

ICICLE Government and Military MIG Agenda & Minutes

This document: [ICICLE Government and Military \(G&M\) MIG Agenda and Minutes](#)

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ICICLE Government and Military MIG Agenda & Minutes 5 Dec 2024, 1530-1700 at I/ITSEC

Attending:

1. Nathan Peace (nathan.peace@defence.gov.au), Erin Czerwinski (eczerwinski@cmu.edu), LtCol Alan Lin (alan.lin@spaceforce.mil), Maxime Maugeais (Maxime.Maugeais@forces.gc.ca), Ramy Kirellos, Nicola Raven (Nicola.Raven@forces.gc.ca), Wendy Walsh, Sae Schatz, Shelly Blake Polk, Jim Goodell, Jodi Lis, Len Matiwosky, Eric Ultes + 6 others (Eric will gather names from their counterparts)

New People Introductions:

1. Nathan Peace (nathan.peace@defence.gov.au), Erin Czerwinski (eczerwinski@cmu.edu), LtCol Alan Lin (alan.lin@spaceforce.mil), Maxime Maugeais (Maxime.Maugeais@forces.gc.ca), Ramy Kirellos, Nicola Raven (Nicola.Raven@forces.gc.ca)

Apologies:

1. Only on-site attendance was available for this MIG session at I/ITSEC.

Discussions:

MIG Focus Areas

2. Review GC Collab site environment:

- a. Check team access to site
 - b. Len added ICICLE MIG group on GC Collab site:
<https://statics.gov.teams.microsoft.us/evergreen-assets/safelinks/1/atp-safelinks.html>
 - c. Discuss set up to load exemplars, including word search parameters
 - d. Action Item: Len to set up ICICLE Govt & Military Group then send GC Collab invites to ICICLE Govt & Military community
2. Review terms of reference (TOR) for the MIG, get team consensus
 - a. TOR loaded on GC Collab
 - b. Team review to discuss key takeaways TOR objectives
 3. Identify list of initial exemplar LE efforts to load into GC Collab, determine keyword search criteria to assist Govt & Military MIG personnel to search based on needs

Team Discussions

1. Challenges with Govt and Military groups finding connections to research capabilities, both within their services/commands and in collaboration with Academia
2. Ramy found NAWC, DEFCON, and Design Interactive training efficacy research reports on training efficacy
 - a. Also RAND and DRDC
 - b. Adult Learning in Military Context report coming out soon, Dr. Sae Schatz will be available very soon (Webinar Jan 7th): [Report Release Webinar Adult Learning in the Military Context | National Academies](#)
 - c. Consider using Notebook LM by SCALE to query and generate word searches
 - i. Action Item: Len taking action to assess incorporating Notebook LM for GC Collab environment to automate keyword searches as exemplars are uploaded
 - ii. Action Item: Eric taking action to begin uploading known exemplars to test run Notebook LM word search queries with Len
3. Len discussed lack of empirical evidence regarding training efficacy, so RCAF 2 CAD partnered with Defence Research and Development Canada (DRDC) to support all Canadian Forces. DRDC have become 'science brokers' to determine which resources and types would be most effective to address a given problem set as well as scientific oversight of an effort being actively worked by Government personnel. DRDC can collaborate Internationally for collaboration and data sharing, such as NATO forces.
 - a. Wendy discussed there is an USMC annual and virtual scholarship of teaching and learning, importance on research but also to ensure we are addressing the education of Govt & Military personnel

- b. Wendy discussed USAF Learning Engineering Center of Excellence to measure validity of training systems. Starting to assess by working with Industry to assess their test plans
 - c. Sae discussed Total Learning Architecture (TLA) with any new tech facility that connects to new tech to enable benchmarks as a means to plug new tech into assessment tools and processes to accomplish in a sandbox environment.
 - d. Maxime discussed Royal Canadian Navy (RCN) abilities and challenges to address LE. Next step is to digitize RCN policies, processes, and policies into a digital framework. Wendy discussed the Department of the Air Force (DAF) model to manuals that is highly interactive that ties back to MBSE principles to support learning scaffolding. Australian Army rep uploaded 300+ docs in six months. Space Command (LtCol Lin) mentioned the impacts this will have on IRB due to time frame constraints. Eric discussed how MBSE could be integrated to provide traceability of policies, processes, and procedures tied to the systems they are supporting and provide traceability so when a requirement or component changes, the impacted information is adjusted with it. John Costa discussed Actionable Databooks for IEEE, currently in the commercial space.
4. Jodi discussed Learning Engineering case study, IEEEICICLE.org on Wed 11th at 1pm EST
 5. Nicola discussed RCAF Future Fighting Lead-In Training (FFLIT) and LE principles to prepare for this, including shifting from task-based training to competency-based training.
 - a. Wendy recommended touching base with DET 24 to see how they've implemented
 6. Nathan mentioned Australia has loaded TLA into their protected Cloud, can push competencies out, but have not connected them together yet
 - a. Shelly clarified the TLA enterprise data structure through ADL has not been completed yet so recommends Govt & Military agencies reach out to him to collaborate as these TLA enterprise data structure standards are completed. Shelly also mentioned there is a study group that those interested in joining should touch base with Shelly.
 7. The Australian Military has 1,800 courses ranging from three weeks to 18 months, so have been reconfiguring into a competency-based training structure.

