

Special Operations Command Joint Capabilities



Overall Classification of this Briefing

UNCLASSIFIED

Innovating Command and Control Training Using Virtualization Technologies

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The Need



**IMPROVING COMMAND AND CONTROL TRAINING
AMONG DISTRIBUTED TEAMS
...INSIDE OR OUTSIDE OF THE MILITARY**

NSWU: Naval Special Warfare Group; **SFG:** Special Forces Group; **SOCPAC:** Special Ops Command, Pacific; **SOG:** Special Operations Group

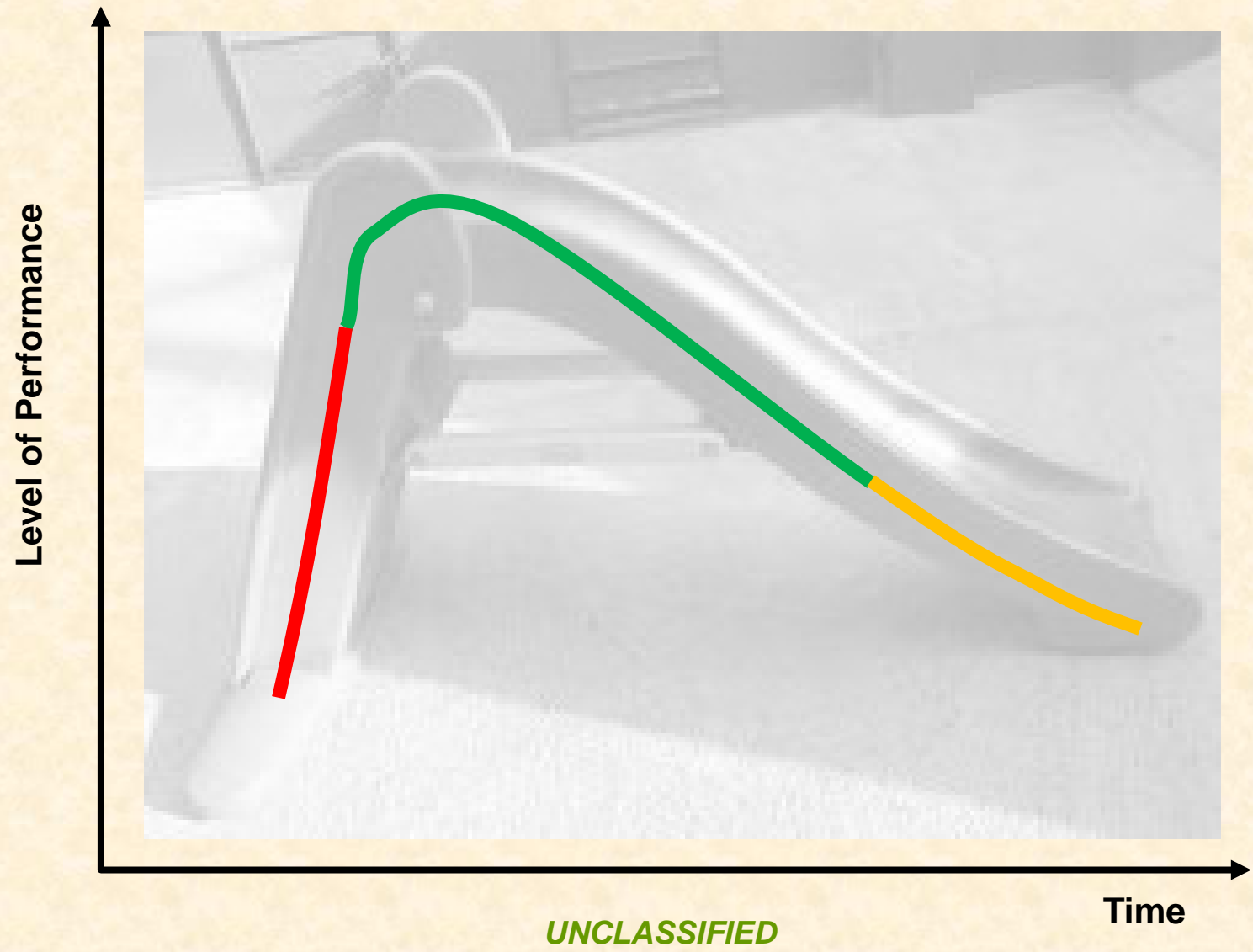


Joint Staff Officer Project

- *Two-year study by Joint Staff Joint Exercise and Training Division (2008)*
- *Validated by 2010 House Armed Service Committee*
- *Findings:*
 - *Respondents → first... Joint assignment*
Staff assignment
Time working with diverse workforce
 - *Resulting in: frustrated personnel, higher error rates, and lower productivity*
 - *Did not train fundamental skills: coordination, processes, tools, and interpersonal skills*

