Work-Justifiable Conference Theme

While we always have a conference theme (Game Shows, Magic, G.A.S.), it’s exciting that the sub-theme this year is Where Experience, OD, and Leadership Intersect. This very work-justifiable theme as a track of conference topics and sessions focus on making training of organizational development more interactive and memorable. This is an excellent reason for NASAGA’s to invite the HR lead from their companies or clients to join the trainers, game designers, and professors who will be presenting and participating at this conference. Remember that we have two sample business cases on the website to help you fashion a justification for attending the conference: [http://www.nasaga.org/page/conference-2011](http://www.nasaga.org/page/conference-2011).

We’re also excited about the inspiring keynoters and the give-aways they will share during their presentations. See bios of the keynoters on page 7 of this issue. Leading up to the conference, we will be learning more about them as we feature rolling interviews on the website.

Please help us market the conference with the link [http://www.nasaga.org/page/conference-2011](http://www.nasaga.org/page/conference-2011). The multiplier effect is great if you send an email to at least ten persons on your email list. Talk about your enthusiasm for the conference and what you take away each year you attend. If you need an additional testimonial, there are several on the website. As well, ask your contacts to share the information with their organizations and colleagues.

We think our website forum is a great start, but it can be so much more if we all contribute a little. If you have a great idea, read an interesting article about games being used in a different circumstance, or want to review Jane McGonigal's (or some other game guru’s) new book, we'd love to have you put that as a forum post. If you were already going to share it via Facebook, you could write it up on the NASAGA.org site, click the "link to Facebook" icon, and have it show up in both places.

What makes the conference so great is not just the content but the community. The same thing can make the website great – not just the content, but the community interaction. Think about things you can share; comment on other people's topics, like the Facebook "Like" button; add friends; post on people's boards... We don't need to become the new Facebook, but we have a 600-person audience that reads the site either directly, via RSS, or via NASAGA Digest email, so you can be heard.

Join our community actively, via our website and at our conference! We’ll be looking for you there.
NASAGA works hard to keep its annual conference fees low and to deliver great conference value. Many attendees return year after year and consistently rate NASAGA as the most inspiring and worthwhile conference they attend. NASAGA conference fees are all inclusive: opening reception, breakfasts, breaks, expo, the banquet, all conference materials, plus many fun and useful surprises. Any first-time participant, including students, can apply for a scholarship/first-time attendee incentive award. The process for applying for a first-time incentive award is posted on the NASAGA website www.nasaga.org and on page 4 of this issue.

The conference day begins at 8:00 every morning with a continental breakfast.

- Wednesday, October 5th – All day – Pre-Conference Sessions; Certificate Programs begin
- Wednesday, October 5th – Evening – Opening Reception
- Thursday, October 6th – All day – Conference Sessions
- Thursday, October 6th – Evening – Expo and Games’ Night
- Friday, October 7th – All day – Conference Sessions
- Friday, October 7th – Evening – Banquet
- Saturday, October 8th – Through 4 p.m. – Conference Sessions, Certificate Programs Wrap-up, and Conference Closure

<table>
<thead>
<tr>
<th>Registration Type</th>
<th>Early Bird</th>
<th>Regular</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conference (Wednesday evening through Saturday p.m.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular</td>
<td>$550</td>
<td>$700</td>
</tr>
<tr>
<td>Speaker/presenter</td>
<td>$450</td>
<td>$550</td>
</tr>
<tr>
<td>Student*</td>
<td>$300</td>
<td>$350</td>
</tr>
<tr>
<td>Non-profit** or group*** rate</td>
<td>$450</td>
<td>$500</td>
</tr>
<tr>
<td>Conference and pre-conference (Wednesday through Saturday p.m.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular</td>
<td>$650</td>
<td>$800</td>
</tr>
<tr>
<td>Speaker/presenter</td>
<td>$550</td>
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<tr>
<td>Student*</td>
<td>$400</td>
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</tr>
<tr>
<td>Non-profit** or group*** rate</td>
<td>$500</td>
<td>$600</td>
</tr>
<tr>
<td>Certificate Program (includes pre-conference and conference registration)</td>
<td>$750</td>
<td>$900</td>
</tr>
<tr>
<td>One-Day Options</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference (any individual day)</td>
<td>$175</td>
<td>$200</td>
</tr>
<tr>
<td>Pre-Conference workshop only</td>
<td>$175</td>
<td>$200</td>
</tr>
</tbody>
</table>

Save money by registering early. Our special early bird registration rates are available until July 30, 2011. After that the full registration rates apply.

*You must currently be a full-time student to qualify for student registration. You will be asked to provide proof of full-time enrollment as defined by your institution.

**You must currently be a full-time employee of a non-profit group to qualify for this discounted registration fee. You will be asked to provide proof of full-time employment as defined by your employer.

***Group rate is available to groups of three or more from the same organization.
NASAGA is a network of professionals working on the design, implementation, and evaluation of games and simulations to improve learning results in education and training. Each year NASAGA holds an annual conference. The goal of the scholarships and first-time incentive awards is to allow more people to participate in the annual conference by paying for part of their conference expenses.

**Description**
The scholarship covers the conference fee. The conference is from October 6 to 8, 2011. Those receiving awards are responsible for their travel and accommodations at the conference hotel. They are also responsible for paying for a pre-conference workshop or certificate program on October 5, if they wish to attend one.

**Eligibility**
Anyone who is a first-time attendee is eligible. Priority, however is given to:
- Students who study in the fields of education, educational technology, training, adult education, and related fields.
- Students presenting at the conference.
- Students or teachers who have designed games or simulations.
- Students or teachers who have a current project related to games or simulations.

**Notification**
All candidates will receive award decisions by August 31, 2011.

**Application**
Please provide the following information concisely in a word processing document.

**Part one: Contact Information**
Provide us with the following contact information:
- Your name
- Mailing address
- Phone
- Email address
- Name of organization or work affiliation, if applicable
- Educational institution or school district, if applicable
- Address of educational institution or school, if applicable
- Field of study (education, educational technology, etc.) or teaching disciplines
- Degree (undergraduate, graduate, or other: please specify)
• Student status (part-time or full-time), if applicable
• Indicate if you are interested in a full or partial incentive. If partial, what would you like covered?

**Part two: Interest**
Please include a short essay describing your interest in simulations, games, or other interactive learning. For example: Have you used games/simulations for education/training purposes? Have you developed games/simulations or other interactive training methods? How do you plan to use games/simulations in your work? Limit your essay to 500 words.

**Part three: Attachments**
Please include the following:

1) If applicable, provide a proof of your status as a student in a recognized institution (including your status as part-time or full-time). This should be on the letterhead of your school. A scanned copy is acceptable.

2) Two references: Please provide two reference letters explaining why you are a good candidate to receive this scholarship. Include their contact information. The letters are expected to come from professors if you are a student or current co-workers or supervisors if you are not a student.