New Business

1. Celebration of Success! LE has been a growing part of the papers and discussions at I/ITSEC that has not been seen to date

Action Items

1. Len to push GC Collab invitation to team (new and current)
2. Len taking action to assess incorporating Notebook LM for GC Collab environment to automate keyword searches as exemplars are uploaded
3. Eric taking action to begin uploading known exemplars to test run Notebook LM word search queries with Len

ICICLE G&M MIG Agenda & Minutes 1 Nov 2024, Noon ET

Attending: Zarka Ali, Henry Ryng, Mike Hernandez John Costa

New People Introductions:

- 2.

Apologies:

Discussions:

MIG Focus Areas

2. Review GC Collab site environment:
 - e. Check team access to site
 - f. Len added ICICLE MIG group on GC Collab site:
<https://statics.gov.teams.microsoft.us/evergreen-assets/safelinks/1/atp-safelinks.html>
 - g. Discuss set up to load exemplars, including word search parameters
 - h. Action Item: Len to set up ICICLE Govt & Military Group then send GC Collab invites to ICICLE Govt & Military community
2. Review terms of reference (TOR) for the MIG, get team consensus
 - c. TOR to be loaded on GC Collab - Len
 - d. Team review to discuss key takeaways TOR objectives
3. Identify list of initial exemplar LE efforts to load into GC Collab, determine keyword search criteria to assist Govt & Military MIG personnel to search based on needs

Team Discussions

8. Empirical evidence studies on efficacy of training

- a. Team discussed how to incorporate aspects of LE to measure success of LE activities, currently in fairly early stages.
- b. Team discussion of what is needed to achieve descriptive analytics with intent to accomplish predictive analytics
 - i. Common challenge is teams are putting cart before the horse in terms of not first establishing foundations required (e.g. data & software architecture, data model selection) while end users are focused on end state areas (like dashboards and predictive analytics).
 - 1. Recommendation is to increase quality and volume of communication between stakeholders without masking end users and leadership from specific decisions that must be made without having to make them experts
 - 2. Recommendation to flip the script to first address the problem, discuss potential solutions, then address LR approaches and technologies that could resolve
 - 3.
- c. ICICLE community members, Aaron Kessler, Erin Czerwinski and Jeanine DeFalco, announce a **CALL FOR PAPERS** for a conference session “**Learning Engineering: Stories from the Field**”. The hybrid session will be part of [International Conference on Adaptive Instructional Systems 2025](#) (which is an affiliated conference of [International Conference on Human-Computer Interaction 2025](#)). The 800 word abstract is due **November 8th**.
 - i. [11:39 AM] Jodi Lis (Unverified)
 - ii. The hybrid session will explore the field of Learning Engineering, bringing together researchers, practitioners, and professionals to share qualitative and quantitative insights from the front lines of this interdisciplinary practice. This session aims to provide a platform for discussing real-world experiences, ethical dilemmas, innovative practices, and emerging competencies within the field. It will include papers and case studies that reflect on both the theoretical frameworks and practical applications of learning engineering, focus on the use or development of AIS will be especially considered.
 - iii. For "Learning Engineering: Stories from the Field" session, please email Aaron Kessler (kessler@mit.edu) your full name, email, and affiliation, and he will invite you to submit an abstract through the conference system.

New Business

- 1. Celebration of Success! Christine and Wendy have successfully set up the to develop USAF Enterprise Learning Engineering

community to transform mindsets and get to common practice across USAF and connect to other agencies:

<https://www.aetc.af.mil/News/Article-Display/Article/3880151/aetc-developing-enterprise-learning-engineering-center-of-excellence-to-acceler/>

2.

