



Development Costs per e-Learning Hour Summary - October 2003

“What are members spending to develop an hour of e-Learning Content?”

Contact Name	Company/ Industry	Subject matter and target audience	Estimated cost of dev per learning hour	Estimated level of interactivity	Interactivity Comments	Insource or outsource dev?	Costs factored into your calculation	Additional Comments
Anonymous	Large International Conglomerate	Subject: How to use a system administration tool for creating interactive voice response applications. Audience: Customers' system administrators Delivery mode: Web- Based Training	\$5,850 per learning hour. This was derived by calculating the total cost of the project (\$46,800) and dividing it by the number of learning hours (8).	Medium	Camtasia demos were used to teach tasks. In most cases, learners were given a practice exercise after each demo. They printed the exercise and performed the task using the actual system administration tool. The course also included lesson review questions and a final quiz. The e-learning courses we typically create include audio / narration, video clips, Flash animations, case scenarios, and product simulations. Constraints to building high interactivity include bandwidth limitations (lowest speed for off site students = 28.8K), staffing cut-backs (70% cut in two years), and budget limitations (cut by 50% in two years).	Inourced Our company employs a 15-member dedicated e- learning team, comprised of software and system engineers, Flash programmers, media developers, instructional designers, and project managers. Recent restructuring due to economic conditions have forced us to consider outsourcing options for the graphics production and Flash programming.	Activities considered in the calculation included planning, project management, media development, instructional design, course authoring, and LMS integration by internal resources. In addition to salaries, costs included equipment, software, and overhead (travel, training, facilities, communications, etc.).	Shorter courses would require a higher development cost per learning hour. This project included rework because the product was evolving as the course was being developed. Courses on stable, less technical content would have a lower cost per development hour.
Bill Bruck BBruck@collaborationarchitects.com	Collaboration Architects	Leadership Skills - adding 4 hours of interactive activities to existing WBT from AchieveGlobal and Ninth house. Four additional hours to be done over a 2 month period.	\$15k (\$60k for 4 hours) \$2k/run for repeated deployment to additional groups	very high	text, graphics, animation, simulation, audio, video, web meetings, discussion forums	n/a (we're the vendor)	This was an all-in cost to the customer, including design, development, deployment, external hosting, live-help support. Customer "soft" costs in addition: * SME time (8 hrs)* PM time (16 hrs) * eCoach time to moderate activities: 5- 12 hours over the two months	none

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Allison Anderson allison.anderson@intel.com	Intel Corporation	General soft skills applicable to entire employee base (70k + people)	\$22.5k per hour	Medium - High I would hesitate to say high, because the course is not a full Flash simulation from beginning to end.	The interactivity comes in multiple ways - there is an engagement piece where the learner listens to audio as a Flash movie plays (the movie plays still shots, not video). Then there are 7 spots where the learner listens to audio while viewing a Flash movie, and then they are asked questions and given feedback on their responses. The feedback also includes audio. There are simpler activities where the learner views text and answers questions, then receives feedback. There are I believe 12 of those. And then finally, there is a multiple choice assessment of 12 questions that they answer, where the score is tracked and they are given credit if they pass.	Insource	Headcount & Flash Development	None
Andy Wooler andy.wooler@wgo.royalsun.com	Royal & Sun Alliance Insurance Group PLC	Understanding Risk Based Capital – for all staff	£12,500 (approx \$21k US on 10/02/2003)		Includes interactive flash based game	outsourced	Total cost of external expenditure with the vendor concerned	Starting point for this course was a specific SME presentation - this was captured on video and the developers worked from that as well as time spent with other internal sme's (their time was not included in the calculation)
Anonymous	Large International Company	IT Security course aimed at all laptop and desktop PC users (approx. 80,000)	\$35k excluding subject matter expert time	Interactivity was low	multiple choice quizzes, scroll over diagrams for more details etc.	Outsourced	Estimate in house SME costs at \$10k, internal testing etc. \$5k	

