ZERO COST E-LEARNING

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The e-learning industry is headed toward premature hardening of formats and categories.

Having been a foot soldier in the previous ill-fated educational revolution, armed with teaching machines and programmed instruction around the mid-1960s, I see defeat in every skirmish and a predicting losing of the hearts and minds of learners, trainers, designers, and everyone else whom we are attempting to save. The battle cry of "just-in-time, just-enough, just-for-me, where-I-am" electronic education is being replaced by cynical comments of "just-wait-a-while, just-too-much, just-one-size, where-am-I" shovelware.

While experts in the field are converging toward the definition of learning objects and the standardization of meta tags, my friends and I have been experimenting with a variety of playful approaches to e-learning. While major corporations are creating rigid proprietary platforms that insists on doing everything from registering students to piping in multimedia extravaganzas, we have been improvising brief and cheap activities that can be mixed and matched in different permutations and combinations. In this process, one of the most cost-effective formats that we have stumbled across is e-mail learning games.

What Are Email Learning Games?

An email learning games is the poor person's gateway to online learning. In this format, the facilitator and players communicate with each other by sending electronic notes. All interactions are limited to low-technology text messages. In the absence of bells and whistles, what engages the learner is solid content and interesting process. We currently use 24 different email learning games associated with different types of learning. Most of these games incorporate several rounds of play spread over a number of days.

LIMITATIONS AND BENEFITS

First the bad news. Here are some problems associated with email learning games:

- They are not fast-paced activities. To permit participation from people around the world, you have to allot a few days for each round of play.

- They don't have bells and whistles, sex and violence, or pictures and sound effects. You have to depend on relevant content and challenging activities to provide intrinsic motivation.

- They are not solitary interactions between the learner and the computer program. You may operate from the privacy of your bedroom but you still need other people in other places to play the game.

- Your email game messages may get lost among the SPAM. Players may intentionally or accidentally delete your email instructions.

- Players may keep dropping in and out of email games. You need built-in flexibility to such permit intermittent play.

Now for the good news. Here are some advantages of email learning games.

- You don't have to learn a new technique to participate in this interactive learning activity. You are familiar with the use of email and you already use it for several other purposes.

- Email is ubiquitous. You can play the learning game from anywhere in the world. Thousands of players from more than 20 countries have participated in the learning games that my Australian partner Marie Jasinski and I have conducted.

- Email is inexpensive. Because most players have access to email at home and in the office, the marginal cost for playing email learning games is zero.

- To the designer, email is an enabling tool for improvisation. You don't need a production team to perform HTML coding and meet technical challenges.

- To the player, email is unobtrusive. The game comes to your mail box. You don't have to log in, enter your password, and wait for files to download.

- Within limits, you can schedule your participation in an email learning game to suit your preferred time.

- Although we call them games (because we prefer plain English to some jargon like *asynchronous collaborative conferencing systems*), there is nothing trivial or contrived about this format. Email learning games produce measurable performance-based learning outcomes.

AN EXTENDED EXAMPLE

Here's one more advantage of using email learning games: You can use an email game in a wide variety of contexts, ranging from a minor follow-up activity to a major course. Here's an example of how a series of email games were used to deliver a "complete" course.

The context

A multinational high-tech corporation, with offices in eight different countries, recently shifted to a team-based work mode. This change transformed traditional managers into team facilitators. Because of the geographic dispersion of the manager-facilitators, the training director decided to use an online learning approach. We were authorized to conduct a pilot test of an email learning game approach with a group of 17 participants in different locations.

Preliminaries

We sent out an email note briefly explaining what we were planning to do: We emphasized our mutual goal of improving everyone's performance as a facilitator in face-to-face team meetings. We explained that our email learning game approach involved setting aside 30-45 minutes every day and participating in each round of the game within 48 hours. We pointed out that our approach will parallel on-the-job teamwork activities and encouraged all participants to keep a log of their workplace experiences. We also distributed a resources list identifying books, videotapes, and web sites with relevant information.

POLL AND PREDICT: Characteristics of Effective Facilitators

Our next email note introduced the first learning game called POLL AND PREDICT by asking each participant to reflect on what makes an effective facilitator. Each participant was asked to send a list that contained as many characteristics of an effective facilitator as possible. We compiled a consolidated list, adding a few more items from the research literature on facilitation, so the final list contained 20 items (such as *confidence, empathic listening, expertise in process skills, flexibility, integrity,* and *inclusiveness*). The second round of the game required participants to review this list of facilitator characteristics and complete two tasks:

- Select the three most important characteristics of effective facilitators.

- Predict which three items would be selected by most participants.

Participants sent email notes with their personal choices and the predictions. In return, we sent them the result of the poll with the 20 items arranged in order of popularity. We also identified the participant who made the most accurate prediction and declared him to be the winner of the first game.

