals who held several unique positions within the ANC, and were able to see first hand some of the labs and wards where their work was done. They were able to try some of the latest technological developments that are ready for testing in the field, and make contacts with the developers. The briefing exercise, in which groups of students prepared to brief the General about issues of their choosing, required a high degree of interactivity both among students as well as with the General.

Relevant Instructional Value: High This course provides a significant amount of information that is relevant to the professional performance of the attendees.

Recommendation

Do not convert to distance learning

Video Teletraining (VTT) was considered as a medium for this course. Although the cost of converting to VTT would represent substantial savings over the current method, it does not appear that the course objectives (formal and informal) could be accomplished by VTT. Specifically, the benefits gained from the small group interaction leading to the final briefing and the field trips involving interaction with senior nursing leaders could not be accomplished by distance learning. This course is a dynamic and highly interactive course whose goal of better preparing tomorrow's leaders is best delivered in real-time. The activities allow the students to go far beyond the basic learning of facts. They learn about career opportunities which must be acted upon today in order to experience them 10 years from now and be better prepared for the leadership roles in which many of them are already filling.

and the second second

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: Army Nurse Corps Company Grade Leadership Course			Course Number: A0524				
1. Instructional goals of the opersonal framework for the AM	course: To EDD vision t	provide part hat supports	cicipants an s leadership	interactive developm	forum in wh ent.	iich to deve	elop their ow
2. Frequency of course offering		1				Yes	No
3. Current length of course in h		32		ert to DL?			X
4. Number of hours to be conv		0	8. Enhar		· · · · · · · ·		X
5. Number of registered studer		47					
 Number of potential student benefit from the course 	s that could	40					
9. If item 8 = Yes, Specify							-87 X.
Technology	Level 1	Level 2	Level 3	Level 4			
WBT							
СВТ							
VTT	Low		High	X	VTT Con	sidered	
Other							
Labor Hours Estimation Meth	od: Short _	Long		onous _X_			
Cost Data							
10. Total Cost Year One				\$23,980			···
11. Total Cost Year Two				\$15,980			
12. Total Cost Year Three				\$15,980			
13. Total Cost Year Four	, 14 m			\$15,980			
14. Total Cost Year Five			**********	\$15,980			
15. Total costs year 1 to 5				\$87,900			
(Sum of lines 10 through 14)					·····		
16. Average cost, years 1 to 5	(Divide value	e in line 15 l	ov 5)	\$17,580			
17. Total potential students ov			3 ,	200			
number of potential students [it			.,				
18. Average cost per potenti	al student o	over 5 year	period.	\$440			
(divide the value in line 15 by th	ne value in lir	ne 17.)					
Additional Hardware/Softwa		4					
Item:	ire Required	1		Cost pe	runit	Total	
				Cost per	um	Cost	
Proposed Enhancements		Cost					- 11 T
Total Enhancement Costs							

Instructional Formats and Physical Training Requirements

Course Nar Leadership		Corps Company Grade Course Number: A0524	aastaat (Aliktobluunuu sa		
% of Course Using this Instructional Format	Format	Description	Physical Presence Required?		
55.54%	Lecture with questions/answer opportunities	A speaker/speakers present verbal information to an audience. The audience may ask questions regarding that information.	No		
3.12%	Panel Discussion	A selected group (often selected for their expertise or experience in a given area) discusses an issue in front of students. Students may ask questions about the ideas being presented.	No		
	Poster Session	A group of individuals presents material in a poster format. Students may read the material being presented, and ask questions about the material.	No		
15.6%	Small Group Discussion	Small groups of students (2~5) discuss an assigned topic.	?		
	Group Discussion	A larger group discusses an issue – usually led by a facilitator – with heavy emphasis on student participation.	?		
	Demonstration	Students observe the application of knowledge. In this case, students are not participating themselves.	?		
10.92%	Student Verbal Presentations	Students present verbal information to the larger group.	?		
	Student Procedural Presentations	Students present procedural information to the larger group.	?		
14.82%	Field Trip	Students visit an instructionally relevant site to observe activities or meet with individuals who present information in an applied setting.			
	Shop Activity	Hands-on technical tasks/procedures.	?		
	Lab Activity	Hands-on laboratory tasks/procedures.	?		

Course Information Summary Sheet

Course Name: Army Nurse Corps Company Grade Leadership Course

Course Number: A0524

Length of course - number of hours of instruction: 27.4 (32.05 actual)

Number of Registered Students: 47

Number of potential students that could benefit from this course: 40

Instructional goals of the course: To prepare company grade nurse leaders to participate in the evolution of the military health care system

Frequency of Course Offering: Annual

Continuing Education Credit Offered? Yes

Number: 25

Administrative Requirements	Check		Check
Self pacing		Detailed student records	
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit			-
Training / Instruction Approach			
Lecture / Text	1	Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	
Self study		Structured Review	
Demonstration		Feedback on performance	
Exhibit		Remediation	
Guided Discussion		Group activities/collaborative tasks	1
Simulation (roll play, in-basket)			
Problem solving exercises	1	·······	1
Testing Types			
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test – "paper"		No testing/Student course eval	1
Performance test – hardware			
Graphics			
2D graphics still	1	3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
		Pre recorded video /films	1
Communications	· · · · · · · · · · · · · · · · · · ·		
Audio		Open Discussion	
Indirect discourse		Question and answer opportunities	1
Assigned reading			

Course Army Nurse Corps Company Grad	е	Technologies				
Administrative Requirements	Check	СВТ	WBT	VTT	1	
Self pacing	Uncon			• • • •		
Group training	-					
On-demand availability						
Open entry / open exit						
Detailed student records				_		
Test Security		-				
Multiple test forms						
Training / Instruction Approach						
Lecture / Text						
Live Presenters (guest speakers)						
Self study						
Demonstration	-					
Exhibit						
Guided Discussion						
Simulation – knowledge based					1	
Simulation - knowledge based					.	-
Problem solving exercises		·				
Learning to Mastery	V					
Practice / drill					····	
Structured Review						
Feedback on performance						
Remediation				_		
Group activities/collaborative tasks						
Testing Types				1		
Objective knowledge tests	1					
Essay						
Performance test –"paper" exercise						
Performance test – hardware simulation				_		
Performance test – hardware						
Oral testing		-				
No testing/Student course evaluation	1			-		
Graphics	· · ·				[
2D graphics still	1					
3D graphics still						
2D animation						-
3D animation					+	-
2D interactive animation						-
3D interactive animation			-			
Pre recorded video /films	1					
Communications		I				
Audio	1	[
Indirect discourse						+
Assigned reading						
Open Discussion	1					
Question and answer opportunities	1					

Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Video Te	letraining
Video Te	latrainina
Level 1 Low	Level 2 High
and the second	
	>>>>>>>>
	>>>>>>>>
	>>>>>>>
1	>>>>>>>
	>>>>>>>>
	>>>>>>>
	>>>>>>>>
	>>>>>>>
	///////////////////////////////////////
	V
	V
v	>>>>>>>
¥	>>>>>>
	>>>>>>>
	>>>>>>
	>>>>>>>>
✓	>>>>>>
	>>>>>>
	>>>>>>>>

Shaded blocks indicates factors NOT supported by that level of technology Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Calculation of Synchronous Training Costs

Course Name: Army Nurse Corps Company Grade Leadership Course	Course Number: A0524
Labor Costs	
Development Cost = (320 hrs.) x average hourly rate (\$50)	\$ 16,000
Course Managers Studio Cost = (Total studio time + 1 hour for each day the course is offered) x number of times course is presented x average hourly rate (\$50)	\$ 3,700
Non-local Labor Cost = Number of non-local presenters x (length of the course in days +1) x number of times offered x average daily rate (\$400)	\$ 0
Moderator (\$400 per 8 hour day the course is taught)	\$ 0
Local Labor Cost = Number of local presenters x average hourly rate (\$50) X 2 X number of times course is offered.	\$ 3,800
Total Labor Costs per session	\$ 23,500
Additional Cost (any costs not captured above) Total Per Diem = (length of course in days plus one travel day x number of non-local presenters) x (local daily per diem rate) x number of time the course will be presented.	0
Total Airfare = (Average Round Trip Airfare x number of non-local presenters) x number of times the course will be presented.	0
Total dollar amount paid as honorariums.	\$ 480
(Other)	
Total Estimated Cost: Add Total Per Diem, Air Fa Costs.	re, Labor Costs, and Additional
Total Labor Costs	\$ 23,500
Total Per Diem	\$ O
Total Airfare	\$ 0
Total paid as honorariums	\$ 480
TOTAL COURSE COST Year 1	\$ 23,980
Potential Students	40
Cost Per Student = Total course costs divided by potential number of students.	\$ 600

-

12

Course Name: Army Nurse Corps Leadership Course	Company	Grade	Course	e Nu	umber: A05	524
Technology Selected	Level 1	Level 2	Level	3	Level 4	
WBT						
СВТ			-		· [·····	
VTT L	ow		High	Х	1	
Other						
Cost Factors		Values			Source	
1. Labor Hours Year 1		470			Course Te	chnology Match Table,
2. Labor Hours Year 2		310			i ecnnolog	y Interactivity Factors Table
3. Labor Hours Year 3		310			-	
4. Labor Hours Year 4		310				
5. Labor Hours Year 5		310				
6. Subtotal		1710				· · · · · · · · · · · · · · · · · · ·
7. Average Labor Cost per hour		\$50				
8. Total labor cost over a 5 year pe Multiply line 7 by line 6.	riod.	\$85,500	<u>.</u>			90
Additional Development Costs I	By Year	-L				
9. Cost year 1		\$480			Data to Su	pport Cost Analysis Worksheet
10. Cost year 2		\$480				
11. Cost year 3		\$480				
12. Cost year 4		\$480				
13. Cost year 5		\$480				N //
14. Total additional costs. Sum line and enter on line 14	es 9 to 13	\$2,400				
15. Total Course Cost. Add lines 8 and enter on line 15.	and 14	\$87,900				
 Average cost over 5 years. Div by 5 and enter on line 16. 	ide line	\$17,580				
17. Potential students year 1.		40			From Cour	se Information Summary Sheet
18. Total potential students year 1 t (multiply line 17 by 5 and enter on li		200				
19. Average cost per student year (Divide line 15 by line 18 and enter of 18)		\$440			Round up t	to the nearest whole dollar.

Cost Estimate for a Single Course Over a Five Year Period

ARMY MEDICAL SPECIALIST CORPS EXECUTIVE MANAGEMENT COURSE Conversion Analysis

AMSC MEDICAL SPECIALIST CORPS EXECUTIVE MANAGEMENT COURSE

Course Purpose: The purpose of the course was to provide knowledge and tools to allow AMSC Senior Leaders to incorporate the Surgeon General's goals (insuring readiness, designing organization, managing care, valuing people, and leveraging technology) in strategically positioning the Corps for mission accomplishment in the 21st Century.