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Lori Bober Lori.Bober@experian.com	Experian	Experian's Expense Reporting Policy and Procedures	\$450.00 per learning hour. The \$450 figure is to develop 1 hour of the 3 hour module. So, it cost \$1350 to develop the full 3 hours of instruction. This cost is for 36 hours of development time at a cost of \$37.50 per hour which includes salary and OPE. This project was an update to an existing e-Learning program where we had to modify/add/delete approx. 70% of content due to a system upgrade which effected policy and procedures.	Low to medium.	Some of it is text based page turner (60% - 70%) with approx. 30% engaged interactivity with questions of T/F, multiple-choice, drag & drop matching quizzes with feedback to test understanding of material.	Insource	Overhead & salaries	This project was a major update to an existing program we had developed. Our expense reporting system was enhanced significantly to a self-service Oracle application that had a big impact on the policy and procedures.
Anonymous	Retail	Retail Sales process training.	20k per hour	Medium	motion, graphics, interactivity.	Outsource, except for SME and coordinator.		
Anonymous	Retail	Point of Sale - Returns Training, Returns Cashiers	\$60,000	High	Touch screen system simulation - fairly complex application.	insource		None
Anonymous	Insurance	Technical training (computer sales software) and Soft Skill Sales Training	Web Based \$10,000 CD-ROM Based \$32,000 ALL in an authorware platform.		Web Based has audio, graphics, and text with emulation interactivity in examples. Interactivity is in an average of 50% of screens CD-ROM Based has audio, video, and graphics with text and emulation interactivity in examples. Interactivity is in an average of 80% of screens.	Script Development: 80% In source 20% outsource Graphics: 95% outsource Audio/Video Production: 95% outsource Authorware Programming: Last 3 yrs was 90% in source starting 2004. 100% outsource	Budget remains the same if in source or outsource. The difference is hard or soft dollars spent. So all internal charge backs for salary are included. Typical Budget Categories: Audio/Video Budget: Programming: Script Writing: Graphics:	
Anonymous	Training Supplier/Consultant	A 2-hour Course on the Account Process for sales executives.	About \$80,000.	Medium	Flash or HTML-based questions, with a few audio clips. "High" = scenario-driven, media-rich with simulation-type choices and feedback. "Low" = page turning with only occasional "recall" type questions to see if you remember what was said.		Labor of instructional designers, media developers, mgt, overhead; did not include cost for content experts or any incremental tool costs.	A really important cost variable is how stable and defined the content is coming into development. Obviously if the IDs have to do content research and synthesis there is much more effort.

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David Barton david.barton@us.michelin.com	Michelin	Computer applications for end users and Production applications for machine operators.	\$12,000-\$15,000 per learning hr.		Interactivity is up to the learner. They can view the modules for information or open the application on the tool bar and practice as they watch. In production, there is little interactivity. The modules are used to introduce the machine and process to the user and as a refresher later.	The video was captured in-house and the scripting, formatting, and voice-overs were outsourced.	tools and technologies, vendors/contractors	We are using these EPSSs along with scenarios and actual applications to assist the learner. They are usually part of a blended learning solution.
Anonymous	Training Supplier/Consultant	Drug Science (Anatomy and Physiology, Disease State, Mechanism of Action)	\$15,000		40 total frames, an interactive learning (reinforcement) activity every 4-5 frames, either flash animation, graphics or complex illustrations on each frame, no video, includes audio in each frame, does not include pre or post testing, includes custom interface.	Insource	Salaries and benefits only	None
Anonymous	Insurance	#1 Training for agents on new business. About 4000 in target audience. #2 Claims Training for new hires. About 250 people (a blended course)	#1: \$30,000 / 7 hours of training = \$4285 per learning hour #2: \$10,589 / 35 hours = \$302 per learning hour (blended course)	#1: Not highly interactive. #2: Not highly interactive in the online component (website). Interactivity was achieved through blending.	#1: We used an in-house template based LCMS to develop. Our instructors entered the content into the template and the outside vendor added interactive exercises and compiled it into the final course. #2: The program included an online web site with discussion area and assignments, phone calls from instructors, mentored exercises at the work site on actual work, self-study, and daily assignments.	#1: Both #2: In source	#1: Tools, technology, vendor costs. Did NOT include in-house content developers costs to populate the templates. #2: Technology, instructor development time, materials costs. Did NOT include the time of on-site mentors.	2002 data for both examples.