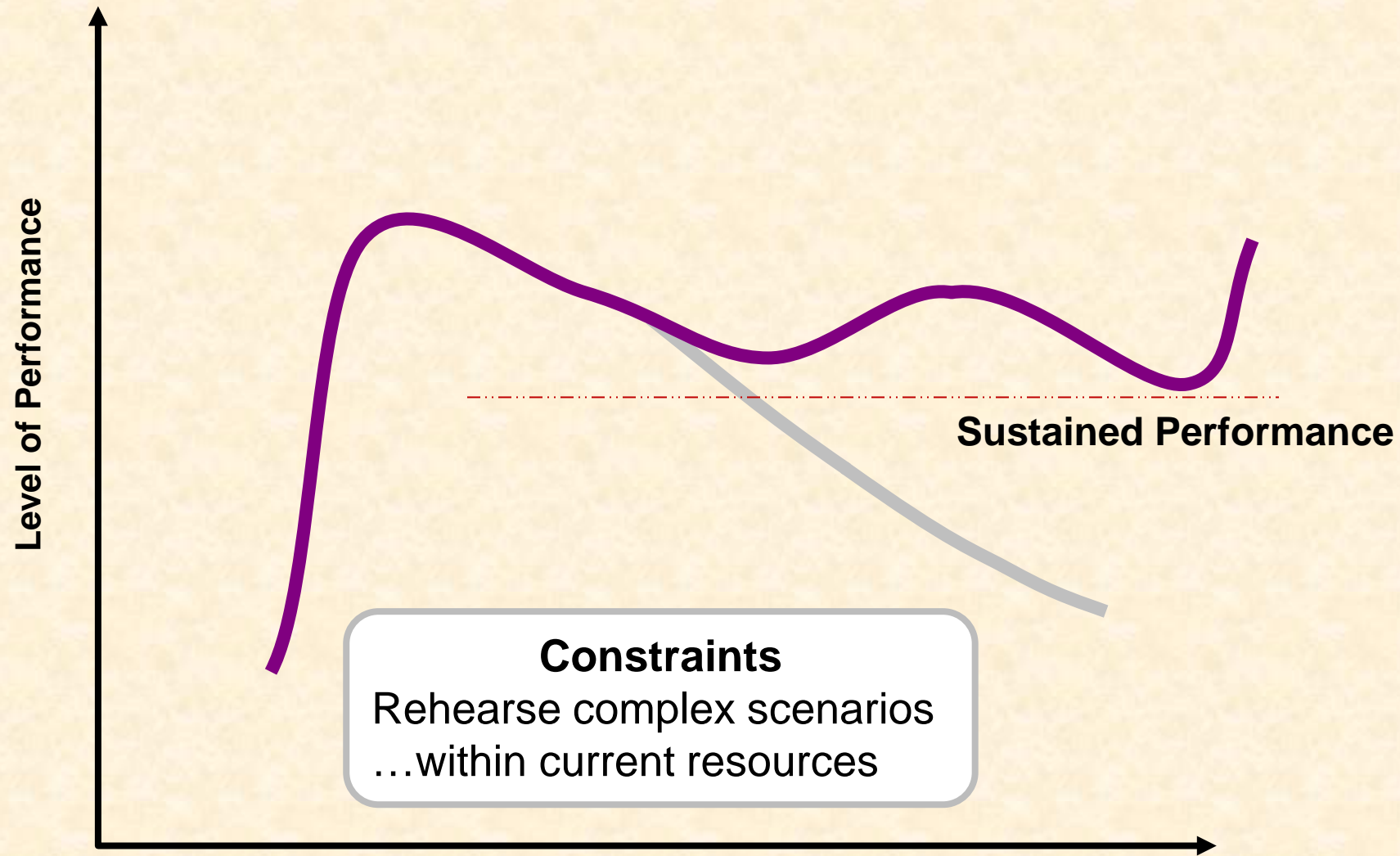


Situation – “As-Is”





Desired Situation – “To-Be”





Alternatives

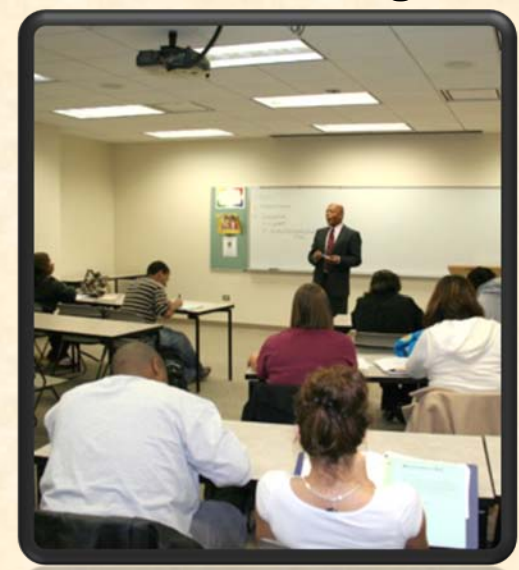
Computer Based Training



Immersive Learning Environments

"...learning situations that are constructed using a variety of techniques and software tools including game-based learning, simulation-based learning and virtual worlds"
-Rozwell (2008)