 Course Content Stability:
 Low

 The course is presented alternate years with a content selected to meet current course focus/objectives and needs. As such, it is almost entirely dynamic and subject to change.

 General Presentation Style:
 Distributive

This course was delivered using lecture, seminar, or a combination of these formats. The majority of the sessions, while falling within the definition of a lecture (one instructor to many learners), were structured to encourage and facilitate a highly interactive discussion and question and answer environment. The information provided in the educational sessions was used to foster skills that were subsequently implemented during the group activity sessions.

Instructional Aids:

A combination of overhead slides, computer-generated slides, videotapes, and handouts supported presentation of the course materials.

Hands-on Activities:

Heavily interactive group activities designed to use problem-solving, conflict-resolution, and other leadership skills presented during the course were conducted. These sessions, while not incorporating training with equipment or tools, could be considered to meet the definition of a "hands-on" experience facilitating practical experience using the skills taught in the course.

Degree of Instructional Interaction A high level of interaction was demonstrated, both during the lecture sessions and the group activities. Questions and discussions during the sessions tended to incorporate real-world situational problems and issues and an exploration of the means by which the content of the

specific presentation might be utilized to address the problem or issue.

 Relevant Instructional Value:
 High

 The course had well-written behavioral objectives that were adhered to during the course. All material was extremely appropriate to military leaders at the level in attendance.

Recommendation Do not convert.

This course, through utilization of the AMSC node of the AMEDD Knowledge Management Network, is currently incorporating distance learning concepts by maximizing continued participation of students in the ongoing Corps strategic planning and problem-solving activities initiated during the course. It should also be noted that pre-course activities involving problemidentification by course participants was planned, but logistical problems within the Network prevented its implementation. In addition, VTC was utilized to allow participation of the Surgeon General of the Army directly from his office in the D.C. area to the course site. It is clear that the planners of this course are already aware of, and are appropriately incorporating, distance learning concepts in course execution. The only conversion media considered was VTC. However, the current cost per student (\$840) is less than the cost to convert (\$1,742). In addition, it is doubtful if all course objectives could be adequately met with any distance learning format.

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: Army Medical Sp Executive Management Course	pecialist Co	rps	Course N	lumber: A 0624		
1. Instructional goals of the co AMSC Senior Leaders to incorpo managing care, valuing people, a accomplishment in the 21st Cent	rate the Su ind leveragi	rgeon Gene	eral's goals	(insuring readiness.	designing or	ganization,
2. Frequency of course offering	per vear	11	Τ		Yes	No
3. Current length of course in ho	•	36	7. Conve	ert to DI ?		X
4. Number of hours to be conver		0	8. Enhan			X
5. Number of registered students		50				
6. Number of potential students benefit from the course		50				
9. If item 8 = Yes, Specify						
Technology	Level 1	Level 2	Level 3	Level 4		
WTB						
СВТ						
VTT	Low		High			
Other		- Y				
Labor Hours Estimation Metho	d: Short	Long	Synchro	nous X		
Cost Data	· · · · · · · · · · · · · · · · · · ·					
10. Total Cost Year One				\$132,366		
11. Total Cost Year Two				\$75,766		11-11
12. Total Cost Year Three				\$75,766		
13. Total Cost Year Four 14. Total Cost Year Five	<u></u>			\$75,766		
15. Total costs year 1 to 5 (Sui	n of lines i	10 through	14)	\$75,766		· · · · · · · · · · · · · · · · · · ·
	n or imes	io inrougn	14)	\$435,430		·····
16. Average cost, years 1 to 5 (E	Divide value	in line 15 b	ov 5)	\$87,086		
17. Total potential students over number of potential students [iter	a five year	period. (m	• •	250		
18. Average cost per potential (divide the value in line 15 by the	<i>student o</i> value in lin	v er 5 year µ e 17.) ²	period.	\$1,742		
Additional Hardware/Software	Required					
Item:				Cost per unit	Total Cost	
Proposed Enhancements		Cost				
						
Total Enhancement Costs				what i		

¹ The course is offered on a bi-annual basis. ² The current cost per student is \$840

Instructional Formats and Physical Training Requirements

ourse Nar rmy Medic lanagemer	al Specialist Corps	Executive A 0624	
of Course sing this structional ormat	Format	Description	Physical Presence Required?
50%	Lecture with questions/answer opportunities	A speaker/speakers present verbal information to an audience. The audience may ask questions regarding that information.	No
	Panel Discussion	A selected group (often selected for their expertise or experience in a given area) discusses an issue in front of students. Students may ask questions about the ideas being presented.	No
	Poster Session	A group of individuals presents material in a poster format. Students may read the material being presented, and ask questions about the material.	No
50%	Small Group Discussion	Small groups of students (2~5) discuss an assigned topic.	?
	Group Discussion	A larger group discusses an issue – usually led by a facilitator – with heavy emphasis on student participation.	?
	Demonstration	Students observe the application of knowledge. In this case, students are not participating themselves.	?
	Student Verbal Presentations	Students present verbal information to the larger group.	?
	Student Procedural Presentations	Students present procedural information to the larger group.	?
	Field Trip	Students visit an instructionally relevant site to observe activities or meet with individuals who present information in an applied setting.	?
	Shop Activity	Hands-on technical tasks/procedures.	?
	Lab Activity	Hands-on laboratory tasks/procedures.	?

Course Information Summary Sheet

Course Name: Army Medical Specialist Corps Executive Management Course

Course Number: A 0624

Length of course - number of hours of instruction: 36

Number of Registered Students: 50

Number of potential students that could benefit from this course: 50

Instructional goals of the course: The purpose of the course was to provide knowledge and tools to allow AMSC Senior Leaders to incorporate the Surgeon General's goals (insuring readiness, designing organization, managing care, valuing people, and leveraging technology) in strategically positioning the Corps for mission accomplishment in the 21st Century.

Frequency of Course Offering: Every other year

Continuing Education Credit Offered? Yes

Number: 28

For each item listed, check ✓ row marked "Check" if observed or documented.

Administrative Requirements	Check		Check
Self pacing		Detailed student records	
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit		· · · · · · · · · · · · · · · · · · ·	
Training / Instruction Approach		t	
Lecture / Text	1	Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	
Self study		Structured Review	
Demonstration		Feedback on performance	
Exhibit		Remediation	
Guided Discussion		Group activities/collaborative tasks	1
Simulation (roll play, in-basket)		•	
Problem solving exercises	1		
Testing Types		t	_I
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test –"paper"		No testing/Student course eval	1
Performance test – hardware			
Graphics		I	
2D graphics still	1	3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
	-	Pre recorded video /films	1
Communications			
Audio		Open Discussion	1
Indirect discourse		Question and answer	
Assigned reading			

Course: Army Medical Specialist Corps Ex Management Course	eculive	Technologies					
Administrative Requirements	Check	СВТ	WBT	VTT	T		
Self pacing	Check		WD1	VII			
Group training							
On-demand availability							
			-				
Open entry / open exit Detailed student records							
Test Security		· ·				_	
Multiple test forms Training / Instruction Approach							
Lecture / Text							
						-	
Live Presenters (guest speakers)							
Self study							
Demonstration							
Exhibit							
Guided Discussion							
Simulation – knowledge based						_	
Simulation - hardware							
Problem solving exercises	√						
Learning to Mastery	_						
Practice / drill							
Structured Review							
Feedback on performance							
Remediation							
Group activities/collaborative tasks	\checkmark						
Testing Types							
Objective knowledge tests							
Essay		1 - A					
Performance test –"paper" exercise							
Performance test – hardware simulation							
Performance test – hardware		1 a. 20					
Oral testing			+ 2	•			
No testing/Student course evaluation							
Graphics							
2D graphics still							
3D graphics still							
2D animation							
3D animation							
2D interactive animation							
3D interactive animation							
Pre recorded video /films	1						
Communications	· · · · · ·	·					
Audio							
Indirect discourse						1	
Assigned reading					1		
Open Discussion	1						
Question and answer opportunities	1				1		

Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side, then this technology should not be used for the course.

Course Name: Army Medical Specialist Corps Executive Management Course	Course Number:	A U624
Synchronous Course	Video Te	eletraining
Interactivity Factors	Level 1 Low	Level 2 High
Administrative Requirements		
Self pacing		
Group training		>>>>>>
On-demand availability		
Open entry / open exit		
Detailed student records		
Test Security		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Multiple test forms		>>>>>>>
Fraining / Instruction Approach		
Lecture / Text	1	>>>>>>>
Live Presenters (guest speakers)		>>>>>>>
Self study		
Demonstration		>>>>>>>
Exhibit		>>>>>>>
Guided Discussion		
Simulation – knowledge based		>>>>>>>
Simulation - hardware		
Problem solving exercises		1
Learning to Mastery		
Practice / drill		
Structured Review		
Feedback on performance		
Remediation		
Group activities/collaborative tasks		1
Testing Types		
Objective knowledge tests		
Essay		
Performance test – "paper" exercise		
Performance test – hardware simulation		
Performance test – hardware		
Oral testing		
No testing/Student course evaluation		>>>>>>>
Graphics		
2D graphics still	1	>>>>>>>
3D graphics still		>>>>>>>
2D animation		>>>>>>>
3D animation		>>>>>>>
2D interactive animation		
3D interactive animation		
Pre recorded video /films		>>>>>>>
Communications	▼	l
Audio		>>>>>>
Indirect discourse		
Assigned reading		>>>>>>>
	1	
Open Discussion		1

Technology Interactivity Factors

Shaded blocks indicates factors NOT supported by that level of technology Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Data Required to Calculate Time and Cost of Synchronous Training

Course Name: Army Medical Specialist Corps Executive Management Course	24	
Data Required: Time and Cost of Synchronous Training - VTT		
Level of Interactivity:	Lov	w High X
Number of time the course is to be offered If interactivity is high then: divide number of participants by 20 to determine the number of times the course sh offered. If interactivity is low then the number of times the course is offered	nould be	3 sessions
Length of the course in days.	#	5 per session
Length of the course in contact hours to be converted.	#	36
Total Studio Time = Course length in hours	#	36
Total number of presenters.	#	13
Number of non-local presenters.	#	8
Total dollar amount paid as honorariums.	\$	\$6,720
Local daily per diem rate.	\$	\$127
Amount spent on presenter air fare (From Course administrators survey.)	\$	\$2,100
Salary, average daily rate, assume average 8 hour day (military and govt. civ 400	vilian) = \$\$	\$400
Average hourly rate = \$50	\$	\$50
Current number of registered students.	#	50
Potential number of students .	#	50
Preparation and planning time (average = 320 hours.)	#	320
	and the second	