The outcome of POLL AND PREDICT was to expose participants to different characteristics of an effective facilitator and to have them think about these characteristics.

DEFINE: More Details of Facilitator Characteristics

We began the next email learning game by identifying the highest-rated characteristic of an effective facilitator (which was *confidence*). We asked participants to send an operational definition of this characteristic. In response, we received definitions such as these:

- The facilitator's ability to be present in the moment, to go wherever the group needs to go, knowing that whatever the path or destination, the facilitator can support participants in the process and help them discover value along the way.

- The belief that no matter what the group throws up, the facilitator has the ability to help them deal with it, to move on, and to progress towards their stated objective.

- The facilitator's ability to know when to say "yes", "no", or "I don't know".

We collected these definitions and sent back a complete list to the participants with a request to select the top three items. We identified the definition that received the most choices and declared it to be a winning entry. We also conducted a content analysis of all definitions and listed the critical attributes of facilitator's confidence.

We repeated the same process with each of the top five characteristics of effective facilitators. The outcome of DEFINE was a deeper understanding of the factors that contribute to effective facilitation.

DEPOLARIZER: Exploring the Dark Side

During the earlier DEFINE game, there were some inklings that the characteristics of effective facilitation had some negative aspects associated with them. We explored this possibility through the next game.

Once again, we began with the characteristic of facilitator's confidence. In the first round of DEPOLARIZER, we assigned a negative role to half the participants and a positive role to the other half. We asked people in the first half to send us three or more reasons why *confidence* could negatively interfere with the performance of a team. We asked the other half to send reasons why confidence could positively enhance the performance of the team.

Here is a sample of the negative influence of facilitator's confidence:

> *Team members may feel that the facilitator is arrogant and begin questioning his judgment.*

Here is a sample of the positive influence of facilitator's confidence:

> *The facilitator's confidence may become so contagious that all team members begin to feel empowered.*

We collected all comments, arranged them with negative and positive comments alternating with each other, sent them back to participants, and invited them to reflect on them. We repeated the same process with each of the top five characteristics of effective facilitators. The outcome of DEPOLARIZER was the realization that different facilitator characteristics may produce different results in different situations.

101 TIPS: How To Be an Effective Facilitator

We began this email learning game by asking participants send practical tips for being an effective facilitator. We encouraged participants to generate these tips on the basis of the earlier email games, personal experiences, what they heard from others, and what they read in books. We told participants to keep the tips brief (not more than 75 words) and to send us at least one tip and not more than five tips before the deadline. By sending in a new tip (different from the samples that we used), a participant earned 10 points. In addition, a panel of judges selected the top three tips at the end of each round. The best tip received a bonus score of 70 points, the second-best 30 points, and the third-best 10 points. At the end of each round, we sent e-mails with the latest collection of tips along with the names of the top three scorers.

Here are a couple of sample tips received during the play of this game:

- SAY "I DON'T KNOW". From time to time feel confident enough to say, "I don't know." Tell the team that you will find out the necessary information. Don't forget to give the team a report during the next meeting.

- DISTRIBUTED FACILITATION. You don't have to do the whole facilitation job all by yourself. Divide the facilitation task component parts and assign different parts to different people. For example, you may say, "Diane, can you please make sure that everyone gets equal air time?" This strategy works all the better if Diane is guilty of taking more than her fair share of air time.

The outcome of 101 TIPS was a set of practical tips for effective facilitation. In the process of playing this game, participants also became aware of different facilitation styles and their own preferences.

SUPERLATIVES: Debriefing Facilitation Experiences

Sometime around this time, all participants had actual experience with facilitating their teams. This email learning game was designed to compare and contrast facilitation experiences of different participants. The game began with an email note asking participants to reflect on their experiences and to briefly describe an experience related to each of these five superlatives:

- the most rewarding facilitation experience
- the most challenging facilitation experience
- the most depressing facilitation experience
- the most humorous facilitation experience
- the most confusing facilitation experience

The next email note asked participants to predict the nature of the most frequently mentioned experience for each of the five superlatives. Later, we gave participants a complete list of responses for each superlative and identified the most accurate prediction.

The outcome of SUPERLATIVES was increased awareness of how different facilitators react to different experiences.

CREATIVE SOLUTIONS: Dealing with Challenging Cases

This email learning game began with a mini-case that was based on the responses to the most challenging, the most depressing, and the most confusing superlatives in the preceding game. Participants received this case through email along with an invitation for them to send their suggested solution. We organized the 17 responses into two sets of six and one set of five. These sets were sent to groups of participants in such a way no participant received a set that contained his or her suggested solution. Participants reviewed the five or six solutions and selected the best one (in terms of creativity and practical utility). We tabulate these choices and identified the top three solutions (one from each group). During the next round, we asked participants to select the best solution among these three.