3) Resume: Include your resume.

**Part four: Send**
Send by e-mail to Marla Allen at: marlaallen@aol.com.
If you have questions, contact Marla at 704.957.1400.

**Part five: Telephone Interview**
You may receive a phone call regarding your application.

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**SAMPLE**

**Scholarship / First-Time Attendee Incentive Award Evaluation**

<table>
<thead>
<tr>
<th>Name of applicant:</th>
<th>____________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criteria</strong></td>
<td><strong>Points received and comments</strong></td>
</tr>
<tr>
<td>Student status (5 points)</td>
<td>Full-time (4 courses per session or as defined by the institution) = 5 points Part-time (1 course = 1 point, 2 courses 2 points, 3 courses 3 points) <strong>Teacher status (5 points)</strong> 1 point for every year taught up to 5 points total. Professional status (2.5 points) .5 points for every professional year up to 2.5 points total.</td>
</tr>
<tr>
<td>Discipline (5 points)</td>
<td>For students and professionals: Fields related to teaching, training, instructional design, etc. = 5 points Other fields = 1-3 points Teachers automatically get 3 points.</td>
</tr>
<tr>
<td>Interest in games and simulations (10 points)</td>
<td>Highly motivated = 2 points Has designed G&amp;S = 2 points Current project related to G&amp;S = 2 points Reference letters states experience in use or development of G&amp;S = 2 points Able to communicate how will use experience to continue using G&amp;S in their field of work = 2 points</td>
</tr>
<tr>
<td>Presenting at the conference (5 points)</td>
<td>Yes = 5 points No = 0 points</td>
</tr>
<tr>
<td><strong>Total possible:</strong></td>
<td>25 points</td>
</tr>
</tbody>
</table>

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“Bigger than any specific session or reception was the warmth, openness, and genuine connections I made with people at the conference. Qualities like these are found in people who live life to the fullest and make an effort to see the potential in the people and projects around them... Thank you again to all who made it possible to attend the NASAGA conference... I am incredibly grateful for the opportunity.”

- Christina, past scholarship recipient
NASAGA has a wonderful conference site with great room rates. Our room block offers a rate of $119 per night plus taxes. The spacious rooms at the Radisson Valley Forge feature complimentary high-speed, wireless Internet access, Sleep Number® beds, in-room safes, hair dryers, iron/ironing boards, and more.

The Radisson Valley Forge Hotel in King of Prussia is connected to the Valley Forge Convention Center and is located directly across from historic Valley Forge National Park. Guests at the hotel enjoy a variety of amenities, including an outdoor swimming pool, fitness center, laundry service, a 24-hour business center, and complimentary shuttle service to and from the King of Prussia Mall. A Budget car rental office is located in the lobby.

The hotel offers a variety of dining options. Watch one of the 10 plasma TVs at Chumley's Sports Bar, or enjoy seafood and steaks in the formal dining room. Cafe Soleil serves breakfast and lunch, while Blue Grotto Italian Bistro offers Mediterranean dishes. Ice Nightclub is open Saturday evenings from 9 p.m. to 2 a.m.

The Radisson Hotel Valley Forge is located 19 miles from downtown Philadelphia and 35 miles from the Philadelphia airport. The Amtrak train station is downtown. The hotel is easily accessible from many major highways as well as the PA turnpike. Conference participants can take a taxi from the train station, or the Tropiano Airport Shuttle Service from the airport for $53 dollars round trip. It departs from the airport every 30 min. from 6 a.m. to midnight.

If you can spend an extra day or two, there are many nearby attractions. In addition to the historic Revolutionary War Valley Forge National Park, the hotel is minutes away from Sesame Place, Longwood Gardens, the Liberty Bell, Independence Place, Betsy Ross's House, the Philadelphia Art Museum, and many other attractions.

1160 First Avenue, King of Prussia PA 19406, USA
Reservations: 1-800-395-7046 US/Canada Toll-free
Telephone: (610) 337-2000 Fax: (610) 768-0183
Allan Silva: Frontiers in Neuroscience, Leadership Development, and Experiential Learning Design

Allan's keynote will bring into focus the emerging applications of neuroscience to experiential learning design and leadership development. He will delve particularly into Dr. Paul Zak's work at the Center for Neuroeconomic Studies on oxytocin as the neurotransmitter of “Trust”, Dr. Dario Nardi's brain imaging studies at UCLA (University of California, Los Angeles) on “Brain Savvy Leadership”, and his own work in Neurophenomenology and the Psychology of Play.

In the early 1990s, as a graduate student in the College of Medicine at the University of Toledo, Allan Silva conducted one of the very first neuroanatomy studies to demonstrate acute neuroplasticity in adults (www.ncbi.nlm.nih.gov/pubmed/8833117). Allan's research indicated that neural physiology and, ostensibly the adult human mind, could be changed by the practice of learning. Not content to just sit in the laboratory, Allan went on to attain his master’s degree in the applied sciences, specializing in Somatics and Performance Psychology. Since then Allan has dedicated his professional life to applying biomedical advances to the practice of human and organization development.

Along the way, Allan was selected for the national board of technical advisers of the Violence Against Women’s Office, Federal Department of Justice, and served from 1999 to 2002. In President Clinton's administration, Allan was directly responsible for building coordinated community response systems to prevent sexual assault on federally funded university and college campuses, and provided large scale organization change and leadership development technical assistance. In recognition for his visionary and strategic contributions to state and national public health, Allan was awarded the Leadership Fellowship by The California Wellness Foundation. He then went on to found Pollack Silva Pollack, a leadership technology consultancy.

For the past ten years, Allan has been providing leadership development, executive coaching, and organization change consulting to nonprofit, government agencies, and corporations. Recent clients include SAP, Google University, and the Starfish Leadership Program of the US Army's Training and Doctrine Command. Allan Silva holds his degree in Clinical Psychology and is a professor on the Neuroscience of Leadership Development at Antioch University.

How are you engaging your brain October 5th-8th? Make it happen at the NASAGA conference!
Sivasailam “Thiagi” Thiagarajan: Interacting with the Past, Present, and Future

In this interactive session, Thiagi will help us explore how the past and the future suggest appropriate strategies and tactics for the present. He will demonstrate how an activity template (a framegame) will help you investigate the intersection of experiential learning, OD, and leadership. Later, he will explain how to creatively plagiarize the template to use it with your own topics and target groups.

Dr. Sivasailam "Thiagi" Thiagarajan is the Resident Mad Scientist at The Thiagi Group, an organization with the mission of helping people improve their performance effectively and enjoyably. Thiagi’s long-term clients include AT&T, Arthur Andersen, Bank of Montreal, Cadence Design Systems, Chevron, IBM, Intel, Intelsat, United Airlines, and Liberty Mutual. On a short-term basis, Thiagi has worked with more than 50 different organizations in high-tech, financial services, and management consulting areas. For these clients, Thiagi has consulted and conducted training in such areas as rightsizing, diversity, creativity, teamwork, customer satisfaction, human performance technology, and organizational learning.