Calculation of Synchronous Training Costs

Course Name: Army Medical Specialist Corps Executive Management Course	Course Number: A 0624
Labor Costs	
Development Cost = (320 hrs.) x average hourly rate (\$50)	\$16,000
Course Managers Studio Cost = (Total studio time + 1 hour for each day the course is offered) x number of times course is presented x average hourly rate (\$50)	\$6,150
Non-local Labor Cost = Number of non-local presenters x (length of the course in days +1) x number of times offered x average daily rate ($$400$)	\$57,600
Moderator (\$400 per 8 hour day the course is taught)	\$1,800
Local Labor Cost = Number of local presenters x average hourly rate (\$50) X 2 X number of times course is offered.	\$1,500
Total Labor Costs per session	\$83,050
Additional Cost (any costs not captured above)	
Total Per Diem = (length of course in days plus one travel day x number of non-local presenters) x (local daily per diem rate) x number of time the course will be presented.	\$6,096
Total Air Fare = (Average Round Trip Air Fare x number of non-local presenters) x number of times the course will be presented.	\$6,300
Total dollar amount paid as honorariums.	\$6,720
(Other)	
Total Estimated Cost: Add Total Per Diem, Air Fa Costs.	re, Labor Costs, and Additional
Total Labor Costs	\$83,050
Total Per Diem	\$6,096
Total Air Fare	\$6,300
Total paid as honorariums	\$6,720
TOTAL COURSE COST Year 1	\$102,16 6
Potential Students	50
Cost Per Student = Total course costs divided by potential number of students.	\$2,043

Course Name: Army Medical Spec Executive Management Course	ialist Corp)S	Course N	umber: A 0	624
Technology Selected	Level 1	Level 2	Level 3	Level 4	
WBT					
СВТ					17 F 10
VTT	.ow	1	High X		•···
Other					
Cost Factors		Values		Source	
1. Labor Hours Year 1		2265		Course Tee	chnology Match Table,
		4400		Technology	y Interactivity Factors Table
2. Labor Hours Year 2		1133		4	
3. Labor Hours Year 3		1133		4	
 Labor Hours Year 4 Labor Hours Year 5 		1133		-	
6. Subtotal		1133	 		
		6795 \$50			
 Average Labor Cost per hour Total labor cost over a 5 year per 	riad	\$339,750			
Multiply line 7 by line 6.	nou.	\$339,750			
Additional Development Costs	By Year	.1			
9. Cost year 1		\$19,116		Data to Su	pport Cost Analysis Worksheet
10. Cost year 2		\$19,116			
11. Cost year 3		\$19,116			
12. Cost year 4		\$19,116			
13. Cost year 5		\$19,116			
14. Total additional costs. Sum line and enter on line 14	es 9 to 13	\$95,580			
15. Total Course Cost. Add lines 8 and enter on line 15.	and 14	\$435,330			
 Average cost over 5 years. Div 15 by 5 and enter on line 16. 	vide line	\$87,066		-	
17. Potential students year 1.		50		From Cour	se Information Summary Sheet
18. Total potential students year 1 (multiply line 17 by 5 and enter on li		250			· · · · · · · · · · · · · · · · · · ·
19. Average cost per student year(Divide line 15 by line 18 and enter18)		\$1,741		Round up t	to the nearest whole dollar.

Cost Estimate for a Single Course Over a Five Year Period

AMSC Combat Casualties and Humanitarian Missions Course Conversion Analysis

SUPPORT OF COMBATICASUALTY CARE AND HUMANITARIAN MISSION

Course Purpose:

To introduce participants to a wide variety of deployment missions and environments, and to assist them in planning for their participation in future deployments.

Course Content Stability: Low This course focuses on presenting the latest relevant information. Each year, different speakers discuss their recent deployment experiences. In addition, experts discuss current operations and world threats.

General Presentation Style: Distributive/Interactive

The majority of this course was delivered using a lecture format with opportunity for questions and answers. For each of the primary attending groups (Dietitians and Physical Therapists), there was an activity in which direct involvement of the students was required.

Instructional Aids:

35mm slides were used by approximately 65% of the speakers. 50% relied on overhead/PowerPoint during their presentations. Special Equipment was used for demonstrations in about 5% of the activities.

Hands-on Activities:

Minor (constructing a Middle Upper Arm Circumference (MUAC) tape to assess malnutrition). Degree of Instructional Interaction:

There was for the most part a high degree of dialogue between presenters and participants during the didactic portions. Participants not only asked questions of the speakers, but also offered their perspectives and experiences as related to a specific content area.

Relevant Instructional Value:

The entire course was structured to introduce participants to a wide variety of deployment missions and environments and to assist them in planning for their participation in deployments in the future.

Recommendation:

Do not convert to a Distance Learning format.

While the basic content of each didactic session could be presented via distance learning, the group dynamics significantly enhanced the educational experience of these sessions. There were several activities ("Do a Lot with a Little" brainstorming; a group deployment exercise) that relied on group participation for success. Furthermore, a hands-on demonstration and practice of special deployment equipment enabled the students to practice and become familiar with equipment that is not readily available to them unless deployed.

There would be value in providing the information presented by the speakers to a wider audience via a distance learning technology. Analysis has shown that 38 hours (73%) of this course could be converted to Web Based Training. Although the educational experience would not be comparable, it would be valuable. While the course is not recommended for conversion consideration may be given to providing a distance learning alternative to the 96% of potential participants not in attendance who could benefit from much of the information provided. Actual time per student spent on such a course would be considerably less that 35 hours given that dietitians and physical therapists would follow different tracks. The Alternative provided is for informational purposes only and does not constitute a recommendation to convert.

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: ALTERNATIVE: AMSC Combat	Course Number: A0630
Casualties and Humanitarian Missions Course	

1. Instructional goals of the course : To enhance the overall military readiness of military dietitians and physical therapist of domestic, joint, and international in a wide variety of deployed environments. The course promotes understanding of military missions in war and military operations other than war (MOOTW), and develops understanding of the strategic planning required for assessment and delivery of health care under battlefield conditions, MOOTW, and humanitarian and disaster relief missions.

2. Frequency of course offering per year:	#	1			Yes	No
3. Current length of course in hours	#	35	7.	Convert to DL?		X
4. Number of hours to be converted	#	35	8.	Enhance?		X
5. Number of registered students	#	80		· · · · · · · · · · · · · · · · · · ·		
 Number of potential students that could benefit from the course 	#	2000		1998-1997		

Technology	Level 1	Level 2	Level 3	Level 4
WBT		X		
CBT				
VTT	Low	L	High	
Other				

Labor Hours Estimation Method: Short _X_ Long__ Synchronous _

Cost Data		
10. Total Cost Year One	\$ 113,925	
11. Total Cost Year Two	\$ 113,925	
12. Total Cost Year Three	\$ 113,925	
13. Total Cost Year Four	\$ 113,925	
4. Total Cost Year Five	\$ 113,925	and a constant
15. Total costs year 1 to 5 (Sum of lines 10 through 14)	\$ 569,625	
16. Average cost, years 1 to 5 (divide value in line 15 by 5)	\$ 113,925	,
17. Total potential students over a five-year period. (multiply the number of potential students (item 6 above)		
by 5.)	# 10,000	
18. Average cost per potential student over 5-year		
period.		
(divide the value in line 15 by the value in line 17)	\$ 57	

Addi	tional Hardware/Sof	tware Required	
Item:		Cost per unit	Total Cost
Proposed Enhancement(s)	Cost		
•	\$	11 / 12 (Million 11 - 1	
	\$		
	\$		
Total Enhancement Costs	\$		
an a		anna an	and the second sec

Instructional Formats and Physical Training Requirements

Course Name: <u>Alternative</u>: AMSC Combat Casualties and Humanitarian Missions Course

Course Number: A0630

f Course ng this ructional mat	Format	Description	Physical Presence Required?				
100%	Lecture with questions/answer opportunities	A speaker/speakers present verbal information to an audience. The audience may ask questions regarding that information.	No				
	Panel Discussion	A selected group (often selected for their expertise or experience in a given area) discusses an issue in front of students. Students may ask questions about the ideas being presented.	No				
	Poster Session	A group of individuals presents material in a poster format. Students may read the material being presented, and ask questions about the material.					
	Small Group Discussion	Small groups of students (2~5) discuss an assigned topic.					
	Group Discussion	A larger group discusses an issue – usually led by a facilitator – with heavy emphasis on student participation.	?				
	Demonstration	Students observe the application of knowledge. In this case, students are not participating themselves.	?				
	Student Verbal Presentations	Students present verbal information to the larger group.	?				
	Student Procedural Presentations	Students present procedural information to the larger group.	?				
	Field Trip	Students visit an instructionally relevant site to observe activities or meet with individuals who present information in an applied setting.	?				
	Shop Activity	Hands-on technical tasks/procedures.	?				
	Lab Activity	Hands-on laboratory tasks/procedures.	?				

Note: For this alternative, assume 11 hours common core instruction and 12 hours each of focused instruction for dietitians and physical therapists. Level of interactivity is set at Level 2. Web Based Training would be used due to the large number of potential authors (currently presenters). Assume that 100% of the content will change each year.

Course Information Summary Sheet

Course Name: ALTERNATIVE: AMSC Combat Casualties and Humanitarian Missions Course

Course Number: A0630

Length of course - number of hours of instruction:

Number of Registered Students: 80

Number of potential students that could benefit from this course: 2000

Instructional goals of the course: To enhance the overall military readiness of military dietitians and physical therapist of domestic, joint, and international in a wide variety of deployed environments. The course promotes understanding of military missions in war and military operations other than war (MOOTW), and develops understanding of the strategic planning required for assessment and delivery of health care under battlefield conditions, MOOTW, and humanitarian and disaster relief missions.