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Matt Everett meverett@guidant.com	Guidant Corporation	Complaint Handling. All Guidant employees need to be aware of Guidant's policy on reporting complaints. The course was developed in 13 languages and launched globally around the world.	1 hour of training: Graphics = \$4000 Translation = \$30,000 Developers = \$15,000 Total: \$49,000 per learning hour	Not much interactivity	The entire course is text based with graphics that help illustrate the topic on the page. The only real interactivity is the Knowledge Check after each topic and an Exam of 30 questions that are pulled randomly from a pool of 40 questions.	Development was done internally. Translation was outsourced.		We just launched it 3 weeks ago on our Intranet and made it available via CD.
Anonymous	U.S. division of an large international conglomerate	We developed technical training (similar to basic windows application training e.g. excel) programs for our company's customers end user training. The training developed was a Macromedia Flash program that could be delivered from the WEB or from CDROM.	The courses range anywhere from 15 to 30 minutes. From my Estimate \$2K to \$3.3K per minute and training is usually 15-30 minutes 120k to 198k per learning hour & \$30k to \$99k per course The cost depends on several factors: 1) complexity of the project and 2) internal resources and talent available. If project scope, storyboard, script, is inhouse then less \$\$ per minute.		The training was designed to guide a user through a process and basically contains four parts. - Describe the purpose of the application and the various fields in the active window. - Show the users how to do a task through a scenario. - Let users perform the task with help if needed. - Provide a quiz for each module on the key points.	We developed a project scope that outlined the objectives to be covered in the training. Once the project scope was approved a resource was assigned to create a storyboard and script. Once the story board and script were approved which involved typically three review cycles. The project was then put out to contractors for bid.	Since we do a lot of internal development, the internal cost is about \$1k to \$1.5K per minute. This takes into account the cost of internal resources to create the project scope, storyboard, script, and the time of the project manager. Usually \$1k to \$1.5K per minute internal cost and \$1K to \$1.8K per minute external cost for a range of about \$2k per minute to \$3.3k per minute.	
Anonymous	Financial	Employee Data Privacy Training Leaders with Direct Reports World Wide (35,000 employees)	5 learning hours (based upon objectives, not actual student time) \$11,400 Note cost per person = \$2	Medium	Every screen requires response; 80% have branching to customize / personalize info	Outsource	CONTRACTOR COST: \$40,000 (\$125/hr for 320 hours) TOOLS - NA (contractor tools) TECHNOLOGIES - interoperability testing processes for our learning system & infrastructure, internal Technologies time and testing lab time: \$4,500 AXP (internal project mgr. and SMEs): \$12,500 (\$100/hr for 125 hrs) TOTAL - \$57,000	