Thiagi has published 40 books, 120 games and simulations, and more than 200 articles. He wrote the definitive chapters on simulations and games for ISPI's Handbook of Human Performance Technology, ASTD's Training & Development Handbook, and the American Management Association's Human Resources Management and Development Handbook.

Thiagi currently writes a monthly online newsletter, Thiagi GameLetter. This newsletter, now in its fifth year, features Thiagi’s training games and other creative interventions that deliver results quickly and effectively. Thiagi served as the editor of NSPI Journal and Performance & Improvement for more than 10 years. He currently edits the simulation/game section in Sage Publication's journal, Simulation & Gaming, and is also a contributing editor of the monthly journal, Educational Technology.

Thiagi has made hundreds of presentations and keynote speeches at professional conferences. At ISPI, Thiagi holds the "records" for making the most presentations, conducting the most pre-conference workshops, and being invited to make the most Encore presentations. Thiagi is also a regular presenter at Lakewood's TRAINING Conferences and the annual conferences of American Society for Training and Development (ASTD) and North American Simulation and Gaming Association (NASAGA).

Thiagi has been the president of the North American Simulation and Gaming Association (NASAGA), International Society for Performance Improvement (ISPI), and Association for Special Education Technology (ASET). He has received 17 different awards and Presidential Citations from ISPI, including the society's highest award, Honorary Life Member. Thiagi also received an Honorary Life Member award from NASAGA as well as its highest award, the Ifill-Raynolds Award.

Internationally recognized as an expert in multinational collaboration and active learning in organizations, Thiagi has lived in three different countries and has consulted in 21 others.
Robert Cantrell: Which Card Will You Play?

As stated by the famous football coach, Vince Lombardi, "Excellence is achieved by the mastery of the fundamentals." In any enterprise there are three fundamental capabilities required for success: innovation, advancement, and security. From 2002 through 2006, Robert researched and developed three card decks that describe the fundamental principles of innovation, advancement, and security from the professional disciplines that have taken the fundamentals to their highest level: TRIZ, Sales, and War. These card decks have since been put to use at top organizations including HP, Intel, the National Defense University, and Sandia National Laboratories. Although sometimes advertised as "the cards you play when it isn't a game," there are many games associated with these cards developed by the author and by other parties. In particular, a game structure called Solve It™ has proven highly successful at rapidly expanding the scope of how to solve a problem. This discussion will conclude with an explanation of the mechanics of Solve It™ that can apply to any or all the card decks. Participants will have the pleasure of playing a few rounds to end the interactive keynote.

Robert Cantrell is an IP Strategist, MBA, author on business and military strategy, and a professional shark photographer. He is on the faculty of Patent Resources Group, where he teaches Patent Strategy for Business. Robert is also the founder of Center For Advantage, a provider of tools for strategy, innovation, and sales workshops, training, and problem solving.

Robert has written a number of articles and papers on intellectual property. This includes his recently published book, Outpacing the Competition: Patent-Based Business Strategy (Robert Cantrell: Wiley 2009). This book blends patent strategy, business strategy, and classical strategy into a comprehensive whole, with the overall theme that the businesses capable of proficiently assessing their situations, deciding on courses of action, and taking action, win most competitive contests.

Robert is part of the strategy conversation in the Washington D.C. area and that has kept him attune to the latest ideas on the topic. Several of his written works are in use at the national and service war colleges as well as in the intellectual property field to include the top selling book Understanding Sun Tzu on the Art of War. Robert enjoys the opportunity to cross-pollinate ideas from his and other fields, and then to provide the insight gained as a way for his clients to build competitive advantage.
Pre-Conference Workshops & Certificate Programs

Four Pre-conference Workshops and Two Certificate Programs

• Design of Games, Activities, and Simulations
  *Part of the DESIGN Certificate Program*

• Facilitation of Games, Activities, and Simulations
  *Part of the Facilitation Certificate Program*

• The Consultant as Witness: An experiential session applying the Lens of Authentic Movement to Sustain Systems Change

• Using Improvisation to Enhance Learning: Where Experience and Momentum Collide

Note: There are two certificate programs: one on the design and one on the facilitation of games, activities, and simulations for education and training. You can not take both certification programs simultaneously.

Design of Games, Activities, and Simulations
Coordinated by Tracy Tagliati, Brian Remer, Raja Thiagarajan, and The Thiagi Group (www.thiagi.com)

At this workshop, participants will explore basic concepts related to the design of educational and training activities and will have hands-on experience in the design and development of games, activities, and simulations.

At the end of the workshop, each participant enrolled in the DESIGN Certificate Program (described below) will identify a specific design project on which to focus her or his work for the duration of the conference.

All DESIGN Certificate Program participants will receive a copy of Design Your Own Games and Activities (published by Jossey Bass and selling for $57). They will also have access to the resources at the NASAGA website and to another website with hundreds of training games and thousands of pages of materials on the design of learning activities.

Objectives

• Define games, activities, and simulations, specifying their advantages and limitations in corporate training and education, and differentiating simulation from non-simulation activities.

• Briefly explore and experience different “frames” (templates) for designing non-simulation activities (such as board games, card games, improv games, online games, interactive lectures, and textra games) and different types of simulation activities (such as production simulations, interactive storytelling, cash games, and jolts).

• Select the most appropriate frame (or type) of activity to suit your specific learning objectives and participant characteristics.

• Prepare a plan for the design, development, evaluation, and revision of the selected type of activity during the conference.
DESIGN Certificate Program

This certificate program provides an opportunity for participants to gain professional credibility in the design of games, activities, and simulations for education and training. Previous participants reported real value in working and learning with experienced game designers to focus their conference experience on the specific skills they wanted to build.

There are four parts to this certificate program:

**Workshop on the Design of Games, Activities, and Simulations**
Enroll and attend the workshop described above.

**Five selected sessions**
During the conference, participants will attend at least five concurrent sessions to acquire experiences and techniques to more effectively complete their design project.

There will also be opportunities to meet with other program participants, as well as session presenters throughout the conference, to share daily insights.

**Presentation of design plan**
On the last day of the conference, participants will present their projects and plans in a wrap-up session.

**Optional follow-up activity**
As a DESIGN Certificate Program participant, you are strongly encouraged to write up your game, activity, or simulation for publication in SIMAGES (or some other professional journal). The workshop team and the SIMAGES editorial board will assist you with their editorial feedback.