Live Training

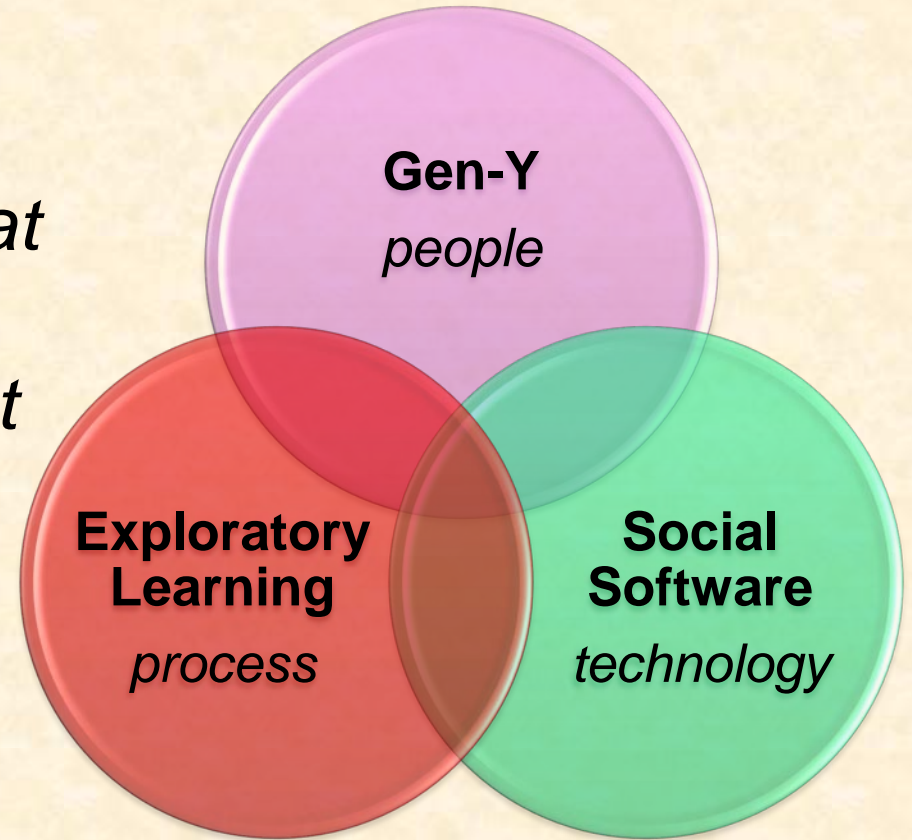




A Framework for Innovation

We now accept the fact that learning is a lifelong process of keeping abreast of change. And the most pressing task is to teach people how to learn.

—Peter Drucker





Talkin' 'bout my generation





Arrival of Gen-Y

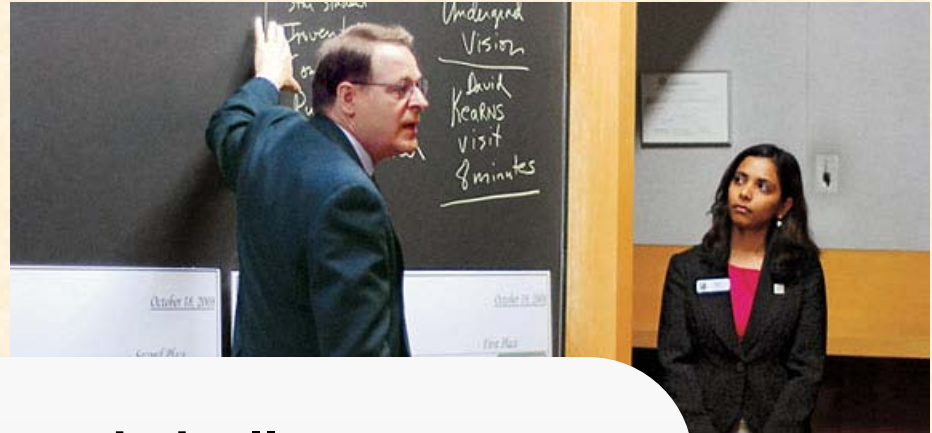


It's one of nature's way that we often feel closer to distant generations than to the generation immediately preceding us.

—Igor Stravinsky



New Learners New Styles



Exploratory Learning is characteristically...

- **Task oriented**
- **Time constrained**
- **Primary goal is task performance**
- **Learning is a secondary aspect**

- Rieman, Young and Howes (1996)



Social Networks: new, really?



facebook

2004: Facebook



Technology Forecast

Hype Cycle for Emerging Technologies, 2010



Gartner, 2010



Pairwise Comparison

People/Process

Adapting training to use methods common among Gen-Y

People/Technology

Thoughtful needs analysis of future generations to determine tech adoption strategies

