Digital Learning Science

Tammy Bankus, Ph.D.
Office of the Navy Inspector General
Digital Learning Science

Dr. Tammy Bankus, Director

&

Dr. William Brantley, Training Specialist

IG80 Training and Certification Division

Naval Inspector General
Fact or Fiction?

- A successful program works everywhere
- Having someone actively click on areas of a screen increases engagement
- Simulations are always the best way to train
- People can discover what they need to learn (discovery learning)
- SME trainers can’t describe up to 70% of what learners need to know
- Learners “happiness” with a course means they have learned what they were taught
Modernize the NAVIG Learning
The Training Road Trip: Telling the Story

• Then

• Now

• Phases

• Future

• Tips/lessons learned
THEN

How is it currently conducted

• Binders of Paper Certificates
• Binders of Paper Class Materials
• Map Your Own Learning Path with Few Options
• Long Training Events
• Large Absences From Work to Attend Class
• One-Size-Fits-All Courses
• Primary face-to-face instruction led by only a few SMEs
• Three course taught once a quarter.
• Primarily PPT (students read bullets)
Analysis

Not a lock-step process
Analysis

Accessibility of courses
- Geographically dispersed population
- Training needs to be more accessible
- Limited Internet and cell phone reception in some locations
- Limited training classes offered
- Class sizes only allow 10 people
- Training doesn't meet the needs of different time zones
- SMEs in many different locations

Challenges & Issues

Course Design Issues
- Learning accounts for formal only no informal learning credit
- Limited point of need training
- No standardized training
- Increased need for professional development
- Lessons learned not included in training
- Training prerequisites need to be identified
- Courses focus too much on reading PPT
- Records management for completion
Analysis

Challenges

- Geographically Dispersed Population, Worldwide
- Training needs to be accessible to everyone both inside and outside of a firewall
- Knowledge is decentralized (SMEs dispersed locations)
- Most training accounts for formal learning only, not informal
- Limited point of need training, currently OJT
- Some places have limited internet and cell phone connections
- Training is not standardized across the enterprise
- Increased need for professional development
- Training calendar that outlines multiple training opportunities

Challenges

- Current class sizes are too small and do not meet the demand/need
- Training does not meet the needs of different time zone
- Training does not include current lessons learned
- Limited funding for training and uneven dispersion of funds across the enterprise
- Courses need to be redesigned to better focus training on the need vs. PPT unity of practice site
Now

World Class, World Leading

Professionalization

Enterprise Excellence

Modernize Learning

Standardize Policies and Processes

Drive Decisions with Data

Strengthen Communication

Independence

Transparency

Integrity

Service

Vigilance
**IG80 Training & Certification Initiatives**

*Provide learning ecosystem to train, educate, develop, and build a world-class NAVAL IG Enterprise*

**Mission:** Designs and implements the NAVAL IG learning ecosystem to ensure enterprise personnel receive standardized professional training, leading to a world-class organization. To build a community of professionals through certification processes and learning opportunities, thereby enhancing trust and credibility with those we serve.

---

**Goals**

- **Optimize**
  - Build ecosystem
    - (Improvement)*
  - Course Revisions (101, 201, 202)

- **Enhance**
  - IG Program Relevance
    - (Professionalization)*
  - Competencies (CIGIE)
  - NAVIG Symposium

- **Enforce**
  - Standards across training enterprise
    - (Excellence)*
  - Data Collection Plan
  - Publish/Revis NAVIG Certification Manual

---

**Lines of Effort (LOEs)**

1. Data Collection Plan
2. Competencies (CIGIE)
3. Course Revisions (101, 201, 202)
4. New courses (Webinars, Hotline, Report writing, Inspections 301/410?)
5. Industry Collaboration (Details, University internships)
6. NAVIG Symposium
7. Program Evaluation
8. NAVIG Enterprise Feedback (PTC, PT4B)
9. NAVIG Strategic Plan (IG80 SOP)
10. Marketing

---

**Endstate**

**IG80 Vision**

Enhancing the quality of NAVAL IG professionals through training, education, and development by fostering innovation, trust, and collaboration ensuring the professionalization of a world-class organization.

---

* - Aligns with NAVINSGEN Strategic Plan Core Purposes

---

- FY 22 Top Priorities
## Training to Support Certification Needs

<table>
<thead>
<tr>
<th>Team Member</th>
<th>Certification Specific KPIs</th>
<th>NAVIG 201 Course</th>
<th>NAVIG 202 Course</th>
<th>Currency Proficiency Requirements</th>
<th>40 CEUs Every Two Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intake Investigator</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>Investigator</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>MWBR</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
</tbody>
</table>

### Mission, Authorities, Communication
1. NAVAL IG Mission and Authorities
2. Assigned Organization
3. Communications
4. Collaboration
5. NAVAL IG Standards

### CIGIE General Competencies
1. Ethics and Integrity
2. Independence
3. Confidentiality
4. Professional Judgment
5. Objectivity

### Technical Knowledge
- Theories, principles, practices, techniques
- Laws Rules, regulations, policies, legal requirements
- Writing: format, clarity, grammar
- Interview/focus groups

### Leadership
1. Empowerment
2. Vision
3. Integrity
4. Self-knowledge
5. Communication
6. Competence

### Intrapersonal Skills
1. Organizational awareness
2. Partnering
3. Teaching Others
4. Conflict Management
5. Teamwork
6. Influencing/Negotiation
7. Customer Service

### Cognitive Skills
1. Planning/evaluation
2. Problem-solving
3. Reasoning
4. Learning
5. Creative Thinking
6. Decision Making
7. Critical Thinking

### Communication Skills
1. Writing
2. Oral Communication
3. Information Management

### Interpersonal Skills
1. Accountability
2. Attention to Detail
3. Self-management
4. Integrity/Honesty
5. Flexibility
6. Resilience
7. Interpersonal skills
8. Self-knowledge

---

**Core Foundational Competencies**
Link Certification Requirements to Training Plan

Need = Solution
- **Train-the-Trainer (T3) IG80 Certification**
  - Collaborate with other Echelons across the NAVIG Enterprise
  - Establish a common operating picture to become authorized to adjunct teach NAVINSGEN courses.
- **Policy in Development**
  - Instructional Methodology & Rubric
  - SME Qualifications Required
  - Observe, Instruct Virtual, F2F Instruction
What is a Learning Portal?