Facilitation of Games, Activities, and Simulations
Coordinated by Sivasailam “Thiagi” Thiagarajan and The Thiagi Group (www.thiagi.com)

At this workshop, participants will explore basic concepts related to instructional facilitation, handling different types of participants, and conducting debriefing discussions. They will gain hands-on experience in agile techniques for getting their participants ready for interactive learning, improvising just-in-time adjustments to the activities to increase their instructional and motivational effectiveness, and conducting after-activity reviews to encourage participants to reflect, gain insights, and share them.

At the end of the workshop, each participant enrolled in the FACILITATION Certificate Program (described below) will develop a specific plan to improve her or his facilitation style and skills.

All FACILITATION Certificate Program participants will receive a copy of the book, The Instructional Facilitator’s Toolkit. They will also have access to the resources at the NASAGA website and to another website with hundreds of training games and practical articles on facilitation skills.
Objectives

• Differentiate training, “pure” facilitation, and instructional facilitation, specifying the advantages and limitations of instructional facilitation.

• Identify critical dimensions of activity-based training (including pace, intensity, competition, and playfulness) in order to select, maintain, and balance appropriate intensities of these dimensions and make appropriate adjustments along these dimensions when facilitating.

• Create instant training activities that incorporate existing sources of training content.

• Recognize disruptive behavior patterns among participants in order to reduce and eliminate these behaviors and transform hostile participants into active collaborators.

• Recognize the importance of the debriefing process for linking the training game or activity to the workplace reality by applying a powerful six-phase model to maximize learning from experience.

Facilitation Certificate Program

This certificate program provides an opportunity for participants to gain professional credibility in the facilitation of games, activities, and simulations for education and training. Offered exclusively at NASAGA, this certificate program will complement the Design Certificate Program as well as provide the principles and procedures for participants who are interested in conducting training and educational activities that are more interactive, enjoyable, and effective. Participants enrolled in this certificate program will have the unique opportunity to work with and learn from experienced facilitators to focus their conference experience on the specific skills they wish to build.

There are four parts to this certificate program:

Workshop on the Facilitation of Games, Activities, and Simulations
Enroll and attend the workshop described above.

Five selected sessions
During the conference, participants will attend at least five concurrent sessions to acquire more experiences and techniques to increase and improve their facilitation skills. In addition to participating in these concurrent sessions, they will also record facilitator behaviors on a systematic observation form.

There will be opportunities to meet with other program participants as well as session facilitators throughout the conference to share daily insights.

Presentation of facilitation plan
On the last day of the conference, participants will present their personal action plans in a wrap-up session.

Optional follow-up activity
As a certificate program participant, you are strongly encouraged to submit a proposal for the NASAGA 2012 conference (or some other professional conference). The workshop team and the NASAGA 2011 conference committee will assist you with suitable feedback.
The Consultant as Witness: An experiential session applying the Lens of Authentic Movement to Sustain Systems Change

This workshop is based on a provocative assumption: that how people are seen strongly influences the outcomes of a consulting intervention. From this perspective, a foundational competency for effective consulting is the ability to focus and maintain attention — in a special way when observing a human system “in action”. With this special combination of precision, vigilance, and care, a consultant consciously assumes a powerful role — as a witness. If a person or group wishes to initiate and sustain long-lasting change, someone is needed to witness that process. As consultant-witnesses, when we choose to pay attention in a special way, we are doing so with a sense of curiosity and compassion, without judgment, and with a sense of personal authenticity. This session incorporates the work of three pioneers, John and Joyce Weir, who guided laboratories for self-differentiation, and Mary Starks Whitehouse, who created Authentic Movement. Join Martha Lask and Ellen Greenberg, for this provocative, experiential, and intriguing session on the consultant as witness to authentic change.

Presenters

Martha Isobel Lask, MSOD, comes with over 25 years’ experience as a coach, consultant, and manager in the public, private, and non-profit sectors and has over 30 years of training in dance, movement, and bodywork. Martha facilitates individuals and groups in the practice of Authentic Movement and combines this with her coaching practice. She holds a Master of Science in Organizational Dynamics (MSOD) from the American University’s School of Public Affairs (AU/NTL — National Training Laboratories Institute) and a certificate in Authentic Movement/Contemplative Dance from Amherst, MA.

Ellen Greenberg, MSOD, is a strategic thinker with experience in generating value through diversity programming, training, team building, managing change, organizational learning, coaching, and building high-performance work systems. She has over 15 years of experience working with non-profit, for profit, and government agencies both in management and consulting capacities. She recently completed the Georgetown Leadership Coaching Program and holds a Master of Science in Organizational Dynamics (MSOD) from the American University’s School of Public Affairs (AU/NTL — National Training Laboratories Institute).

Using Improvisation to Enhance Learning: Where Experience and Momentum Collide

Improvisation is the skill of comedic geniuses such as Red Skeleton, Lucille Ball, Steve Martin, or Mike Myers. Or is it? Improvisation is the ability to create something out of what is given to you when working with others. As a consultant, trainer, facilitator, educator, or coach you vigorously spend time planning based on needs and future goals. But what happens when in the middle of a well-planned session something goes awry? Adaptation is the key, right?

During this interactive experience, you will explore and practice how the principles of improvisation can be the foundation for adapting to an audience’s needs, whether solo or within a group of other trainers. Led by professional actors from Without A Cue Productions, LLC, you will discuss and practice how to enhance learning by applying
improvisation techniques to your workshops.

**Objectives**

- Identify and practice the ten key principles of improvisation and explain how they relate to consulting and training.
- Create your own improv toolbox of activities to use with clients and groups.
- Practice how to be comfortable with failure.
- Challenge stagnant behaviors and attitudes.
- Generate new ideas.
- Think outside the boundaries.
- Develop a strategy to ‘get-to-the-point’ quicker, faster, and easier with audiences.

**Presenters**

*Without A Cue Productions, LLC was founded in 2002. Their performers are trained professionals – not just actors, but dancers, singers, musicians, writers, and directors. Experience ranges from stage productions, television, movies, radio, live concerts, event hosting, and voice recording. Additionally, their actors have worked as teachers, ministers, corporate trainers, marketing professionals, non-profit leaders, economists, and sales managers. This unique combination of skill, talent, and passion makes each performance enjoyable and memorable for every audience.*

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**Get involved with NASAGA!**

- Share conference information with 10 colleagues
- Post a comment or question on the website forum discussion or respond to a blog post
- Use the Facebook Like button to put NASAGA news on your Facebook
- Plug NASAGA when you introduce yourself or do a presentation or training
Surprising things can happen while playing at a NASAGA Conference and, sometimes, the game just keeps expanding.

In 2009, Andrew Boyarsky attended the Certificate in Game Design during NASAGA’s conference in Arlington, Virginia. One requirement for receiving the certificate was to design a game and present an outline of it by the end of the conference. Certificate participants were coached to attend break-out sessions that would help them complete their design.