Process/Technology

Assess how emerging tech (ILEs) may impact training strategies



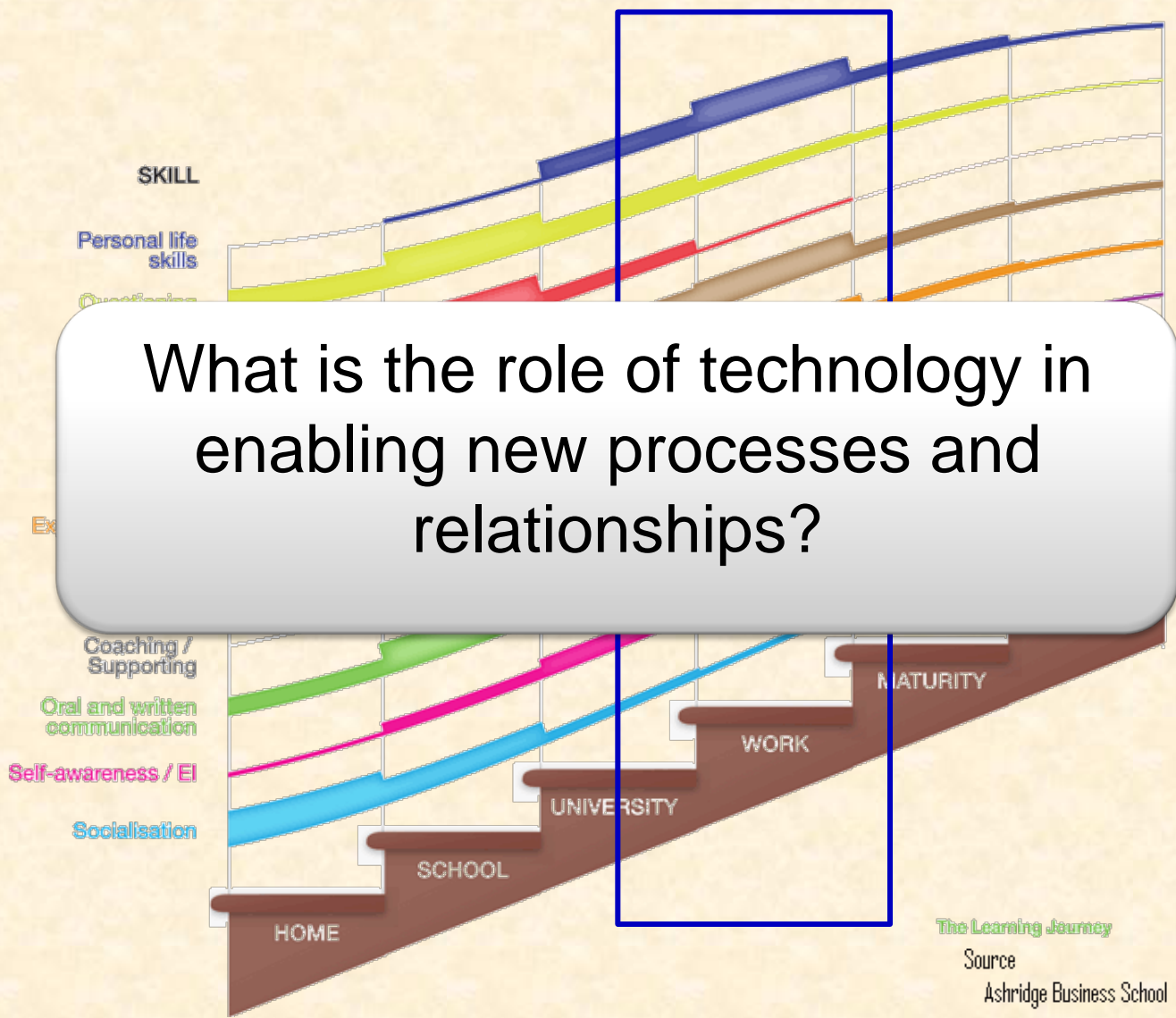
Further Analysis

- *First group of Gen-Y officers will arrive in Joint Staffs and Combatant Commands around 2013*
- *As company-grade officers, they were formed in the crucible of Iraq and Afghanistan*

What impacts may this have for how senior leadership develops training in the coming decades?



Further Analysis



What is the role of technology in enabling new processes and relationships?

The Learning Journey
Source
Ashridge Business School



Bringing it together...