Frequency of Course Offering: Once a year

Continuing Education Credit Offered? Yes

Number: 29.5

Administrative Requirements	Check		Check
Self pacing		Detailed student records	
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit			
Training / Instruction Approach			
Lecture / Text	X	Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	
Self study		Structured Review	
Demonstration		Feedback on performance	
Exhibit		Remediation	
Guided Discussion		Group activities/collaborative tasks	
Simulation (roll play, in-basket)		· · · · · · · · · · · · · · · · · · ·	
Problem solving exercises			
Testing Types	· · · · · ·		
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test – "paper"		No testing/Student course eval.	X
Performance test – hardware			
Graphics			
2D graphics still	X	3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
		Pre recorded video /films	
Communications			
Audio		Open Discussion	
Indirect discourse		Question and answer	
Assigned reading			

Short Worksheet: Development Time

Sh Co	ort Worksheet: Refined ourse Name: ALTERNAT	I Estimate o	f Developm	ent Hours Per He	our of Instruction	ouroo
		<u></u> /\	oombat Oas		ased Training Lev	
		Analysis	Design	Development		Sums
1	Percentage of Time Spent by Task Type by Level	.40	.20	.25	.15	
2	Multiply line 1 by average * hours200					
3	Average hrs. per phase	80	40	50	30	
4	Adjustments ** for hours per phase Use 1 for added time and for less time	.3	.5	.8	.3	
5	Adjusted hrs. Per phase. Multiply line 3 by line 4.	24	20	40	9	
*	Total Labor Hours - sum across line 5					93

* Average hours per hour of instruction
 ** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

47. -

Course Cost Estimation Worksheet

	Course Cost Estimate Works	ksheet: Web Base	d Training
AMS		Course Number: A	-
1	Write the sum from Refined Estimat estimated number of hrs. per hr. of	- /	Hrs. 93
2	Average hourly labor cost in dollars		\$ 50
3	Multiple line 1 by line 2 and put the	results on line 3.	\$ 4650
4	Actual number of classroom equival converted or developed.	lent hours to be	Hrs. 35
5	Compression: If conversions to asy delivery multiply line 4 by .7 (seven the results on line 5. If not a convers asynchronous delivery skip line 5	tenths) and put	Hrs. 24.5
6	Multiply line 3 by line 5 if a conversi asynchronous delivery OR line 3 by conversion to asynchronous deliver on line 6.	line 4 if not a	\$ 113,925
	Do not use lines 7 to 12 for any	costs that are to	be shared.
7	Infrastructure Costs		\$
8	Recurring Costs		\$
9	Delivery Labor Costs		\$
10	Travel Costs	n yr falwydd	\$
11	Miscellaneous Costs		\$
12	Add line 7 to 12		\$
13	Total Cost - Add lines 6 and 12.		\$ 113,925
14	Number of potential students		# 2000
15	Average Cost Per Student Divide li	ne 13 by line 14	\$ 57

6

Cost Estimate for a Single Course Over a Five Year Period

Course Name: Alternative: AMSC Casualties and Humanitarian Mission				ourse Numb		
Technology Selected	Level	1 Level	2	Level 3	Level 4	
WBT		x				
CBT					· · · · · · · · · · · · · · · · · · ·	- WESR-11 /
VTT	Low			High		
Other			· · · · · · ·			
Cost Factors		Values			Sourc	
1. Labor hours year 1		2278.5	·		<u> </u>	· · · · · · · · · · · · · · · · · · ·
2. Labor hours year 2		2278.5		 Course T	echnology N	latch Table
3. Labor hours year 3		2278.5				ity Factors Table
4. Labor hours year 4		2278.5			<i>y</i> ,	
5. Labor hours year 5		2278.5		-		
6. Subtotal		113,925				
7. Average labor cost		\$ 50				<u> </u>
 Total labor Cost over 5-yr. per Multiply line 6 by line 7 	rind	\$ 569,625				
Additional Development/ Delive	ery Cos	st By Ye	ar			
9. Cost year 1		\$0		Data to S Workshe	Support Cost et	Analysis
10. Cost year 2		\$0				
11. Cost year 3		\$0				
12. Cost year 4		\$0				
13. Cost year 5		\$0				
14. Total Additional Costs. Sum lines 9 to 13 and enter o line 14	n	\$0				
15. Total Course Cost. Add lines 8 and 14 and enter line 15	on	\$ 596,625				
16. Average cost over 5 years. Divide line 15 by 5 and enter o line 16.	on	\$ 113,925				
17. Potential students year 1		2000		From Col Sheet	urse Informa	tion Summary
18. Total potential students year 55 (multiply line 17 by 5. and enter on line 18)		10,000				
19. Average cost per student yr.5. (divide line 15 by line 18 enter on line 19)				Round up	o to the near	est whole dollar

91B Multisystem Trauma Short Course Conversion Analysis

91B MULTISYSTEM TRAUMA SHORT COURSE

Course Purpose:

To enhance the medical NCO's capabilities by presenting valuable, up-to-date information on multiple system trauma treatment and management, establish common approaches to similar issues related to trauma, and exchange state-of-the-art information and current trends within the entire spectrum of emergency medical providers.

Course Content Stability: <u>Low</u> As medicine changes with new ideas and technology, the material presented is the most current to date.

The course was primarily lecture format with an opportunity for questions and answers.

Instructional Aids

The majority of the speakers used PowerPoint slides or a 35mm slide projector to support their presentations. A significant portion of the speakers also provided the students with handouts. In addition, there was limited use of video (10%).

Hands-on Activities: None

Degree of Instructional Interaction

There was an opportunity to ask questions following most of the presentations. Although few questions were asked, when they occurred, the exchanges were informational.

Relevant Instructional Value: High This course provides a significant amount of information, but with a goal of making the listeners familiar with the topic. Should the students wish to apply any of the information that was

provided, it is doubtful that this could be wisely accomplished without further researching the topic independently.

Recommendation Convert to Web Based Training.

The instructional value of this course would benefit from delivery on a distance learning technology that allowed for one-to-many communications, and an asynchronous delivery. Since approximately 90% of the course can change on an annual basis, the best mode of delivery would be Web Based Training, although Computer Based Training could also be utilized. Currently, this course is offered every two years at an estimated cost (by the Course Administrator) of \$158,000. Even if the course had to be completely updated each year, converting to Web Based training would result in savings of over \$37,000 over the two-year period. If the course had to be updated every two years, the savings would double. Offering the course over the web would make it available to everyone in the MOS. If everyone in the MOS took the course over a five-year period, the average cost per student would be only \$20. If everyone took the course in one year, the cost would only be \$4 per student!

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: 91 B Multisystem Trauma Sho Course		Short Course Number: A0711				
1. Instructional goals of the co personal framework for the AMEI	D urse: To p DD vision th	provide part at supports	icipants an leadership	interactive forum i development.	n which to develo	op their own
2 Frequency of course offering		1				[A.3
2. Frequency of course offering p	•	1	7 0		Yes	No
3. Current length of course in ho		19 19	7. Conve		X	
	4. Number of hours to be converted		8. Enhan	ce?		X
5. Number of registered students		448				
 Number of potential students to benefit from the course 		15,224				
9. If item 8 = Yes, Specify						
Technology	Level 1	Level 2	Level 3	Level 4		
WTB		X				
СВТ						
VTT	Low		High			
Other						
Labor Hours Estimation Metho	d: Short _)	Long	Synchr	onous		
Cost Data					***	
10. Total Cost Year One		1		\$61,845		
11. Total Cost Year Two				\$61,845		
12. Total Cost Year Three				\$61,845		
13. Total Cost Year Four				\$61,845		
14. Total Cost Year Five				\$61,845		
15. Total costs year 1 to 5 (Sur	n of lines 1	10 through	14)	\$309,225		
10						
16. Average cost, years 1 to 5 (E			,	\$61,845		
17. Total potential students over number of potential students [iten	n 6 above] I	by 5.)		15,224		counts for e in the MOS
18. Average cost per potential (divide the value in line 15 by the			period.	\$20		
Additional Hardware/Software	Required					
Item:		·		Cost per unit	Total	
				p	Cost	
Proposed Enhancements		Cost				
•						·····
			·····			
						· · · · · · · · · · · · · · · · · · ·
Total Enhancement Costs						

Instructional Formats and Physical Training Requirements

	ne: 91B Multisyste	m Trauma Short Course Number: A0711	Sin Information
% of Course Using this Instructional Format	Format	Description	Physical Presence Required?
100%	Lecture with questions/answer opportunities	A speaker/speakers present verbal information to an audience. The audience may ask questions regarding that information.	, No
	Panel Discussion	A selected group (often selected for their expertise or experience in a given area) discusses an issue in front of students. Students may ask questions about the ideas being presented.	No
	Poster Session	A group of individuals presents material in a poster format. Students may read the material being presented, and ask questions about the material.	l No
	Small Group Discussion	Small groups of students (2~5) discuss an assigned topic.	?
	Group Discussion	A larger group discusses an issue – usually led by a facilitator – with heave emphasis on student participation.	' ?
	Demonstration	Students observe the application of knowledge. In this case, students are no participating themselves.	^t ?
	Student Verbal Presentations	Students present verbal information to the larger group.	?
	Student Procedural Presentations	Students present procedural information to the larger group.	?
	Field Trip	Students visit an instructionally relevant site to observe activities or meet with individuals who present information in an applied setting.	?
	Shop Activity	Hands-on technical tasks/procedures.	?
	Lab Activity	Hands-on laboratory tasks/procedures.	?

Course Information Summary Sheet

Course Name: 91B Multisystem Trauma Short Course

Course Number: A0711

Length of course - number of hours of instruction: 19

Number of Registered Students: 448

Number of potential students that could benefit from this course: 15,221 (entire career field)

Instructional goals of the course: To enhance the medical NCO's capabilities by presenting valuable, up-to-date information on multiple system trauma treatment and management, establish common approaches to similar issues related to trauma, and exchange state-of-the-art information and current trends within the entire spectrum of emergency medical providers.