Andrew left the conference with a solid design for a board game to instruct on emergency sheltering for New York City emergency response staff. He developed a full-blown board game including a variety of game mechanics and engaging activities but he didn’t stop there. Seeing the game’s effectiveness for on-the-ground teaching, Andrew refined its elements and worked with other developers to create a 3-D learning environment* of the game. Multiple players (course participants) now enter a virtual environment as avatars to set up a City emergency shelter, assign staff, bring in supplies, set up shelter areas, and problem-solve different situations during a disaster. Andrew was back at the NASAGA Conference, in Vancouver last year, to demonstrate the online version of his game.

Andrew’s game has received wide acclaim by end-users, experienced emergency shelter managers, and experts in virtual worlds and the good news is that it has just won the second place award at the Federal Virtual World Challenge.

For additional information:

Andrew Boyarsky: ABoyarshky@gc.cuny.edu

Blog post about Andrew’s second place win: http://tragedyofthe.commons.gc.cuny.edu/

*3D Learning environment (3DLE) are also commonly referred to as a virtual world (VW); some examples of these are Second Life, OpenSim, Forterra, and the Unity platform.
R. Garry Shirts was a giant among simulation gamers and we all stand on the shoulders of such giants and will miss his creative, quirky mind. One of his favorite thinkers was Victor de Bono and I like to think that Garry could have taught de Bono a few things about lateral thinking.

Born on March 3rd, 1934, Garry passed away on April 23rd 2011, leaving the world of simulation gaming a bit less playful. He was the creator of BaFa BaFa, the classic intercultural simulation game and Starpower, the pioneering game of class and power. Even though those two might have been his best known games and played by hundreds of thousands worldwide, he also developed Pumping the Colors, Where Do You Draw the Line?, Guns and Butter, and a raft of other lesser known games.

I first met Garry as part of the U.S. Navy research team that was developing alternative ways of selecting uniformed Navy personnel for overseas duty, the result was BaFa BaFa. In those days (the mid 1970s), Garry was conducting a three-day design workshop which I had the pleasure of attending and which opened my eyes to the power of simulation gaming. Yet it was only a while later that I truly experienced BaFa: Garry conducted it for a San Diego school with a large group of Spanish speaking parents and students and I was an Alpha and as of that moment I truly became hooked on gaming.

Born in Brigham City, UT, Garry earned his PhD in educational psychology from the University of Utah, where he met Cozette, his future wife. They moved to San Diego in 1965 where Garry worked for the San Diego County Department of Education before joining the Western Behavioral Sciences Institute (WBSI) in La Jolla. At WBSI, Garry designed games around major social issues; his goal – to promote harmony and reduce conflict. Starpower is the result of this work. In 1970, Garry and Cozette founded Simulation Training Systems (originally known as Simile II) to design and market his simulation games for universities, corporations, schools, and government.

Typical of Garry’s intellectual generosity, his Simile II catalog was packed with helpful hints for gamers as well as very thorough descriptions of his games. For example, Catalog S4 contained the article, "Where and When to Use Simulation Games." The "where" suggested using simulation games in courses of study, workshops and training programs, as well as special events, writing assignments, historiography, stimulus for designing other simulations, and practice for foreign language courses. His famous Inventory of Hunches was included in this catalog as well as A Few Suggestions for Running Simulation Games (eight suggestions actually). The catalog even included
everything you would need to run a freeway planning game.

One of Garry’s stories that I always enjoyed concerned his helping a town council to select a city administrator by using a simulation game. The council had narrowed it down to two candidates and couldn’t decide so they called in Garry. He had them do his simulation Talking Rocks with each candidate on a different team. They realized immediately that one candidate would be great to work with and the other (whom they all liked) would not make a good team player. So the winning candidate got the job all due to his ability to play Talking Rocks!

Did you know that Garry:

- An inveterate organizer, started a monthly poker game that has lasted 40 years and a book club that has lasted more than 20 years?
- A practical joker par excellence, once mailed a Christmas tree to Germany as part of an elaborate gag?
- Wrote humorous pieces for local and national newspapers and magazines, as well as articles for professional journals?
- Served on the San Dieguito School Board from 1977 to 1981?
- Served in the U.S. Army Reserve from 1958 to 1969?
- Married his wife Cozette twice?
- Has R for Robert as his middle initial?

Accurately characterized by his son Mitch, Garry was a “gentle, loving man… he was always there for people. He was the one people would call for advice.”

Garry will be greatly missed by all of us who knew him and by those who had not yet had that pleasure.

“One of the most satisfying experiences in training or education, no matter what the subject, is the so-called “Aha!” moment, that instant when sudden, spontaneous insight cuts through the tangle of loose ends in a learner’s mind to reveal a memorable truth. Having spent nearly 40 years designing experiential simulations, I believe simulations are the most likely teaching method to create those “Aha!” moments.”

From Ten Secrets of Successful Simulations by R. Garry Shirts
http://www.stsintl.com/business/articles/tensecrets.html
Imagine you’re faced with this training challenge: Your company needs to train 2.4 million employees in 150 occupational areas plus thousands of specialties and sub-specialties, around the world under high-pressure conditions. You’re also responsible for another million non-employees and their dependents. You need to train executives to lead, manage, and command. Turnover is rapid and constant. Among those who stay, job change is fast, particularly at the executive level. Strategy, tactics, and equipment are all continually evolving. Extremely sophisticated technology is playing a greater and greater role. And your training has to be fast.

I’ve paraphrased from Mark Prensky’s True Believers: Digital Game-Based Learning in The Military (2001), but you know what we’re talking about. Prensky goes on to point out that

“...they need to train for war, yet increasingly they need to train for peacekeeping missions, as American’s role in the world changes. Finally, their incoming recruits are not seasoned adults with work experience and habits on their resume, but typically high school graduates and non-graduates, most of whom have never worked before.” (6)

The military’s training challenge really puts our own training workload into perspective, doesn’t it? Even if you had their combined training budget of $18 billion, it’s a staggering job. It should be no surprise to NASAGAns that a lot of that budget is going into training games. Let’s look at what kind of game-based training that chunk of change is buying.
America's Army. You may have heard of the free online game the Army launched in 2002 as a recruiting and public relations tool. Progressing through 26 versions so far, America's Army 3 is a first-person-shooter game with boot camp sessions that present a primer on Army life, optional medical training, and exciting multiplayer combat missions. (Boot camp is optional too but if you explore those sessions, you can unlock better equipment and gear for combat.) (4) You can play it online or experience live simulations at the 14,500 square-foot Army Experience Center located inside a mall in Philadelphia or at one of the Army’s mobile Virtual Army Experiences touring the country since 2007. (1)

There are those who argue that America’s Army “glamorizes the military.” The official line is that the game promotes the Army’s seven core values and uses computer technology to “…provide the public a virtual Soldier experience that (is) engaging, informative, and entertaining.” (1) Here’s a piece of uncorroborated evidence in its favor: two America's Army game players reported that they used emergency medical procedures they learned in the game to save lives. Whether you’re pro or con, the reality is that the game is both popular and critically praised. America’s Army has garnered a long list of gaming industry awards and five Guinness World records, one in 2008 as the most downloaded war game. (3)

America's Army recycled. The game has "…grown in ways its originators couldn't have imagined." (1) Dozens of government training and simulation applications have been built on top of the America's Army platform. Soldiers, sailors, pilots, and their leaders are gaming their training in some surprising ways. Most are online, many are multiplayer, but the bottom-line is that they are cost-effective and producing positive learner outcomes and satisfaction. Your teenager may be having a swell time taking out the enemy with simulated AK-47’s, but within the real military services, training games are serious business.