Immersive Learning Environments



Benefit	Years to Mainstream Adoption			
	< 2 yrs	2 - 5 yrs	5 - 10 yrs	> 10 yrs
Transformational	Web 2.0	Virtual Worlds		
High	Presence			
Moderate	Blogs	Wikis Tablet PC		
Low				

Reference: excerpted from Gartner Priority Matrices for
(i) Emerging Technologies (2009) and (ii) Social Software (2009)



Decision Time

- *SOC-Joint Capabilities has begun using ILEs*
- *ILEs are appropriate under these criteria:*
 - *Scenarios: engaging and feasible*
 - *Objectives: learners need procedural knowledge, practice with techniques, or explore scenarios not otherwise available*
 - *Purpose: scenario is important to mission outcomes or individual performance*

-Rozwell (2008)





Risks

- *Cultural Implications*
 - *Who is the audience?*
 - *How does audience differ from trainers?*
- *Social Implications*
 - *Interactivity with others and computers*
 - *Technology can make learning more “active, social, and learner centered – but the uses of IT are driven by pedagogy, not technology”*

-D. Oblinger & J. Oblinger (2005)





The Partnership



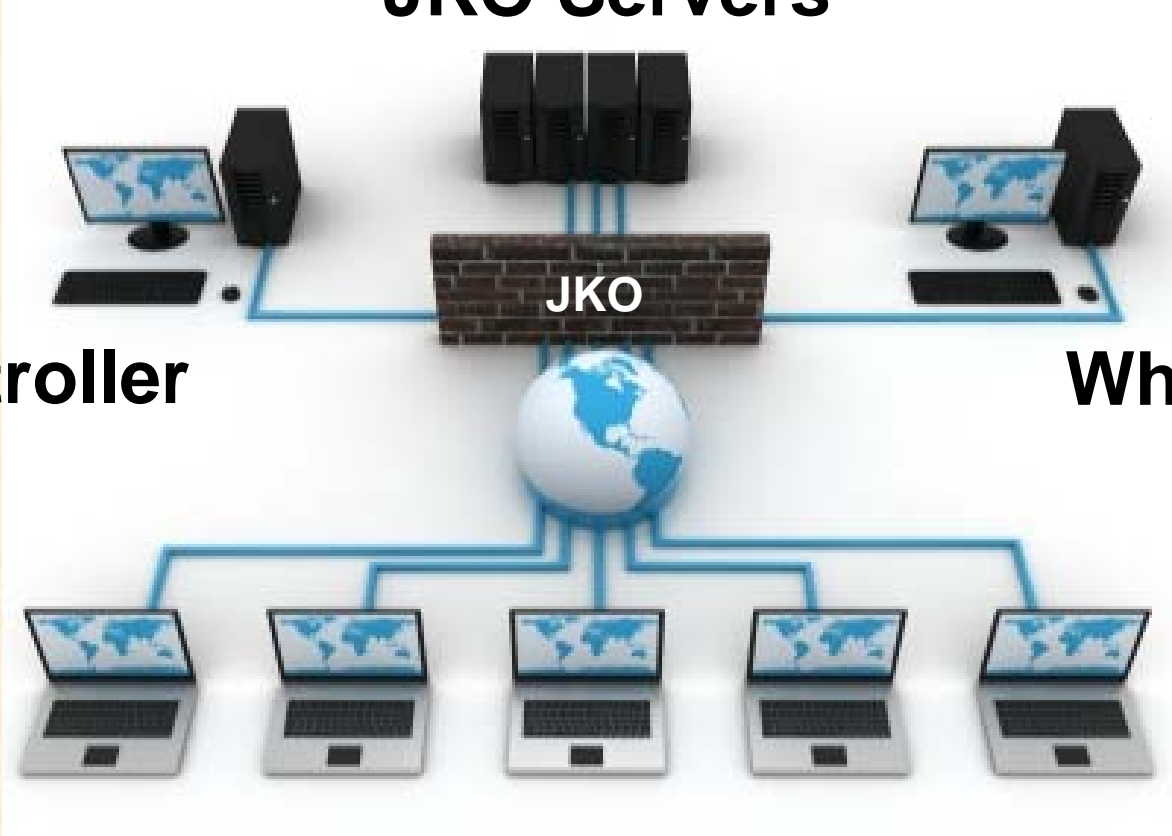
A coalition of the willing
A federation of believers