Frequency of Course Offering: Bi-annual

Continuing Education Credit Offered? Yes

Number: 31.4

Administrative Requirements	Check		Check
Self pacing		Detailed student records	
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit		· · · · · · · · · · · · · · · · · · ·	
Training / Instruction Approach			
Lecture / Text		Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	
Self study		Structured Review	
Demonstration		Feedback on performance	
Exhibit		Remediation	
Guided Discussion		Group activities/collaborative tasks	
Simulation (roll play, in-basket)			
Problem solving exercises			
Testing Types			
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test – "paper"		No testing/Student course eval	1
Performance test – hardware			
Graphics			
2D graphics still		3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
		Pre recorded video /films	1
Communications			
Audio		Open Discussion	
Indirect discourse		Question and answer opportunities	
Assigned reading			

Course: 91B Multisystem Trauma Short Cours		ODT	Technologies				
Administrative Requirements	Check	CBT	WBT	VTT		_	
Self pacing							
Group training	_						
On-demand availability							
Open entry / open exit							
Detailed student records							
Test Security							
Multiple test forms							
Training / Instruction Approach							
Lecture / Text	1						
Live Presenters (guest speakers)			$f(x) \in [x_1, y_2]$				
Self study							
Demonstration							
Exhibit						1	
Guided Discussion							
Simulation – knowledge based				10000 L		1	
Simulation - hardware			and a second			-	
Problem solving exercises							
Learning to Mastery			-				
Practice / drill							
Structured Review							
Feedback on performance							
Remediation							
Group activities/collaborative tasks							
Testing Types					. 1		
Objective knowledge tests							
Essay							
Performance test – "paper" exercise							
Performance test – hardware simulation			•	_			
Performance test – hardware			. 1				
Oral testing						-	
No testing/Student course evaluation	1						
Graphics		L	1				
2D graphics still	_	Γ			1		
3D graphics still					-		
2D animation							
3D animation							
2D interactive animation							
3D interactive animation							
Pre recorded video /films	1						
Communications	•				_		
Audio	1	T	1		T		
Indirect discourse							
Assigned reading							
Open Discussion							
Question and answer opportunities							

Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Short Course	WEB Based Training						
Asynchronous Course							
Interactivity Factors	Level 1	Level 2	Level 3	Level 4			
Administrative Requirements							
Self pacing		>>>>>>>	>>>>>>>	>>>>>>>>			
Group training							
On-demand availability		>>>>>>>	>>>>>>>	>>>>>>>			
Open entry / open exit		>>>>>>>	>>>>>>>>	>>>>>>>			
Detailed student records		>>>>>>>	>>>>>>>	>>>>>>			
Test Security		>>>>>>>	>>>>>>>	>>>>>>			
Multiple test forms			>>>>>>>	>>>>>>>			
Training / Instruction Approach	-						
Lecture / Text	1	>>>>>>>	>>>>>>>	>>>>>>>			
Live Presenters (guest speakers)		1					
Self study		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Demonstration			>>>>>>>	>>>>>>			
Exhibit			>>>>>>>	>>>>>>			
Guided Discussion							
Simulation – knowledge based			>>>>>>>	>>>>>>>			
Simulation - hardware							
Problem solving exercises			>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Learning to Mastery		>>>>>>>	>>>>>>>	>>>>>>>			
Practice / drill		>>>>>>>	>>>>>>>	>>>>>>			
Structured Review		1		>>>>>>			
Feedback on performance	-		>>>>>>>	>>>>>>			
Remediation		 ·	>>>>>>>	>>>>>>			
Group activities/collaborative tasks							
Testing Types	•						
Objective knowledge tests		>>>>>>>	>>>>>>>	>>>>>>			
Essay							
Performance test –"paper" exercise	-		>>>>>>>	>>>>>>>			
Performance test – hardware simulation							
Performance test – hardware							
Oral testing							
No testing/Student course evaluation		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Graphics	v						
2D graphics still		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
3D graphics still			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
2D animation			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
3D animation				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
2D interactive animation				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
3D interactive animation							
Pre recorded video /films		/	>>>>>>>>	~~~~~			
Communications		✓		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Audio	1						
		>>>>>>>	>>>>>>>>	>>>>>>>			
Indirect discourse							
Assigned reading		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
Open Discussion							

Technology Interactivity Factors

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

	Computer Based Traini				
Level 1	Level 2	Level 3	Level 4		
	>>>>>>>	>>>>>>>>	>>>>>>		
	>>>>>>>>	>>>>>>>>	>>>>>>		
	>>>>>>>	>>>>>>>	>>>>>>		
		>>>>>>>>	>>>>>>>		
1	>>>>>>>	>>>>>>>	>>>>>>>		
	>>>>>>>	>>>>>>>	>>>>>>		
		>>>>>>>	>>>>>>		
		>>>>>>>	>>>>>>>		
		>>>>>>>	>>>>>>		
	>>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
	>>>>>>>	>>>>>>>	>>>>>>>		
	>>>>>>>>	>>>>>>>	>>>>>>>		
		>>>>>>>	>>>>>>>		
	>>>>>>>	>>>>>>>	>>>>>>		
		>>>>>>>	>>>>>>		
- · ·	· .				
-					
	>>>>>>>>	>>>>>>>	>>>>>>		
		>>>>>>>	>>>>>>		
			>>>>>>		
1	>>>>>>>	>>>>>>>	>>>>>>		
		L	J.,		
1	>>>>>>>	>>>>>>>	>>>>>>		
		>>>>>>>	>>>>>>>		
		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
	· · ··		>>>>>>>		
			>>>>>>		
-	~	>>>>>>>	>>>>>>		
			*		
	>>>>>>	>>>>>>>	>>>>>>		
	>>>>>>>	>>>>>>>	>>>>>>		
	· · · · · · · · · · · · · · · · · · ·				

Technology Interactivity Factors

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Short Worksheet: Development Time

Short Worksheet: Refined Estimate		

Course Name: 91B Multisystem Trauma Short Course

	Media: Web Based Training			Level: 2		
	Analysis	Design	Development	Implementation	Sums	
1 Percentage of Time Spent by Task Type by Level	0.40	0.20	0.25	0.15		
2 Multiply line 1 by average * hours			-			
200		-				
3 Average hrs. per phase	80.00	40.00	50.00	30.00		
4 Adjustments ** for hours per phase. Use 1 for added time and for less time						
	0.30	0.50	0.80	0.30		
5 Adjusted hrs. per phase. Multiply line 3 by line 4	24.00	20.00	40.00	9.00	· · · ·	
Total Labor Hours - sum across line 5			5 N. S.		93.00	

** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Short Worksheet: Development Time

Short Worksheet: Refined Estimate of Development Hours Per Hour of Instruction Course Name: 91B Multisystem Trauma Short Course Media: Computer Based Training Level: 2 Analysis Design Development Implementation Sums 1 Percentage of Time Spent by Task Type by Level 0.40 0.20 0.25 0.15 2 Multiply line 1 by average * hours 200 3 Average hrs. per phase 80.00 40.00 50.00 30.00 4 Adjustments ** for hours per phase. Use 1._ for added time and ._ for less time 0.30 0.50 0.80 0.30 5 Adjusted hrs. per phase. Multiply line 3 by line 4 24.00 20.00 40.00 9.00 Total Labor Hours - sum across line 5 93.00 Average hours per hour of instruction

** Reduce or raise the average percentage per year. Numbers in line 4 reflect savings for PPSCP courses based on assumptions given.

Course Cost Estimation Worksheet

	Course Cost Estimation Worksheet: Web Based Training		
	rse Name: 91B Multisystem Trauma Short Course Number: A0711		
Cour	se		
1	Write the sum from Refined Estimate Worksheet, estimated number of hrs. per hr. of instruction.	Hrs.	93
2	Average hourly labor cost in dollars	\$	\$50.00
3	Multiple line 1 by line 2 and put the results on line 3.	\$	\$4,650.00
4	Actual number of classroom equivalent hours to be converted or developed.	Hrs.	
5	Compression: If conversion to asynchronous delivery multiply line 4 by .7 (seven tenths) and put the results on line 5. If not a conversion to asynchronous delivery skip line 5.	Hrs.	13.3
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery OR line 3 by line 4 if not a conversion to asynchronous delivery. Put the results on line 6.	\$	\$61,845.00
	Do not use lines 7 to 12 for any costs that are to be shared.		Aanaa aa aa ahaa ahaa ahaa ahaa ahaa aha
7	Infrastructure Costs	\$	
8	Recurring Costs	\$	
9	Delivery Labor Costs	\$	1
10	Travel Costs	\$	
11	Miscellaneous Costs	\$	
12	Add line 7 to 12	\$	0.00
13	Total Cost - Add lines 6 and 12.	\$	61,845.00
14	Number of potential students.	#	15,221
15	Average Cost Per Student Divide line 13 by line 14	\$	4.06
		· .	· ·

Course Cost Estimation Worksheet

[Course Cost Estimation Worksheet: Computer Based Training		· · ·
	urse Name: 91B Multisystem Trauma Short Course Number: A0711 urse		
1	Write the sum from Refined Estimate Worksheet, estimated number of hrs. per hr. of instruction.	Hrs.	93
2	Average hourly labor cost in dollars		50.00
3	Multiple line 1 by line 2 and put the results on line 3.		4,650.00
4	Actual number of classroom equivalent hours to be converted or developed.	Hrs.	
5	Compression: If conversion to asynchronous delivery multiply line 4 by .7 (seven tenths) and put the results on line 5. If not a conversion to asynchronous delivery skip line 5.	Hrs.	13.3
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery OR line 3 by line 4 if not a conversion to asynchronous delivery. Put the results on line 6.	\$	61,845.00
	Do not use lines 7 to 12 for any costs that are to be shared.	••••	
7	Infrastructure Costs	\$	
8	Recurring Costs	\$	
9	Delivery Labor Costs	\$	
10	Travel Costs	\$	- Arra
11	Miscellaneous Costs	\$	
12	Add line 7 to 12	\$	0.00
13	Total Cost - Add lines 6 and 12.	\$	61,845.00
14	Number of potential students.	#	15,221
15	Average Cost Per Student Divide line 13 by line 14	\$	4.06
		I	I <u>, , , , , , , , , , , , , , , , , , , </u>

Course Name: 91 B Multisystem	Trauma Sh	ort Course	Course N	umber: A0	711
Technology Selected	Level 1	Level 2	Level 3	Level 4	
WBT		X			
CBT					
VTT	Low	4	High	.1	
Other					
Cost Factors		Values		Source	
1. Labor Hours Year 1		1237	1117.8446		echnology Match Table, ny Interactivity Factors Table
2. Labor Hours Year 2		1237			
3. Labor Hours Year 3		1237			
4. Labor Hours Year 4		1237			
5. Labor Hours Year 5		1237			
6. Subtotal		6185			
7. Average Labor Cost per hour		\$50	ite da		A de la construcción de la constru
8. Total labor cost over a 5 year Multiply line 7 by line 6.	period.	\$309,225			
Additional Development Cost	s By Year			-	
9. Cost year 1		\$0		Data to Su	Ipport Cost Analysis Worksheet
10. Cost year 2		\$0			
11. Cost year 3		\$0			
12. Cost year 4		\$0			
13. Cost year 5		\$0			
14. Total additional costs. Sum I and enter on line 14		\$0			
15. Total Course Cost. Add lines and enter on line 15.	8 and 14	\$309,225			
16. Average cost over 5 years. In 15 by 5 and enter on line 16.	Divide line	\$61,845			
17. Potential students year 1.		3044		From Cou	rse Information Summary Sheet
18. Total potential students year (multiply line 17 by 5 and enter or		15220			
19. Average cost per student yea(Divide line 15 by line 18 and enter18)		\$20		Round up	to the nearest whole dollar.