We repeated this email learning game with other cases that incorporated different types of problems.

The outcome of CREATIVE SOLUTIONS was increased ability to analyze facilitation problems and to generate effective solutions.

FOUR HEADS: Generating Practical Ideas

This email learning game provided additional opportunities for analyzing and solving facilitation problems. We begin the first round by sending four different mini-cases to four randomly selected participants and asking each of them to come up with a suitable solution. During the second round, we sent each of the four solutions to two other randomly selected participants. One of the two participants was instructed to write a critique of the solution focusing on its weaknesses. The other participant wrote a testimonial for the solution focusing on its strengths. During the third round, the original solution along with its critique and testimonial was sent to the fourth participant who improved the solution by removing or reducing its weaknesses and emphasizing and reinforcing its strengths.

The outcome of FOUR HEADS was increased fluency in recognizing and solving facilitation problems.

HALF LIFE: Discovering the Essence of Facilitation

This email learning game provided a closure to the course. During the first round of this game, we asked each player to write a guideline for effective facilitation, incorporating the key insights they gained from the earlier games and their workplace experience, using exactly 32 words. We sent these guidelines to all participants, identifying the top three guidelines selected by an external panel of judges. During the next four rounds, we asked participants to successively shrink the of their guidelines to exactly 16, 8, 4, and 2 words--while preserving the essential message. During each round, the panel of judges select the top three guidelines. After the final round, participants voted for the best guideline of any length.

The outcome of HALF LIFE was to focus on the essential ingredients of effective facilitation.

The Show Goes On

Although the HALF LIFE game brought the course to some kind of closure, we remind participants that learning to be a better facilitator is a lifelong pursuit. We suggested that participants may continue playing 101 TIPS, CREATIVE SOLUTIONS, and FOUR HEADS as frequently as they wanted to.

The pilot group of 17 participants helped us to concurrently design, evaluate, and modify the course. In addition, they generated a lot of relevant content. While we incorporated these content elements in the ensuing implementation of the course with future learners, we did so only after encouraging each new group to respond to different questions on their own.

SHORTER SUPPORT STATEGIES

While the preceding example shows how email learning games can be sequenced to deliver a complete course, a more effective and exciting use of these games is to use them as brief interludes to support training activities and other performance-improvement strategies. The following four examples show how email games are used to reinforce other training sessions:

101 QUESTIONS Before a Workshop

Before a face-to-face training workshop on cultural diversity, we used a variation of the 101 TIPS (described above) to conduct a rapid needs analysis. A couple of weeks before the session, we sent an email note to all participants inviting them to join the 101 QUESTIONS game and asking each of them to send us at least one and not more than five questions which they would like to be answered at the workshop. By sending each question, the participant earned 10 points. After a week's time, we emailed the complete set of questions to all participants and asked them to identify the three most important questions among them. The top three questions earned bonus scores of 70, 30, and 10 points. The participant with the highest total score received special recognition and a prize at the beginning of the workshop.

101 SUGGESTIONS During a Course

We incorporated another version of 101 TIPS in an online course (on a technical topic related to the measurement of bit rate errors in electronic devices). In addition to completing the regular

course assignments, we invited trainees to participate in the 101 SUGGESTIONS game that was being played in the background. Each week, all participants were invited send at least one and not more than five suggestions on how to improve the course. As in the original game, each suggestion earned 10 points and the top three suggestions (selected by the instructor) received additional bonus points. (Incidentally, many of the suggestions were incorporated to improve the delivery of the course.)

HALF LIFE at the End of a Course

One of the last activities in the online course involved the use of the HALF LIFE game (also described earlier). During the final Monday of the course, all participants were invited to summarize the most important points they had learned in exactly 32 words. A complete set of these summaries were shared with all participants with the three best summaries (as selected by a panel of judges) being clearly identified. During the next four days, we asked participants to successively shrink their summaries to exactly 16, 8, 4, and 2 words.

101 TIPS as a Follow-Up Activity

A month after an instructor-led sales training workshop, we conducted the 101 TIPS game as a follow-up activity. We invited participants to join this email game and submit their best-practice ideas from the field as tips for use by other sales people. The game continued for several months acting as an effective clearing house for innovative ideas.

VIRTUAL TEAMWORK

The preceding examples suggest that email games need not be limited to training activities. They can also be incorporated during and after the design and implementation of other types of performance-improvement strategies. Here are three additional examples of such use:

CHAIN REACTION for Needs Analysis

We invited employees of a large organization to join an email game and help us in conducing a performance needs analysis. A randomly selected group of employees received an email note asking them to complete this sentence: "What this organization needs right now is ----------". In addition to sending the response to the coordinator, each participant was asked to send a similar email note inviting one of his or her coworkers and to encourage this person to respond to question and continue the process by sending a similar note to another person. After a month, we summarized the needs-analysis data and posted a report on a web site. We also tracked down the longest unbroken chain of notes from the first person to the last and publicized this information.