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Anonymous	Financial & Insurance	Corporate mandated programs related to Ethics and Compliance, Business Conduct, Records Retention. We've developed multiple 30 - 45 minute programs.	40 - 50K	Low Level	some graphics - non-animated, no audio, embedded testing and final assessment.	Outsourced development (with our SME)	Vendor fees - did not factor in our company's time, overhead or salary info.	All said I'd say that this effort will probably run around 75k- 80k per hour with our company time, overhead and salary.
Kelly Herrick kherrick@salesforce.com 415.901.8583	Salesforce.com	Generally, Sales Reps, Marketing Managers or Customer Service Engineers (Support Reps) who use our product	~\$25k for self-paced, Web-delivered content \$0 dedicated cost for ILT Web-delivered content		Self-paced is high -- users actually move into their own "production" environment to do exercises. ILT Web-delivered is pretty low -- mostly lecture / demo -- some polling and some application sharing	Outsource for self-paced Insourced for live, Web-delivered	"hard" \$ paid to vendors	We do 2 types of eLearning 1) We're using a vendor to develop self-paced eLearning content in 1 hour modules (based on number for course elements or objects) -- can take one user an 45 minutes and another user 80 -- depends on language skills, technical aptitude, etc. 2) Web conferencing -- 'real' cost is delivery charges -- phone/ license-seat costs. Use the standard training decks for our classroom training and deliver them over the Web.
Margie Schulte Margaret_Schulte@ssmhc.com	SSM Health Care	Hospital/Medical Compliance such as CRP, HIPAA, OSHA and JCAHO mandatory courses. Audience = ranges from all employees to job specific.	\$160 for labor plus cost of software \$500. This does not include LMS that was already in place or basic Microsoft tools. About 40 hours to build one hour (includes quizzes and tests).	No interactivity - just feedback.	The courses have graphics and rollovers for definitions and references. No sound or video clips. Quiz questions (not scored) and test questions (scored) have immediate feedback so the students know the correct response and the rationale. Our aim is to make sure they know the correct response so they "do the right thing." Must have 80% to pass.	Insourced	Hrs X salaries	

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David Robins david.robins@hp.com	Hewlett Packard	ITIL Essentials training for all business & IT staff interested in base level knowledge on ITIL (Information Technology Infrastructure Library) and ITSM (IT Service Management), sufficient to pass the basic ITIL certification exam	\$10k		Labs at end of each module plus ongoing case studies & other interaction throughout class modules	Outsource	Total bid for fixed set of elearning deliverables	
Anonymous	Manufacturing	Code of Business Principles, all employees, especially managers globally (100,000).	\$40,000 (Our average price per finished hour is \$25,000 – but this is too high and we will seek to have it closer to \$10,000-15,000.	Medium	Includes audio & video (repurposed from existing video), quizzes, roll-overs and other learner engagement, but not a high level of thought provoking (higher level learning) activities or writing/instructional design.	Outsource, based on internal content.	Vendor development fee. No internal time for project management/content approval included.	
Anonymous	Training Supplier/Consultant	Sales - go to market training; sales and presales	three levels from overview to role plays \$15 to \$40K	Low to High	High incl. responding to questions and getting feedback, selecting team members, building a presentation with feedback, etc. Mainly using text and graphics because of bandwidth. The difference in the interactivity from low to high is the amount of branching that takes place in the course. In the high there is quite a bit of branching and very little time is spent on reading other than the instructions.	Combination, SME and ID insource and outsourced web development	Salaries, expenses, vendors	

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Paul Quandt paul.quandt.ne02@statefarm.com	State Farm	State farm currently uses e-learning to cover a broad range of subject matter and uses it as a tool to reach all audiences including agents, corporate staff, etc.	The current estimated cost to develop one hour of e-learning training is \$1,326 (this is based on training developed through Corporate Learning & Development from January 2003 to August 2003).	Interactivity is High	Text, Printable PDF files to accompany the courses in a way of a job aid, graphics, animation, simulation, labs, quizzes, tests, audio, (chunked though, not streaming), video (chunked though, not streaming) Courses must be able to play across 56K	This decision is based on several factors including subject matter, target audience, and other major factors. Currently, the split is in the neighborhood of 50/50 to 60/40 in favor of outsourcing.	The development cost per hour figure is comprised of salary cost and all quantifiable non-salary costs including licenses, vendors, materials, etc. Salary costs are based on company averages broken down by employee level (e.g. managers, professional staff, support staff).	Some of this information was informally gathered and is representative of opinions of a sample of Learning & Development staff.
Anonymous	Manufacturing	Benefits Orientation	\$14,000	Low to medium -	Some click and drag, moving text, etc., but no video.	Outsourced	Vendors	Project timeline meant we had to make a quick decision about the vendor. In hind site, this was not a good decision since cost could have been reduced and interactivity increased with other vendors we have spoken with since then.