These are not your kid’s games.

Michael Macedonia, chief scientist and technical director of the U.S. Army Simulation, Training, and Instrumentation Command, considers war gaming, modeling, and simulation “…essential to the retooling of the armed forces for the realities of the 21st century.” (2) Every one of the service colleges are using commercial and customized as well as proprietary gaming software for a wide variety of training. We can reveal just a few examples (or they might have to shoot us.)

Combat Readiness, Strategy, & Tactics

- When the Navy realized that student pilots were using Microsoft’s Flight Simulator at home and had higher flight scores as a result, they began issuing their own customized version of Flight Simulator to every student pilot. (2)
- The Navy has replaced reading technical manuals on board their subs with SubSkillsNet, which simulates surfaced bridge views, radar, sonar displays, fire control functions, and a periscope, to train teams or individuals on networked laptops. (6)
- After Air Force pilots accidentally shot down two Army Blackhawk helicopters over Iraq, the Air Force developed a rapid reflex game called JVID and Finflash that trains pilots to identify...
targets and aircraft markings.

- An **Army Reserve** survival training simulation based on the children’s adventure game “Freddi Fish” models the consequences of forgetting critical survival supplies.

- A 16-man **Marine** squad can coordinate their movements to eliminate an enemy bunker on networked computers with Quake, a sequel of Marine Doom based on the commercial game Doom. In this fast-action game full of shooting, confusion, and chaos, the learning goals are actually teamwork, communication, and concepts of command and control.

**Medical Training & Rehabilitation**

- Instead of live simulations where participants carry pieces of paper describing their injuries, computer simulations can recreate every imaginable kind of wound with intense graphic realism. According to Roger Smith, Chief Technology Officer at the Army's Program Executive Office for Simulation, Training, and Instrumentation, “It's kind of gross, but that's the point. We don't want to find [the trainees] shocked and frozen up when they see real soldiers on the battlefield for the first time.” (7)

- **Pulse!!** is a virtual clinical training tool financed by the Navy that requires quick thinking to handle medical emergencies under life-and-death pressure.

- In veteran’s hospitals like Walter Reed, Nintendo’s Wii gaming system is transforming PT (“pain and torture”) sessions into “Wii-Hab” sessions that are entertaining, competitive, and motivating.

**Cultural & Language Learning**

- The **Army** has reduced 15 hours of values training to four with a simulation game called Saving Sergeant Pabletti; it deals with prevention of sexual harassment, army values, equal opportunity, and cross-cultural communication.

- ISLET (Integrated System for Language Education and Training) is a five-year project funded by the **Office of Naval Research** to develop an online culture and second language instruction system. It culminates in a multiplayer game where learners progress through game levels, earning achievements and badges. According to Jennifer McCune, Academic Programs Coordinator at ACGE, developer of ISLET: “...the online game uses leader boards, notes, bookmarks, forums, and blogs to create a community of learners in a competitive and collaborative environment. Social networking tools help create a competitive, participatory learning methodology that motivates students to learn and retain language in cultural context.” (5)

**The new Military-Industrial Complex?** The updated version of that sixties-era Eisenhower-ism could now be dubbed the “Military-Gaming Industry Collaboration.” Today’s military buys or borrows most of its game technology from commercial games, (6) but the advanced computing systems, computer graphics, and Internet that make commercial games what they are
today originated with military-sponsored projects and government-funded research. (6) And the collaboration continues:

• The Army established the Institute for Creative Technology at the University of Southern California. Working closely with the game community, their focus is on virtual reality technologies like “synthespians” and intelligent tutors that immerse trainees in “…engrossing stories with engaging characters which may be either virtual or real.” (2)

• The Serious Games Showcase and Challenge, a competitive venue for aspiring game designers, was originally army-organized and financed. Its goal is to identify innovative game-based technologies to improve training solutions. (6)

• Connections is an annual conference sponsored by Air University that brings together military and commercial war gaming communities for technical interchange and concept exploration. (2)

And, yes, all the scenarios in our opening quiz are real — but you probably knew that already. (Sometimes Peter Sagal lies.) When it comes to games and training, we may not be able to keep up with today’s military, but their example can certainly inspire us, or maybe help to prompt more interest from the doubters in our own organizations about our training game proposals.

 Meanwhile, watch for America’s Army: The Graphic Novel, coming soon to your Kindle! Really.

REFERENCES


5. Personal email, McCune to the author.

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JAN SAGE is a freelance instructional designer currently working on exciting elearning projects for non-military clients. Her past projects have ranged from senior services for the state of Michigan to Harley-Davidson! Background in theatre (MFA), music (MM), and media production (Writer/Director/Editor), Jan has an IST certification from Indiana University and joined NASAGA in 2008, where you may have met her at the Bloomington and DC conferences.

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Do you know a unique training resource NASAGAns might like to know about? Write a review for SIMAGES and send to Brian Remer brian@thefirefly.org
Most Influential Ideas Instilled Through Operational Games: Interview with Dennis Meadows

By Brian Remer

Dennis Meadows is a long-time member of NASAGA and winner of the Ifill-Raynolds Award, NASAGA’s highest honor. As an early proponent of Systems Thinking, he remains a leader in the arena of sustainability and global leadership; he served as President of the International Simulation and Games Association and of the System Dynamics Society. Dennis was a professor at three universities: MIT, Dartmouth College, and the University of New Hampshire where he helped found the Brown Center for Experiential Education. He is the author of 10 books, many of them involving games and simulations. The books have been translated into 35 languages.

SIMAGES: You have built your career on teaching people to view the world from a systems perspective. How did you happen upon the use of games and simulations to promote your ideas?

MEADOWS: After teaching for 15 years, I did an informal poll of my former students, asking what they remembered from my classes. The most influential ideas, by far, were those that I had instilled through operational games. So I resolved to teach myself good practice in the design and use of games and to make their use a centerpiece for my teaching.

SIMAGES: What makes games and simulations such an effective tool for teaching about systems thinking?

MEADOWS: There is an old saying, "When I hear, I forget. When I see, I remember. When I do, I understand." Games offer learning by doing. They are especially useful for teaching about systems, since the important feature of systems is their dynamic behavior. Games give participants a chance to experience change over time through direct personal involvement.