Cost Estimate for a Single Course Over a Five Year Period

91 R/S/T Short Course (Vet) Conversion Analysis

91 R/S/T Short Course (Vet)
Purpose of the Course-
R = Veterinary Technician; S = Preventive Medicine; T = Food Service
Purpose:
<i>91 R/T:</i> To update geographically-isolated soldiers on new methods, guidance, technology, and information related to food inspection and animal care, and to network and share common solutions.
91 S: Inform students about current issues in Preventive Medicine and to share experience and knowledge.
Course Content Stability:
The focus is on the latest developments in the area, and therefore the topics change each year.
There are some core topics in the 91 S course that are stable each year.
General Presentation Style:
This course could be better described as a "conference" than a formal course. That is, the
information was delivered using a lecture format as the primary vehicle in which one instructor presented information to many learners. Approximately 95% of the instruction was delivered
using a basic lecture format. Approximately 2% used film/video as part of the presentation.
There was one demonstration/shop activity.
Instructional Aids:
Most of the speakers used overhead slides, 35mm slides, or PowerPoint presentation files to aid
them in their instruction.
Hands-on Activities
None
Degree of Instructional Interaction:
There were opportunities for the students to ask questions. Although many of the instructor's felt that the class interaction was critical to meeting course objectives, the amount of this interaction varied from instructor to instructor. In general, these questions concerned points of clarification, and served to allow the learner to better understand how to apply the information in a real world situation. The question/answer periods were generally limited to an exchange between an individual student and the instructor; that is, the interaction did not expand into a general discussion period involving several students.
Relevant Instructional Value: Moderate
This course provides a significant amount of information, but with a goal of making the listeners familiar with the topic. Should the students wish to apply any of the information that was provided, it is doubtful that this could be wisely accomplished without further researching the topic independently. A primary benefit of the course appeared to be the opportunity to network and make contacts among peers.
Recommendation:
Convert to Web Based Training.
This "course" is actually more of a conference insofar as there is no structured set of intended learning outcomes unified by a specific theme. The information itself could easily be presented in the form of Web Based training accompanied by an electronic journal. As such, the entire population could have access to the information, and the presenters could have an "electronic publication" to add to their vitas. In this way, the educational value of the course could be increased insofar as students could participate in interactive activities and be assessed using a distance learning technology.

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: 91 R/S/T Short	Course (Ve	et)	Course N	umber: A07	'17		
1. Instructional goals of the c 91 R/T: To update geographically related to food inspection and an 91 S: Inform students about curre	y-isolated si imal care, a	and to netw	ork and sha	re common s	olutions.		ation
2. Frequency of course offering	ner vear	1				Yes	No
3. Current length of course in ho		38 ²	7. Conve	art to DL 2	- MARIA	X	INO
4. Number of hours to be conver		38	8. Enhan			^	x
5. Number of registered students		80					^
6. Number of potential students benefit from the course		1,250					
9. If item 8 = Yes, Specify				· · · · · · · · · · · · · · · · · · ·		•	
Technology	Level 1	Level 2	Level 3	Level 4			···· 1,
WBT		X					
СВТ							
VTT	Low		High				
Other							
Labor Hours Estimation Metho	d: Short _	XLong	Synchi	ronous			
Cost Data			,				
10. Total Cost Year One				\$123,700			
11. Total Cost Year Two				\$123,700			
12. Total Cost Year Three				\$123,700			
13. Total Cost Year Four				\$123,700			
14. Total Cost Year Five				\$123,700			
15. Total costs year 1 to 5 (Su	m of lines	10 through	n 14)	\$618,500			
16. Average cost, years 1 to 5 (I	<u>Divido voluc</u>	in line 1E l		6400 700			
17. Total potential students over			• ,	\$123,700 6,250			· • • • •
number of potential students [iter			iuluply the	0,250			
18. Average cost per potential (divide the value in line 15 by the			period.	\$99			
						_ }	
Additional Hardware/Software	e Required						····
Item:				Cost per u	nit	Total Cost	
Duran and Each							
Proposed Enhancements		Cost					
Total Enhancement Oct							
Total Enhancement Costs							

¹ Course is offered bi-annually ² Includes all breakout hours in the total

Instructional Formats and Physical Training Requirements

Course Name: 91 R/S/T Short Course (Vet)

Course Number: A0717

6 of Course Ising this Instructional Format	Format	Description	Physical Presence Required?			
95%	Lecture with questions/answer opportunities	A speaker/speakers present verbal information to an audience. The audience may ask questions regarding that information.	No			
	Panel Discussion	A selected group (often selected for their expertise or experience in a given area) discusses an issue in front of students. Students may ask questions about the ideas being presented.	No			
	Poster Session	A group of individuals presents material in a poster format. Students may read the material being presented, and ask questions about the material.	No			
	Small Group Discussion	Small groups of students (2~5) discuss an assigned topic.	?			
	Group Discussion	A larger group discusses an issue – usually led by a facilitator – with heavy emphasis on student participation.	?			
5%	Demonstration	Students observe the application of knowledge. In this case, students are not participating themselves.	?			
********************************	Student Verbal Presentations	Students present verbal information to the larger group.	?			
	Student Procedural Presentations	Students present procedural information to the larger group.	?			
((((((((((((((((((((((((((((((((((((((Field Trip	Students visit an instructionally relevant site to observe activities or meet with individuals who present information in an applied setting.	?			
	Shop Activity	Hands-on technical tasks/procedures.	?			
	Lab Activity	Hands-on laboratory tasks/procedures.	?			

Course Information Summary Sheet

Course Number: A0717

Length of course - number of hours of instruction: 38

Number of Registered Students: 80

Number of potential students that could benefit from this course: 1,250

Instructional goals of the course:

91 R/T: To update geographically-isolated soldiers on new methods, guidance, technology, and information related to food inspection and animal care, and to network and share common solutions.

91 S: Inform students about current issues in Preventive Medicine/share experience and knowledge.

Frequency of Course Offering: Bi-Annual

Continuing Education Credit Offered? No Number: N/A

Administrative Requirements	Check		Check
Self pacing		Detailed student records	
Group training		Test Security	
On-demand availability		Multiple test forms	
Open entry / open exit			
Training / Instruction Approach			
Lecture / Text	1	Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	
Self study		Structured Review	
Demonstration	1	Feedback on performance	
Exhibit		Remediation	
Guided Discussion		Group activities/collaborative tasks	
Simulation (roll play, in-basket)			
Problem solving exercises			
Testing Types			
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test – "paper"		No testing/Student course eval	1
Performance test – hardware			_
Graphics		[1
2D graphics still	1	3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
		Pre recorded video /films	
Communications			
Audio		Open Discussion	
Indirect discourse		Question and answer opportunities	
Assigned reading			

Administrative Requirements Self pacing Group training On-demand availability	Check	CBT	WBT	VTT	1	
Group training On-demand availability						
On-demand availability						-
5						
Open entry / open exit	_					
Detailed student records		_				
Test Security						
Multiple test forms						
Training / Instruction Approach						
Lecture / Text						
Live Presenters (guest speakers)						
Self study						
Demonstration						
Exhibit			_			
Guided Discussion						
Simulation – knowledge based						-
Simulation - hardware		·				1
Problem solving exercises						
Learning to Mastery						+
Practice / drill						1
Structured Review						+
Feedback on performance		1				-
Remediation				-		
Group activities/collaborative tasks						-
esting Types						
Objective knowledge tests						1
Essay						
Performance test – "paper" exercise						
Performance test – hardware simulation				-		
Performance test – hardware						+
Oral testing		-				
No testing/Student course evaluation	1					
Graphics			_	1		
2D graphics still	1	1	1		Т	<u> </u>
3D graphics still						
2D animation						
3D animation						
2D interactive animation					-	-
3D interactive animation						
Pre recorded video /films				-		
Communications						
Audio		ľ	1	- <u> </u>	T	1
Indirect discourse						
Assigned reading						
Open Discussion			1			
Question and answer opportunities						

Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

(Vet)				
Asynchronous Course	V	VEB Base	ed Traini	ng
Interactivity Factors	Level 1	Level 2	Level 3	Level 4
Administrative Requirements				
Self pacing		>>>>>>	>>>>>>>	>>>>>>>
Group training				
On-demand availability	-	>>>>>>>	>>>>>>>	>>>>>>>
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>
Detailed student records		>>>>>>>	>>>>>>>	>>>>>>>
Test Security		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Multiple test forms			>>>>>>>	>>>>>>>>
Training / Instruction Approach				
Lecture / Text	1	>>>>>>>	>>>>>>>	>>>>>>>
Live Presenters (guest speakers)				
Self study		>>>>>>>	>>>>>>>>	>>>>>>
Demonstration		1	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Exhibit		····· •	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>
Guided Discussion				
Simulation – knowledge based			>>>>>>>	>>>>>>
Simulation - hardware				
Problem solving exercises			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>
Learning to Mastery		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Practice / drill		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Structured Review				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Feedback on performance	- Carlos de Carl		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Remediation			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Group activities/collaborative tasks				
Testing Types				
Objective knowledge tests		>>>>>>>	>>>>>>>	
Essay			111111111	>>>>>>>
Performance test – "paper" exercise	-			
Performance test – paper exercise Performance test – hardware simulation			>>>>>>>	>>>>>>
Performance test – hardware	- ·			
	-			
Oral testing				
No testing/Student course evaluation	✓	>>>>>>>	>>>>>>>	>>>>>>>>>
Graphics 2D graphics still				
3D graphics still	v	>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2D animation			>>>>>>>>	>>>>>>>
			>>>>>>>	>>>>>>
3D animation				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2D interactive animation				>>>>>>
3D interactive animation				
Pre recorded video /films Communications			>>>>>>>	>>>>>>
			1	
Audio		>>>>>>>	>>>>>>>	>>>>>>>
Indirect discourse		1 10 1 10 1 	1994 - S. 1997 -	
Assigned reading		>>>>>>	>>>>>>>	>>>>>>
Open Discussion				
Question and answer opportunities				