Building a Distributed Training Environment



JKO Servers



Controller

White Cell

Training Audience



SOC PAC Event Recap



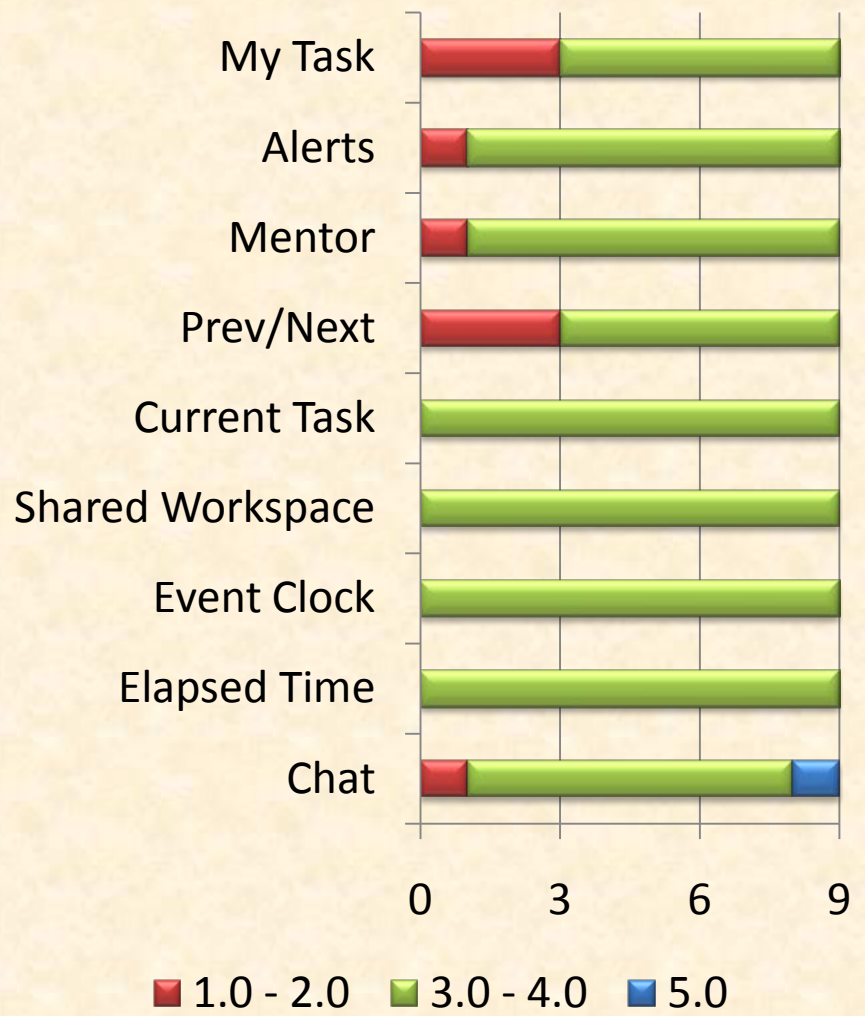
Mission: Conduct a feasibility test of the Small Group Scenario Trainer in an operational command and control environment, investigating several perspectives:

- 3-hour event: routine procedure; disaster relief context
- Joint Planning Group - gained situational awareness
 - Roles included: J1; J2; J3; J35; J39; J4; J6
- Conducted mission analysis in response



User Response to SGST

SGST Usability



- **Assessment Yielded:**
 - Most Useful
 - Suggested additions
 - Least Useful
- **Additional scenarios have been built**



SGST Player - SOC JFCOM HADR Phase 1 v18 - Windows Internet Explorer

http://les.ctc.com/sgst/(S{0b54m230ej1ss2fqpy0n455})/Protected/Player/default.aspx