CREATIVE SOLUTIONS for Continuous Problem Solving

We have used this email game (described earlier) as an ongoing problem solving strategy. We invited company employees to email a brief description of a technical problem to a registered group of game players. The facilitator compiled different suggestions and sent them to the group of players, inviting them to select the best solution. The top-ranked solution was awarded a prize and all participants were encouraged to adapt their own combination of solution ideas to their unique situations.

DEPOLARIZER for Feedback Collection

When a new expense-reimbursement system was introduced in an organization, we wanted to collect employee feedback on its usability. We used a modification of the DEPOLARIZER game (described earlier) by inviting one set of participants to write a critique of the new system (attacking all its defects) and another group to write a testimonial to the new system (praising all its merits). We sent back a list of these comments to participants, alternating positive and negative feedback--and used them to make suitable revisions to the system.

EMAIL GAMES AND IMPROVISATION

Traditional instructional designers use a systematic procedure to create a tightly structured training package. E-learning platforms and professionals have taken on this systematic approach toward producing final versions of training packages. We believe that this is a major mistake because a "final" training package is an illusion in these days of rapidly changing content. Furthermore, the pursuit of a replicable training package neglects the enormous power of the online learning environment to continuously enhance the depth and breadth of the course by encouraging participants to generate additional content and incorporating it in the future version. We believe that the field of improvisation provides better guidelines for online training design than traditional instructional design.

DESIGN JAMMING

Marie Jasinski has borrowed the concept of *jamming* from jazz improvisation and applied it to the instructional design context. The heart of design jamming is the assumption that online training courses are created collaboratively by facilitators and participants interacting with each other. Here are some aspects of the design jamming concept as applied to the online course on facilitation skills described earlier.

Emergent objectives. While we knew the desired outcomes of the course at the beginning of the project, we did not conduct a detailed task analysis to specify a list of training objectives. Instead we let the performance outcomes emerge from the interaction among the facilitator-designers and participants.

Serendipitous paths. We started the project with recipes and routines for the email games and an open mind eager to incorporate new insights. The experiences and outcomes of the first email game suggested the second one. One of the unique concepts in the current version of the course is the realization that an excess of any desirable facilitator characteristic could result in undesirable outcomes. We arrived at this important principles not through interviews with subject-matter experts but by reflecting on the spontaneous comments during an earlier email game. Similarly, an effective learning activity in the current version of the course involves analyses of facilitation problems and synthesis of creative solutions. This activity is based on authentic mini-cases created from participant responses to an earlier email game.

Life-long interaction. In one sense, the facilitation-skills course does not have any conclusion. Near the end of the course, participants are encouraged to form themselves into an informal network and to continue learning with each other replaying several of the email games with new and relevant content.

Accumulated content. The responses given by each group of participants to the email games provide a rich source of additional content. We have archived these responses for review and

analysis by future groups of participants. However, we require each participant to come up with his or her responses to the email game questions before being given access to this archived information. This is because we believe that true learning emerges from participants struggling with these questions and coming up with personal responses.

New resources, new games. Another email game emerged to make use of the increasing amount of archived responses. This game (called CLUSTER) requires participants to review previous responses and to organize them into logical categories. A critical twist in this game requires one group of participants to apply the category system created by another group. The learning outcome of CLUSTER is an increased understanding the relevant variables associated with each set of responses.

SMALL SCALE IMPROVISATION

The previous section discussed the application of the design-jamming concept to a complete course. On a smaller scale, we encourage our facilitators and participants to play with the rules of the email games rather than playing within the rules. Here are brief descriptions of how our associates have been improvising with these games.

Same process, different content. We have used 101 TIPS to collect strategies and suggestions for solving different types of problems in the workplace such as cross-cultural communication, coaching, repaid instructional design, conflict management, and consulting.

Same process, different outcomes. The original 101 TIPS game was designed to collect strategies. Our associates have currently created different versions to share relevant information (101 FACTOIDS about a product), collect important questions (101 QUESTIONS for use in our FAQs), and express feelings and opinions (101 COMMENTS about a new product).

Same process, different uses. While most email games were originally designed as learning activities, they are now being increasingly used for different purposes such as needs analysis, idea generation, participatory decisionmaking, and evaluation.

Email games provide low-cost, low-tech alternatives to complex and costly approaches to online learning and web-based collaboration. The games result in effective learning and problem solving because the technology remains in the background. They are easy to understand, learn, and use. Their flexible application can range from simple single