Technology Interactivity Factors

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Asynchronous Course	Cor	nputer Ba	ased Trai	ining
Interactivity Factors	Level 1	Level 2	Level 3	Level 4
Administrative Requirements			· · · · · · · · · · · · · · · · · · ·	
Self pacing		>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Group training				
On-demand availability		>>>>>>>	>>>>>>>	>>>>>>>
Open entry / open exit		>>>>>>>	>>>>>>>	>>>>>>>
Detailed student records	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	1. ¹¹ .1.1		
Test Security	· · ·			
Multiple test forms			>>>>>>>	>>>>>>
Training / Instruction Approach				
Lecture / Text	1	>>>>>>>	>>>>>>>	>>>>>>>
Live Presenters (guest speakers)				
Self study		>>>>>>>	>>>>>>>	>>>>>>>
Demonstration			>>>>>>>	>>>>>>
Exhibit			>>>>>>>	>>>>>>>
Guided Discussion				
Simulation – knowledge based			>>>>>>>	>>>>>>>
Simulation - hardware				
Problem solving exercises		>>>>>>>	>>>>>>>>	>>>>>>>
Learning to Mastery		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Practice / drill	· · · ·	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Structured Review			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Feedback on performance		>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Remediation			>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Group activities/collaborative tasks	· · · ·			
Testing Types			· · · · ·	
Objective knowledge tests	1	>>>>>>>	>>>>>>>	>>>>>>
Essay				
Performance test –"paper" exercise	· . ·		>>>>>>>	
Performance test – hardware simulation				>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Performance test – hardware simulation				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Oral testing No testing/Student course evaluation				
Graphics	•	>>>>>>>	>>>>>>>	>>>>>>
2D graphics still				T
	~	>>>>>>>	>>>>>>>	>>>>>>
3D graphics still 2D animation			>>>>>>>	>>>>>>
			>>>>>>>	>>>>>>
3D animation				>>>>>>
2D interactive animation				>>>>>>>
3D interactive animation			· · · · · · · · · · · · · · · · · · ·	
Pre recorded video /films			>>>>>>	>>>>>>
Communications				1
Audio		>>>>>>>	>>>>>>>	>>>>>>
Indirect discourse				
Assigned reading		>>>>>>>>	>>>>>>>	>>>>>>
Open Discussion				

Technology Interactivity Factors

Shaded blocks indicates factors NOT supported by that level of technology. Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Short Worksheet: Development Time

	Media: We	eb Based	Level: 2		
	Analysis	Design	Development	Implementation	Sum
1 Percentage of Time Spent by Task Type by Level	0.40	0.20	0.25	0.15	284
2 Multiply line 1 by average * hou	rs 💡				2.5.9.i.
200	· .		· · · · · · · · · · · · · · · · · · ·		
3 Average hrs. per phase	80.00	40.00	50.00	30.00	
4 Adjustments ** for hours per phase. Use 1 for added time and for less time	0.30	0.50	0.80	0.30	
5 Adjusted hrs. per phase. Multiply line 3 by line 4	24.00	20.00	40.00	9.00	n na National National
Total Labor Hours - sum across line 5					93.00
 Average hours per hour of nstruction Reduce or raise the average perc PSCP courses based on assumpti 		ear. Num	bers in line 4 re	eflect savings for	•

Short Worksheet: Development Time

	Media: Co	mputer B	ased Training	Level: 2		
	Analysis	Design Developme		Implementation	Sum	
1 Percentage of Time Spent by Task Type by Level	0.40	0.20	0.25	0.15		
2 Multiply line 1 by average * hours					· ·	
200						
3 Average hrs. per phase	80.00	40.00	50.00	30.00		
4 Adjustments ** for hours per phase. Use 1 for added time and for less time	0.30	0.50	0.80	0.30		
5 Adjusted hrs. per phase. Multiply line 3 by line 4	24.00	20.00	40.00	9.00		
Total Labor Hours - sum across line 5					93.00	
 Average hours per hour of nstruction * Reduce or raise the average percer 	tage per v	oar Nu	mbers in line 4	roflact sovings fo		

Course Cost Estimation Worksheet

	Course Cost Estimation Worksheet: Web Based Train	ing	
Cou	rse Name: 91 R/S/T Short Course (Vet) Course N	umber: A 0717	<u>, , , , , , , , , , , , , , , , , , , </u>
1	Write the sum from Refined Estimate Worksheet, estimate number of hrs. per hr. of instruction.	ed Hrs.	93
2	Average hourly labor cost in dollars	\$	50.00
3	Multiple line 1 by line 2 and put the results on line 3.	\$	4,650.00
4	Actual number of classroom equivalent hours to be conve developed.	rted or Hrs.	38
5	Compression: If conversion to asynchronous delivery mult by .7 (seven tenths) and put the results on line 5. If not a conversion to asynchronous delivery skip line 5.	iply line 4 Hrs.	26.6
6	Multiply line 3 by line 5 if a conversion to asynchronous d OR line 3 by line 4 if not a conversion to asynchronous de Put the results on line 6.	elivery \$ livery.	123,690.00
	Do not use lines 7 to 12 for any costs that are to be sh	ared.	
7	Infrastructure Costs	\$	
8	Recurring Costs	\$)
9	Delivery Labor Costs	\$	
10	Travel Costs	\$	i
11	Miscellaneous Costs	\$	
12	Add line 7 to 12	\$	0.00
13	Total Cost - Add lines 6 and 12.	\$	123,690.00
14	Number of potential students.	#	1,250
15	Average Cost Per Student Divide line 13 by line 14	\$	98.95
-		·····	J

Course Cost Estimation Worksheet

anger (* Konsk	Course Cost Estimation Worksheet: Computer Based Training		
Co	urse Name: 91 R/S/T Short Course (Vet) Course Number: A 0717		
1	Write the sum from Refined Estimate Worksheet, estimated number of hrs. per hr. of instruction.	Hrs.	93
2	Average hourly labor cost in dollars	\$	50.00
3	Multiple line 1 by line 2 and put the results on line 3.	\$	4,650.00
4	Actual number of classroom equivalent hours to be converted or developed.	Hrs.	38
5	Compression: If conversion to asynchronous delivery multiply line 4 by .7 (seven tenths) and put the results on line 5. If not a conversion to asynchronous delivery skip line 5.	Hrs.	26.6
6	Multiply line 3 by line 5 if a conversion to asynchronous delivery OR line 3 by line 4 if not a conversion to asynchronous delivery. Put the results on line 6.	\$	123,690.00
d.	Do not use lines 7 to 12 for any costs that are to be shared.		
7	Infrastructure Costs	\$	
8	Recurring Costs	\$	
9	Delivery Labor Costs	\$	
10	Travel Costs	\$	
11	Miscellaneous Costs	\$	
12	Add line 7 to 12	\$	0.00
13	Total Cost - Add lines 6 and 12.	\$	123,690.00
14	Number of potential students.	#	1,250
15	Average Cost Per Student Divide line 13 by line 14	\$	98.95
euc			· · · · · · · · · · · · · · · · · · ·

Course Name: 91 R/S/T Short Co	ourse (Vet)	Course N	umber: A07	17
Technology Selected	Level 1	Level 2	Level 3	Level 4	
WBT		X			
СВТ					····
VTT	Low	I	High		
Other					
Cost Factors		Values		Source	
1. Labor Hours Year 1		2,473.8		Course Teo Table, Tech	hnology Match nology Factors Table
2. Labor Hours Year 2		2,473.8			
3. Labor Hours Year 3		2,473.8		1	
4. Labor Hours Year 4	2,473.8		-		
5. Labor Hours Year 5	2,473.8		-		
6. Subtotal	12,369				
7. Average Labor Cost per hour	\$50			····	
8. Total labor cost over a 5 year po Multiply line 7 by line 6.	eriod.	\$618,450			- 193 - 20 - 20 - 20 - 20 - 20 - 20 - 20 - 2
Additional Development Costs	By Year				
9. Cost year 1		\$0	Data to Su Workshee	pport Cost A	nalysis
10. Cost year 2		\$0			nonne-
11. Cost year 3		\$0			
12. Cost year 4		\$0			
13. Cost year 5		\$0			
14. Total additional costs. Sum lin and enter on line 14	es 9 to 13	\$0	4 1 ²		
15. Total Course Cost. Add lines and enter on line 15.	8 and 14	\$618,450			
16. Average cost over 5 years. Di 15 by 5 and enter on line 16.	\$123,690				
17. Potential students year 1.	1,250	0 From Course Information Summ Sheet			
18. Total potential students year 1 (multiply line 17 by 5 and enter on		6250			
19. Average cost per student year(Divide line 15 by line 18 and enter18)		\$99	Round up	to the neare	st whole dollar.

Cost Estimate for a Single Course Over a Five Year Period

Health Care Ethics Conversion Analysis

ETHICS

Course Purpose:

To provide chaplains with the tools for ethical decision-making with a particular focus on medical and battle field ethics.

Course Content Stability: High

Although the examples used during the course may change, the focus on the "case study method" remains constant.

General Presentation Style: Lecture/Simulation/Open Discussion

Background information was presented using a basic lecture format. Many of the issues were then further examined using group discussion. The application of the case study method was demonstrated using a discussion format as well. High level of interactivity Instructional Aids:

Instructional Aids: Lecture was supplemented with overhead slides outlining the information being presented. Handouts provided guidelines concerning the case study method and information about activities that the students would be participating in, as well as films/VCR presentations were used, .

Hands-on Activities: None.

Degree of Instructional Interaction:

The students participated in several discussions, and a role play. This allowed the students to more fully explore some rather sensitive and "gray area" issues. In addition, they could demonstrate that they had integrated the information presented concerning the "case study method", and were able to work through a "real life" problem using it.

Relevant Instructional Value: High

This seminar presented professionally relevant information as well as a methodology that could be used to function more effectively on the job.

Recommendation:

Do not convert to a distance learning mode

While it is possible to convert this course to Video Teletraining, the cost per student is very high. The high level of interactivity would require the course to be presented at least twice in order for a high level of interactivity to be maintained. While it is possible to separate the methodology from the application so that students could review the material, and familiarize themselves with the content before attending the course, the high level of integration in this course would require that this material be presented again in the course and in context. Given the short length of the course, and the small number of students, pre-course instruction will not provide any significant savings.