SGST Player - SOC JFCOM HADR Phase 1 v18

- SOC JFCOM HADR Phase 1 v18
 - Situational Awareness
 - Take Training
 - J1 JPG Standup
 - J1 Mission Analysis
 - J1 COA Development
 - J1 Mission Brief
 - End

Chat

Preferences

Name
D'arcangelo, Stephanie (J1)
Interval, April (J39)
Knobloch, Kristy (J4)
Pachucki, Joy (J3)

stephanie.darcangelo(J1-13:00:41): Determining ComAir schedule for PSAT/LNO Team to drive time-line.

kristy.knobloch(J4-13:04:30): Determining the status of JTF airlift support and will advise J3/SOC.

joy.pachucki(J3-13:04:43): Roger. I'm preparing OPCONTACON of Forces message and will send soon.

april.interval(J39-13:05:24): Developing and coordinating preliminary Public Affairs Guidance.

Enter Chat Message Here

UPDATE: Sumatra Disaster
William Thompson

This is William Thompson reporting from Jakarta, Indonesia where there is a de

Previous Task 3 of 4

Mission Brief

- As the J3 Current Operations, you are tasked to:
 - Use the N-HOUR sequence (found in the Shared Workspace) and complete your tasks appropriate to this mission.
 - Coordinate with the other staff members using the OPCEN log (found in the Shared Workspace) and chat (within SGST).

Note: You have sixty (60) minutes to perform these tasks.

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	J1 Personnel	J2 Intelligence	J3 Current Ops	J35 Future Ops	J39 Enablers	J4 Logistics	J6 Signal	JECG White Cell
Information Operations Battle Drill								
		ALERT 2						

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COA Development

The following screens will present content (situational awareness and tasks to be performed) related to the J3 Current Operations role you are playing in this exercise, HA/DR effort.

- Some pointers as you proceed through this exercise:
- Utilize the tools available through the SGST, including:
 - Shared Workspace: References, templates and work products
 - Injects Received: Mentor and Alerts
 - Chat: Communication with other Players.
 - Recognize that as you read through the content of the following screens that some information is provided for your own situational awareness, while other information may be requesting that your role perform a specific task and/or perform a collective task with other players within the exercise.

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The screenshot shows a web browser window titled "SGST Player - SOC JFCOM HADR Phase 1 v18". The main content area displays an "Overview of Exercise" page with the following text:

Overview of Exercise

Welcome to the Special Operations Command, Pacific (SOC PAC) Small Group Scenario Trainer (SGST) online exercise.

Today's exercise consists of five phases and is programmed for three hours. The exercise is designed as a SOC PAC N-Hour sequence and focuses on Crisis Action Planning.

The objective of this exercise is to provide new staff members with an environment in which they can become familiar with staff processes and operating procedures (SOPs).

Crisis Action Planning

You are a member of the Crisis Action Planning team. The exercise is broken down into the following tasks:

1. Situational Awareness
2. Stand-up of the JPG
3. Mission Analysis
4. Course of Action Development
5. Commander's Estimate

Note: All of the events have detailed instructions that can be passed by the Exercise Manager based upon your specific training requirements.

When Ready, Select Next Task

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Navigation: Previous Task 3 of 4

Chat window on the left shows a list of participants: D'arcangelo, Stephanie (J1); Interval, April (J39); Knobloch, Kristy (J4); Pachucki, Joy (J3).

Mission Analysis

As the J1 Personnel, you are tasked to perform the following activity and work product development:

- Create a Personnel Slides for Mission Analysis (MA).
- Name the file "J1_Personnel_MA".
- Upload the file to the Exercise Products area of the Shared Workspace.

Note: You have thirty (30) minutes to perform the tasks detailed on the previous screen and this activity.



An intriguing future...



Games are at the very beginning of their potential...eventually some form of conversation between real people and the computer-created characters will occur alongside the conversation among people

-Gee (2003)