SIMAGES: What is your favorite game or simulation for teaching about systems thinking and how do you set it up with your participants?

MEADOWS: I use dozens of different games for this purpose; I do not have a favorite one. The choice depends on my teaching objectives. Generally I prefer shorter, metaphorical games over longer literal exercises.

SIMAGES: Can you say more about why you prefer metaphorical games over literal exercises? Do you think people learn more through metaphors?

MEADOWS: I prefer metaphorical games because they are generally quicker to play and, by correctly framing and debriefing the exercise, you can make them relevant to many different groups and goals. Literal games typically take longer and are more specific to one group, one institution, one objective. An extremely important part of any game experience is the predispositions, the knowledge, the experience that participants bring into the play. With a metaphorical game, you have more latitude for tapping into that with different groups.

SIMAGES: What resistance to the use of simulations and games have you encountered and how have you addressed that?
MEADOWS: I have seen resistance in four ways:

1. In some cultures the concept of a game is associated with children's play, so adults resist becoming involved in a game session. I deal with that by calling my exercises "strategic planning exercises" rather than games, or I tell the group of adults I wish to involve in a game session that recently some group they admire played the game with great benefit.

2. Some games require contact or proximity or frankness among participants that is inappropriate in the culture of the players. One must be sensitive to that, so that people are not distracted from the central lessons of the game by their concern about violating some cultural or organizational norm. For example, you can divide the players into a male and a female group, so that holding hands with strangers of the opposite gender does not distract them.

3. Some facilitators have a favorite game that they try to use for purposes for which it is not suited. "If your only tool is a hammer, everything looks like a nail." When this is the case, the resistance of the players is well founded. The way to deal with it is to use some other didactic method or to find a more suitable game.

4. Some facilitators devote all their time to the play of the game and leave the debriefing to the individual players. "You have all experienced some important lessons. Now go home and identify them and think through their implications." Avoid the tendency to use up all your time in the play of the game. My rule of thumb is that debriefing should take at least as much time as playing.

SIMAGES: What advice do you have for game designers and facilitators?

MEADOWS: For designers, I would say be excruciatingly clear and realistic about your teaching objectives, then design the absolute minimum game for serving your needs. I usually start a game design effort by looking for other useful exercises that are somewhat close to what I need. It is always easier to adapt an existing game than to create a new one from scratch. For facilitators, I would say respect your participants and observe the Rule of 10 (which I probably first heard from Dick Duke). You have to play a game at least ten times before you have mastered it.

SIMAGES: How has the focus of your work evolved as people have begun to rely upon hand-held electronics, the internet, and social media?

MEADOWS: My work has not. The big problems of society come from fundamental misunderstanding of systems and dysfunction among social groups. I have focused on those issues and to get to them, I find well-designed classical games, using mechanical pieces and group interaction, more useful than web-based devices which typically employ virtual relationships and give power to a single person.

“For designers... be excruciatingly clear and realistic about your teaching objectives, then design the absolute minimum game for serving your needs. For facilitators... respect your participants and observe the Rule of 10... you have to play a game at least ten times before you have mastered it.”
Most Influential Ideas Instilled Through Operational Games, continued

**SIMAGES:** It seems like the most challenging thing about systems thinking is getting beyond the limits of one’s own point of view. How can people be sure they are seeing a system from the widest perspective possible?

**MEADOWS:** This question involves issues far outside the scope of gaming and I can not offer a short, definitive answer. I will say though that one should always ask, after analyzing a system and deciding on an action, "What will happen to nullify the results of our intervention? How are we making a profound mistake? What are we overlooking?" Considering these questions will not guarantee that you adopt the appropriate perspective, but it will help.

**SIMAGES:** So far this year, 2011 has seen tremendous political changes, especially in the Middle East. What insight can a systems-thinking perspective provide about those types of societal changes?

**MEADOWS:** I will not presume to tell others what insights they should have yet I will share with you a few insights that my systems expertise has given me about the recent changes in the Middle East. First, events in the Middle East reflect issues that have evolved over numerous decades, not days, and it remains totally unclear to me what ultimately will replace the dictators that have recently been removed from power. I anticipate several decades of turmoil before there is any sort of stability in that region. Second, the problems have a fundamentally physical nature – too many people in a resource-constrained world. Nothing about changing the government in Egypt, for example, is going to alter the fact that the country can only feed itself by being the world's largest wheat importer. The third insight is that we have a tendency to impute absolutely absurd virtues and powers to "democracy." I have read that democracy will increase oil production, that democracy will reduce the unemployment rates, and so forth. How silly and totally hallucinatory! The fact is that democracy is a very complex constellation of factors, such as a diverse and truly free press, respect for the rule of law, a tradition of equity in the allocation of economic resources, and so forth. Kicking out a ruling family and replacing it with something cobbled together between the military, the street crowds, and the remnants of the old system is not going to give democracy. And it is certainly not going to mean that long-term issues are suddenly given priority over short-term benefits.

**SIMAGES:** As you look to the future, what is the biggest challenge for educators and what role (if any) do games and simulations have in meeting that challenge?

**MEADOWS:** There is no "biggest challenge" – there is an interconnected set of issues that must be dealt with simultaneously and in an internally consistent fashion. Among them is the need for a longer-term perspective, the collective ability to sacrifice short-term benefits for long-term rewards. I have struggled with designing games that relate to this. My games can point out, in an intellectual way, the need for long-term perspectives but I do not believe I have yet created any sort of experience that alters people's predisposition to focus on the short term. I absolutely do know that operational games will be more effective at this than lectures or reading assignments.

See the activity Harvest by Dennis Meadows on page 27 of this issue of SIMAGES.
Running a “Mini-NASAGA” as a Pre-Conference for Librarians

By Scott Nicholson

In March, 2011, I co-presented a half-day pre-conference session for the Computers in Libraries annual conference called "Games and Simulations to Energize Training & Teaching." Jim DelRosso, a librarian at Cornell University, and I worked together to create a “mini-NASAGA conference” to help attendees see the variety of training activities available and how an interactive session can be much more engaging than three hours of PowerPoint slides. This model could be used by others in different fields to demonstrate why NASAGA might be a great resource.

Our session description was:

If well designed, games can be a motivating tool to teach and to entertain. One of the challenges of being an instructor is avoiding the traps of presenting slide after slide from a PowerPoint presentation or demonstrating the same tired searches while attendees look on, bleary-eyed. This workshop shows a wide variety of activities to get audiences energized and engaged. Come with an open mind and willingness to participate as this workshop is run in the style of the NASAGA (North American Simulation and Gaming Association) conference: low on PowerPoint and high on engagement. Participate in Jolts, Icebreakers, Role-plays, and Simulations; debrief what happened in each; and explore how these might be applied in different training and teaching situations.