DISTANCE LEARNING CONVERSION REPORT FORM

Course Name: Health Care Ethics			Οοι	irs	e Num	nber:	A0803			
			l					· · · · · · · · · · · · · · · · · · ·		
1. Instructional goals of the cou	Irse : To	pro	vide cha	ipla	ains wi	th the	tools for ethi	ical deci	sion-ma	aking
with a particular focus on medical and	battle field	u et	nics.							
2. Frequency of course offering p	er vear:	#	less						Yes	No
	or your.	[an 1						105	
3. Current length of course in hou	rs		24	7.	Co	nvert	to DL?			X
4. Number of hours to be converted			24	8.		nance				X
5. Number of registered students		#	15							
6. Number of potential students th	nat									
could benefit from the course		#	35							
RECOMMEN	ID ETHI	CS	COU	RS	E BE	LEF	T AS-IS			
9. If item 8 = Yes, Specify										
Technology	Level 1	Ι	Level	2	Lev	el 3	Level 4		-	
WBT										
СВТ										
VTT	Low				High	1				
Other								<u> </u>		
								ч. 		
Labor Hours Estimation Method	: Short _	<u>_X_</u>	Long		Sync	chron	ous			
		0	-1 D-1-							
10 Total Cast Vear One			st Data			¢		r		
	0. Total Cost Year One					\$				
12. Total Cost Year Three	11. Total Cost Year Two					\$ \$				
13. Total Cost Year Four						э \$				
14. Total Cost Year Five						\$				
15. Total costs year 1 to 5 (Sun	n of lines	= 11) throu	ah	14)	\$				
	i or inice	5 70	Janou	<u>y</u>	(+-	Ψ				
16. Average cost, years 1 to 5 (div	vide value	e in	line 15	5 b	v 5)	\$				
17. Total potential students over a					, - ,	–				
(multiply the number of potent				at	oove)					
by 5.)					,	#				
18. Average cost per potential s	student o	ove	r 5 yea	r						
period.										
(divide the value in line 15 by	the value	e in	line 17)		\$				
A .1.1:1:		1	10			<u> </u>				
	onal Harc	awa	are/Sof	tw	are R	1		T - 4 - 1	A	
Item:						Cos	t per unit	Total	Cost	
Proposed Enhancement(s)	Cost									
Electronic Journal										
	\$ \$									
	<u>э</u> \$									
Total Enhancement Costs	\$									
	φ									
and the second states in the										
and the second							1100			

ourse Nan ealth Care		Course Number: A0803					
of Course ing this structional rmat	Format	Description	Physical Presence Required				
77%	Lecture with questions/answer opportunities	A speaker/speakers present verbal information to an audience. The audience may ask questions regarding that information.					
	Panel Discussion	A selected group (often selected for their expertise or experience in a g area) discusses an issue in front of students. Students may ask quest about the ideas being presented.					
	Poster SessionA group of individuals presents material in a poster format. Students may the material being presented, and ask questions about the material.						
	Small Group Discussion	Small groups of students (2~5) discuss an assigned topic.	?				
12%	Group Discussion	A larger group discusses an issue – usually led by a facilitator – with heavy emphasis on student participation.					
	Demonstration	Students observe the application of knowledge. In this case, students are not participating themselves.	?				
	Student Verbal Presentations	Students present verbal information to the larger group.	?				
	Student Procedural Presentations	Students present procedural information to the larger group.	?				
	Field Trip	Students visit an instructionally relevant site to observe activities or meet with individuals who present information in an applied setting.	?				
	Shop Activity	Hands-on technical tasks/procedures.	?				
	Lab Activity	Hands-on laboratory tasks/procedures.	?				

Instructional Formats and Physical Training Requirements

Course Information Summary Sheet

Course Name: Health Care Ethics

Course Number: A0803

Length of course - number of hours of instruction: 24

Number of Registered Students: 15

Number of potential students that could benefit from this course: 35

Instructional goals of the course: To provide chaplains with the tools for ethical decision-making with a particular focus on medical and battle field ethics.

Frequency of Course Offering: less than once a year

Continuing Education Credit Offered? NO

Number: N/A

Administrative Requirements	Check		Check
Self pacing		Detailed student records	
Group training		Test Security	-
On-demand availability		Multiple test forms	-
Open entry / open exit			
Training / Instruction Approach			
Lecture / Text	X	Learning to Mastery	
Live Presenters (guest speakers)		Practice / drill	
Self study		Structured Review	
Demonstration		Feedback on performance	
Exhibit		Remediation	
Guided Discussion	X	Group activities/collaborative tasks	
Simulation (roll play, in-basket)	X		
Problem solving exercises			
Testing Types			
Objective knowledge tests		Performance test hardware	
Essay		Oral testing	
Performance test – "paper"		No testing/Student course	X
Performance test – hardware			
Graphics			
2D graphics still	X	3D animation	
3D graphics still		2D interactive animation	
2D animation		3D interactive animation	
		Pre recorded video /films	X
Communications	•		
Audio		Open Discussion	X
Indirect discourse		Question and answer	X
Assigned reading			

Course Name: Health Care Ethics				chnologi	es	
Administrative Requirements	Check	СВТ	WBT	VTT		
Self pacing						
Group training						
On-demand availability						
Open entry / open exit						
Detailed student records		2 × × .				
Test Security		Дана 1945 г. с.				
Multiple test forms						
Training / Instruction Approach						
Lecture / Text	X					
Live Presenters (guest speakers)			1		-	
Self study						
Demonstration						
Exhibit						
Guided Discussion	X					
Simulation – knowledge based	X					
Simulation - hardware		-	ļ	1		
Problem solving exercises						
Learning to Mastery						
Practice / drill						-
Structured Review				-		
Feedback on performance						
Remediation						
Group activities/collaborative tasks						
Testing Types						l
Objective knowledge tests		T	1			
Essay			· .			
Performance test – "paper" exercise						
Performance test – hardware simulation						
Performance test – hardware		1.000	1.16.2			
Oral testing						
No testing/Student course evaluation	X					
Graphics				l		
2D graphics still	X			Т	· · ·	
3D graphics still						
2D animation			-			
3D animation			-			
2D interactive animation						
3D interactive animation						
Pre recorded video /films	X					
Communications			<u>_ l</u>		1	1
Audio	1		T			
Indirect discourse	-		- l			
Assigned reading	-					
Open Discussion	X		 			
Question and answer opportunities	X				+	

Course Technology Match Table

If the course requires any of the factors indicated by a black box on the technology side then this technology should not be used for the course.

Synchronous Course	Video Teletraining				
Interactivity Factors	Level 1 Low	Level 2 High			
Administrative Requirements					
Self pacing					
Group training		>>>>>>>			
On-demand availability					
Open entry / open exit					
Detailed student records	-				
Test Security		>>>>>>>>			
Multiple test forms		>>>>>>>			
Training / Instruction Approach					
Lecture / Text	X	>>>>>>			
Live Presenters (guest speakers)		>>>>>>			
Self study					
Demonstration		>>>>>>>			
Exhibit		>>>>>>>			
Guided Discussion		X			
Simulation – knowledge based	Х	>>>>>>>			
Simulation - hardware					
Problem solving exercises	-				
Learning to Mastery					
Practice / drill	-				
Structured Review	-				
Feedback on performance	-				
Remediation	-				
Group activities/collaborative tasks					
Testing Types					
Objective knowledge tests					
Essay					
Performance test – "paper" exercise	-				
Performance test – hardware simulation	· ·				
Performance test – hardware					
Oral testing					
No testing/Student course evaluation	Х	>>>>>>			
Graphics	<u> </u>				
2D graphics still		>>>>>>>			
3D graphics still		>>>>>>			
2D animation		>>>>>>>			
3D animation		>>>>>>			
2D interactive animation					
3D interactive animation					
Pre recorded video /films		>>>>>>>			
Communications					
Audio		>>>>>>>			
Indirect discourse					
Assigned reading		>>>>>>>			
Open Discussion					
Question and answer opportunities		<u> </u>			

Technology Interactivity Factors

Shaded blocks indicates factors NOT supported by that level of technology Right Arrows (>>) indicate that all higher levels of the technology also support that factor.

Labor Cos	
Development Cost = $(160 \text{ hrs.}) \times \text{average hourly}$	¢ 0000
rate (\$50)	\$ 8000
Course Managers Studio Cost = (Total studio time	
+ 1 hour for each day the course is offered) x	
number of times course is presented x average	¢ 2000
hourly rate (\$50) Non-local Labor Cost = Number of non-local	\$ 2800
presenters) x (length of the course in days +1) x	
	¢ 40.000
number of times offered x average daily rate (\$400 Local Labor Cost + Number of local presenters x	\$ 12,000
average hourly rate (\$50) X 2 X number of times	
course is offered.	\$ none
Total Labor Costs	\$ none \$ 22,800
	φ 22,000
Additional Cost (any costs	not captured above)
Total Per Diem =	
(length of course in days plus one	
travel day x number of non-local presenters) x	
(local daily per diem rate) x number of time the	
course will be presented.	\$ 3,630
Total Airfare = (Average Round Trip Airfare x	
number of non-local presenters) x number of times	
the course will be presented.	\$ 1000
Total dollar amount paid as honorariums	\$ none
(Other)	\$ none
Total Estimated Cost: Add Total Day Diam Air	fare Labor Coote and Additional Coote
Total Estimated Cost: Add Total Per Diem, Air Total Labor Costs	\$ 22,800
Total Per Diem	\$ 3,630
Total Airfare	\$ 3,030 \$ 1,000
Total paid as honorariums	
(other) electronic journal	\$ none
TOTAL COURSE COST Year 1	\$ 27,430
Cost Per Student = Total course costs divided by	¢ 700
potential number of students (35)	\$ 783

Calculation of Synchronous Training Costs

Note:

- Given the small number of presenters and their high level of experience delivering this type of information, preparation time should be well below the average. Therefore the time spent in preparation and planning by all involved should be less. The estimate used is 160 hours for the first year, if converted.
- Since all presenters stayed at the facility where the course was given they are all considered non-local even though only required air travel.

Cost Estimate for a Single Course Over a Five Year Period

Course Name: Health Care Ethics			Course Number: A0803					
Technology Selected	Level	1	Level	2	Level 3	Level 4		
WBT								
CBT								
VTT	Low			-	High)	[
Other				-	High)	`		
Cost Factors			Values			S.	ource	
1. Labor hours year 1		16						
2. Labor hours year 2			80		Course T	echnology	Match Tabla	
3. Labor hours year 3		-	30		Course Technology Match Table Technology Interactivity Factors Table			
4. Labor hours year 4			0			gy meraou	ing racions rable	
5. Labor hours year 5			0		-			
6. Subtotal		48	-		Covers preparation and planning time			
7. Average labor cost		\$ 50						
3. Total labor Cost over 5 yr. per	riod.							
Multiply line 6 by line 7		\$ 24	1,000					
Additional Development/ Delive	erv Co	ost I	Bv Year	•				
9. Cost year 1		\$ 19,430		Data to Support Cost Analysis Worksheet				
0. Cost year 2		\$ 16,630		2414 10 01		Crinarysis Worksheet		
			,		Additional	Costs inclu	ude course managers	
					studio tim	e for vear c	one only, non-local	
11. Cost year 3		\$ 16	5,630		labor cost	s, per diem	and air fair.	
12. Cost year 4		\$ 16	6,630					
13. Cost year 5		\$ 16	6,630					
14. Total Additional Costs .							and the state of the	
Sum lines 9 to 13 and enter of line 14	n	\$ 85	5,950					
15. Total Course Cost. Add lines 8 and 14 and enter of line 15	on	\$ 1C)9,950					
 Average cost over 5 years. Divide line 15 by 5 and enter c line 16. 	on		,990					
7. Potential students year 1		35		From Cou	rse Informa	tion Summary Sheet		
 Total potential students year 1 (multiply line 17 by 5. and enter on line 18) 		175						
 Average cost per student yr. (divide line 15 by line 18 enter on line 19) 		\$ 62	:9		Round up	to the near	est whole dollar	