A learning portal is a gateway to all the courses, resources, and instruments that facilitate teaching and learning. It’s a place where you store all your documents, podcasts, videos, presentations, and so on.

Learning portals can also include applications that facilitate communication: Discussion forums, messaging services, email, calendars, and so on.

In its simplest form, a learning portal can be a shop-front where your learners can discover or be assigned content.

In its complex form, a portal can be an ecosystem for managing all teaching and learning experiences.
Learner and Learning Facilitator

LEARNING OUTCOMES
(e.g., Run-time rules, individual run-time performance, paradata)

EXPERIENCES
(Available learning opportunities, e.g., course, scenarios, learning multimedia, even jobs)

Competencies
(Common Currency)

LEARNER PROFILE
(e.g., longitudinal attributes, performance, enterprise learner records)
### NAVINSGEN Learning Portal

#### Phase 1: Foundations
- Redesign current courses to achieve greater effectiveness and efficiencies
- Build Partnerships
- Align with Needs (Certification Manual, competencies)
- TWMS for records management

#### Phase 2: Requirements
- Integrated data strategy linking learning events to achievement competencies and certifications
- Occupational alignment
- Informal, formal
- Apply a competency-based framework to Training
- Apply a learning ecosystem to NAVINSGEN training

#### Phase 3: Integration
- Integrate RMS, CMS, LMS seamlessly
- Data to populate dashboard
- Career path suggestions
- Certification requirement tracking
- Discussion Boards
- Training Catalogue
- LMS = Moodle

---

**Learner and Instructor Dashboard Digital Learning Portal**
### Quick Peek

#### Phase 1 – Foundations

<table>
<thead>
<tr>
<th>Task</th>
<th>Current Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>201 Basic Hotlines Investigator</td>
<td>Scheduled completion NOV 2022</td>
</tr>
<tr>
<td>202 MWBR</td>
<td>Scheduled completion NOV 2022</td>
</tr>
<tr>
<td>Inspections course</td>
<td>Partnerships and Analysis phase through FY2022</td>
</tr>
<tr>
<td>Build partnerships Universities</td>
<td>USC, ODU, UVA, Virginia Tech, George Mason</td>
</tr>
<tr>
<td>Professional Development ops</td>
<td>2 Personnel start in JUL &amp; AUG</td>
</tr>
<tr>
<td>TWMS</td>
<td>101 Certificate tracking</td>
</tr>
<tr>
<td>Certification Tracking</td>
<td>SharePoint</td>
</tr>
</tbody>
</table>

#### Phase 2 - Requirements

<table>
<thead>
<tr>
<th>Task</th>
<th>Current Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable LMS</td>
<td>JKO/Moodle</td>
</tr>
<tr>
<td>Course catalog</td>
<td>NEL- (Navy ELearning)</td>
</tr>
<tr>
<td>Competency based framework</td>
<td>Certification manual (Industry competencies; CIGIE)</td>
</tr>
<tr>
<td>Integrated data strategy</td>
<td>Authoritative Database (data lake)</td>
</tr>
<tr>
<td>Course Redesign 101</td>
<td>Completed JUN 2022</td>
</tr>
<tr>
<td>Reviewing other course options</td>
<td>Course equivalents</td>
</tr>
<tr>
<td>Partnerships</td>
<td>Advanced Distributed learning</td>
</tr>
</tbody>
</table>
Where we want to go: NAVIG Learner Profile

- Learning anywhere
- Across multiple Devices
- Keeps track of progress
- Bookmarks critical events
- Display a comparison picture of where you are and your peers
- Supervisor Dashboard
- Certification tracking and recommendation
- Chunked instruction
- One to Two click access
- Accredited courses

https://demo.madlx.org/#/dashboards?d_id=6c8a5492-bc2c-453a-ac3b-f185d20386ac
Tips/Lessons Learned

• Analysis is critical
• Change management must be done iteratively and with buy-in
• Have a multi-level communications plan
• Bells and whistles are not always needed (cognitive load theory)
• Learning-2-Learn embedded strategies are critical for self-paced courses
• Pilot courses and assessments prior to full implementation
• Adaptive & Intelligent tutoring systems can range in complexity to meet learner needs
• Setbacks will happen! Use them as a learning tool vs. punitive measure
• Identify and maximize team skill sets
• Don’t be afraid to reach out of your organization for help . . . It’s a micro to macro team effort
• Start early on your program evolution methodology
• Set goals and benchmarks
• **What can you do?**
  
  – Looking to offer professional development opportunities
  – Share your stories and successes, we may adopt them or partner with you
  – This is a TEAM effort (not just a Naval Team effort)
Coming together is a **beginning**, staying together is **progress**, and working together is **success**.

- *Henry Ford*
“All Sailors, Marines, and Civilians in the Department of the Navy will operate as one team to protect the American people and our interests in the most effective and efficient way possible, with our actions guided always by our core values.”