Our goal was to provide a sample of different styles of training games and direct participants to resources where they could learn more.

We opened with the concept of jolts with Thiagi's "Changing Perceptions." In this jolt, participants move their finger in a circle high in the air, then, continuing to circle, bring their circle down to watch the finger change direction. At this point, we introduced the concept and importance of debriefing.

The second jolt was "Top Three" (www.thiagi.com/pfp/IE4H/april2008.html#Jolt), where players in groups of three play rounds of a prisoner's dilemma game. The top three scores are the winners of the activities, so smart teams realize that if they coordinate their play, all three of them can win. We followed this with another debriefing.

Icebreakers were next and we used "Who Started It" (taken from The Big Book of Humorous Training Games by Tamblyn and Weiss). Everyone stands in a circle and selects someone across the circle to watch. Players are instructed to not move unless the person they are watching moves, in which case the player repeats the observed action. Twitches, sways, and giggles get bigger and bigger and by the end, nobody is standing still. The debriefing ties this activity into blame in organizations, and how it is better to just accept that something is wrong and fix it instead of trying to figure out who started it.

After this, we did a larger simulation that I had created originally for a graduate-level class about online searching. Participants take on the role of Web search tools and are given Web page mockups that have no words, but instead have letters and symbols. Participants have to return the best matches for a variety of searches presented to them by a simulated user. Just as the search tools can't understand the words on Web pages and are forced to match letters, participants have to match letters and use other clues on the Web page mockups as to what might be the best match for the user. Indexing tools similar to what is used by search
tools are then provided to make the process easier, and participants learn how search tools see the Internet through the simulation.

We then moved on to role-plays and started with a short one, "Non-verbal Violations" (www.thiagi.com/pfp/IE4H/october2003.html#Roleplay) where participants are given non-verbal behaviors to implement. After debriefing this activity, we talked about the concept of role-play and different ways it can be used. We then did a scaled-down version of "Objections" (www.thiagi.com/pfp/IE4H/may2006.html#Roleplay) where participants took on roles of library staff and library patrons with problems in an iterative set of engagements. During each interaction, participants got to explore different facets of problems and potential solutions.

We finished our exploration of techniques with debriefing, presenting Thiagi’s model and debriefing both the workshop and exploring how to use debriefing.

We closed with a discussion of NASAGA and the annual conference. Most libraries offer training in a variety of ways and would find NASAGA to be a good match. That was the inspiration behind conducting this “mini-NASAGA” pre-conference workshop. I would certainly run this type of event again as a pre-conference and I do think it would fit well with any academic setting that has a service component.

Scott Nicholson is an Associate Professor at the School of Information Studies at Syracuse University. He is also the author of Everyone Plays at the Library: Creating Great Gaming Experiences for All Ages, published in 2010 by Information Today. Dr. Nicholson studies game design for education and games in libraries, and is a published board game designer. He was the host of Board Games with Scott (http://boardgameswithscott.com), runs the Game Lab of Syracuse, and joined the NASAGA board in 2010.
In the 1980s I created FishBanks, Ltd, a two-hour, computer-assisted role-playing game that teaches key ideas about the sustainable management of renewable resources. Thousands of sets are in use in at least 15 countries and there has been demand for a simpler, faster version that does not require a computer. So I created the following exercise, which I call Harvest. Some features of this exercise were originated and used by others, long before I came along, but the exercise described below has unique characteristics for which I am responsible. It is in the public domain, and it may be copied and adapted by anyone for any purpose. It would not be correct to give me full credit for this game and I do not know its parentage. I am describing here a very simple version intended for children. You'll see it could be modified by replacing the candy with money or poker chips and could then work as well for adults. A slightly more complex version of Harvest, based on teams, is described in the Systems Thinking Playbook (Linda Booth Sweeney and Dennis Meadows, Sustainability Institute, 2008, ISBN-10: 0966612779).

Supplies
To run the game you need one medium-sized bowl, a whistle or bell, and 150 - 200 pieces of candy.

Participants
The game may be run for groups from 3 to 15.

Player Instructions
Here is a bowl with 50 pieces of candy in it.

In just a moment, I will blow my whistle to start the first round. Then all of you will have 5 seconds to take from the bowl as many pieces of candy as you wish to or are able to grab.

After 5 seconds, I will stop the round, count the candy, add the necessary pieces, and give you a few moments to consider your strategy. Then I'll blow the whistle for the third round.

Your goal is to get as much candy for yourself as you can.
Facilitator Notes
I usually try to blow the whistle for the first round before they have a chance to talk about a common strategy. But after that, if they ask about the possibility of talking together, I say they should do whatever they feel will let them maximize the amount of candy they can get. If they ask how many rounds will be played, just say, “We’ll do this for awhile, until I decide to stop.”

Debrief
One key issue in the game is the choice between collaboration and competition. Collaboration requires joint decision-making, coordination, and trust. It is useful to get the participants to share their thoughts, observations, and strategies on this choice and to discuss where and how this choice confronts them in real life.

The game introduces a concept analogous to “Maximum Sustainable Yield” in a renewable resource system. If the participants take the candy to zero, you do not add any more for the subsequent rounds. But blow the whistle anyway for several more rounds, so they can experience intensely the frustration of going to an empty bowl. If they do not take any candy, leaving it at 50, you also do not add any. By taking enough candy in each round that the bowl is left with 25 pieces, the participants can maximize the amount that you must add each round.

Of course, over the long term, they cannot take out on a sustainable basis more than you put in. You can draw a graph to make this clearer. On the horizontal axis is “Number of pieces at the end of the round” ranging from 0 to 50. On the vertical axis is “Number of pieces added” ranging from 0 to 25. The data curve has the shape of an equilateral triangle with its peak at the point (25,25). Engage them in discussions about where this kind of regeneration confronts them in real life. The relation to fisheries, forests, and ground water is obvious. The game also makes points about softer resources, like faith in government.

![Graph](image-url)

See the interview with Dennis Meadows on page 22 of this issue of SIMAGES.
The Value of Interactive Training Techniques

Using the numerical value of each letter and the total for each activity, figure out the names of 12 well-known interactive training techniques. There are also three bonus techniques, less well-known, perhaps.

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Hint: It might help you to first list all of the interactive techniques you can think of. They may be two words. Then try to match them to the number of spaces provided for the techniques. To help you, when it is a two-word answer, the total value of the first word is given in parenthesis.

EXAMPLE: __ __ __ __ __ = 45

G A M E S
7+1+13+5+19 = 45

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__ __ __ __ (50) + __ __ __ __ __ = 152

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The Value of Interactive Training Techniques, continued

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Answer to Teleported Puzzle: Reflection

The quote on reflection by Dwight Eisenhower, U.S. President:

Unless each day can be looked back upon by an individual as one in which he has had some fun, some joy, some real satisfaction, that day is a loss.