Action Items

4. Len to set up ICICLE Govt & Military Group then send GC Collab invites to ICICLE Govt & Military community - Complete
5. Action Item: Jim to load IEEE WG rules of engagement on GC Collab MIG group once able
6. Action Item: Len and Eric to clarify what MIG versus SIG means in Terms of Reference
7. Action Item: Len and Eric to review IEEE constraints for loading video recordings like meeting minutes and provide updates to MIG community - Complete

ICICLE G&M MIG Agenda & Minutes 4 Oct 2024, Noon ET

Attending: Len Matiowsky, Michael Jay, Eric Ultes, Rob Nyland, Jim Goodell, Andy Johnson, Eileen Lento, Henry Ryng, Ioana Stefan, Jenna Matthews, Jodi Lis, Kevin Owens, Shelly Blake-Plock, Wendy Walsh, Mollie McCormick

New People Introductions:

3. Henry Ryng

Apologies:

Discussions:

MIG Focus Areas

1. Review terms of reference (TOR) for the MIG, get team consensus
 - e. Team recommendations to move TOR into Google Docs and Excel/Word for those who can't access Google Docs from a Govt perspective
 - f. Team recommended taking some time to digest and rack-and-stack TOR objectives
2. Discuss GC Collab site environment:

- i. Discuss set up to load exemplars
 - j. Action Item: Len to set up ICICLE Govt & Military Group then send GC Collab invites to ICICLE Govt & Military community
3. Identify list of initial exemplar LE efforts to load into APAN, determine keyword search criteria to assist Govt & Military MIG personnel to search based on needs

Team Discussions

9. Team discussion regarding loading video recordings. Michael mentioned IEEE restricts recording, but may not apply to ICICLE, Len and Eric to check
10. Wendy asked whether meeting recordings can be loaded on Google docs, Len discussed may be appropriate to load and review these on GC Collab.
11. Regarding Terms of Reference (ToR) team review, purpose is get team consensus on MIG priorities and generate buy-in for how we proceed together
12. Len discussed 2 CAD Virtual conference with global community and key takeaways that may benefit MIG to be aware of from a knowledge management and knowledge transfer perspective. There was a significant interest in participants joining Govt & Military MIG. Question was raised whether there should be parameters/criteria who can be a member of this MIG. Team discussed being inclusive vs. exclusive, Wendy raised potential concern regarding how Govt interfaces with Industry and Academia and recommended having some documented rules of engagement. Michael discussed potentially having active versus inactive status. Jim Goodell recommended adoption of applicable portions of IEEE WG rules of engagement:
<https://docs.google.com/presentation/d/1T4gIhV4zuNOQI3vpUSX-MNYDhNHvFeliL/edit#slide=id.p1>
 - a. Here is a template Policy and Procedures document used for standards workgroups (maybe more than we need for this group but something to start with):
<https://docs.google.com/document/d/1UtjiJRViDW8bwAnAh3ClvaA5wBq6Sj7x/edit?usp=sharing&oid=111659177288878493637&rtpof=true&sd=true>
 - b. Action Item: Jim to load IEEE WG rules of engagement on GC Collab MIG group once able
13. Team discussed what Market Interest Group (MIG) means in relation to Segment Interest Groups (SIGs). Action Item: Len and Eric to clarify what MIG versus SIG means in Terms of Reference

New Business

3. Celebration of Success! Wendy was able to share Learning Engineering and implementation at Training and Tech Conference

- with NATO and Consortium for Peace, including the maturity model for agencies to self assess
4. Celebration of Success! Len was able to share Learning Engineering with 2 CAD and global community at First RCAF 2 CAD Virtual Conference
 5. Wendy was requested to speak at other forums

Action Items

8. Len to set up ICICLE Govt & Military Group then send GC Collab invites to ICICLE Govt & Military community
9. Action Item: Jim to load IEEE WG rules of engagement on GC Collab MIG group once able
10. Action Item: Len and Eric to clarify what MIG versus SIG means in Terms of Reference
11. Action Item: Len and Eric to review IEEE constraints for loading video recordings like meeting minutes and provide updates to MIG community

ICICLE G&M MIG Agenda & Minutes

6 Sept 2024, Noon ET

Attending: Jim Goodell, Len Matiowsky, Michael Jay, Eric Utes, Rob Nyland, Brian Kirk, Lindsey Fredman, Jodi Lis, Mollie McCormick, Dina Kurzweil, D'Marie Bartolf, Sae Schatz, John Costa, Zarka Ali Kevin Owens

New People Introductions:

4. Sae Schatz (US DoD), Partnership for Peace Consortium

Apologies:

I am unable to join today - looking forward to seeing you all next month. - Jenna M.
I was also unable to attend this time - Ioana Ștefan

Discussions:

MIG Focus Areas

1. Review terms of reference (TOR) for the MIG, get team consensus
 - g. Team recommendations to move TOR into Google Docs and Excel/Word for those who can't access Google Docs from a Govt perspective

- h. Team recommended taking some time to digest and rack-and-stack TOR objectives
2. Review APAN options for site setup, get DoD sponsor identified:
- k. Review GC Collab.ca as an alternative option to APAN
 - l. Review lowest barrier to entry option
 - m. Request DoD Champion to set up APAN:
 - i. Rob Nyland and Eric Ultes to coordinate
3. Identify list of initial exemplar LE efforts to load into APAN, determine keyword search criteria to assist Govt & Military MIG personnel to search based on needs

Collaboration opportunity: Design SIG released their LE Case Guide V1.0 for documenting Cases:

https://docs.google.com/presentation/d/1zswPfXQxV1_aRHzwQCaGRV5ZehABFUCVTYNR6jF2xS4/edit#slide=id.g2cd2c68cb73_0_1

*Aaron Kessler is happy to coordinate presenting this to our group: kesslera@mit.edu

LE presentations, images from Jim and Sae

https://drive.google.com/drive/folders/1Tw56aHCzb5FBhGvFX96CZGOWMNKj2T97?usp=drive_link

Presentation at conference for doing "workshop in a box" with more resources to talk about LE

<https://drive.google.com/drive/u/2/folders/121H3yUPwUu80wbrdX1nJ97X4QMVtzS-8?ths=true>

4. Who will be at I/ITSEC, and do you have any presentations?

- Sae Schatz:
 - 2 DEC, 0830-1000: Generative AI Tutorial (330EF)
 - 4 DEC, 1330-1500: Cognitive Warfare signature panel (330EF)
- Kevin Owens:
 - 5 DEC, 1030ish: 24120 Learning Engineering Competency-Based Experiential Learning within Institutional Military Education (320D)
- Lindsey Fredman
 - 3 DEC, 1600-1730: Learning Engineering something ? (310CD)

Continuation from last meeting

6. How does strategy and policy impact our outcomes to achieve and maintain mission readiness?
7. Implementation of lifelong learning continuum
8. Reconsider prioritizing Plugfest for ICICLE trades how's and to bring back Government and Industry players to ICICLE conference
9. Lack of joint partner participation, develop comm plan to bring in Allied Nation Government & Military participation
10. Being able to communicate and articulate what LE is as a thing and value in concrete terms for operators and decision makers to provide budget, resources and assess value
11. How can data from Govt can help LE based on relationship to learning and the job
12. Start with a single challenge, work through it, then show results (good and bad) to the MIG to enable collective learning of lessons learned and best practices within MIG community (ties back to exemplar recommendation on item 1)
13. How to get LE into military framework with step by step instructions for personnel to implement throughout their organizations
14. Consider ICICLE 2025 Panel Presentation on Applied LE: lessons learned and success stories from the Government & Military Practitioners
 - a. Eric to follow up with I/ITSEC POCs to link LE panel with ICICLE Govt and Military MIG participants attending for collaboration
15. Plan Govt agency outreach plan

Actions

1. Eric to send out minutes and agenda for next meeting on 6 September
2. All: Recruit more members including international government & militaries
3. All: Identify champions for TOR development
4. Eric and Len to look at implementation APAN for ICICLE Govt and Military MIG:
<https://www.apan.org/>
5. Eric and Len to look at getting a meeting of this group at IITSEC this year... that's a major military/government training conference that may facilitate a lot of these topics. @Kevin

Owens, Wendy Walsh will be at I/ITSEC and can meeting. @Dr. JJ Walcutt might be able to navigate how we get a space on if we want to be on the agenda. I know things have already been approved for the formal agenda, but we can surely pull together and informal gathering. I am hosting an inter-service panel on implementing learning engineering.

6. Zarka to get Design SIG to walk through with MIG on what it is and how it works
- 7.

ICICLE G&M MIG Agenda & Minutes

9 August 2024, Noon ET

Attending: Eric Ultes, Zarka Ali, Len Matiowsky, Rob Nyland, Mollie Macdonald, Kevin Owens, Wendy Walsh, JJ Walcott, Vipin Verma, Jodi Lis, , Santiago Morales (Smora), Shelly Blake-Plock

New People Introductions:

5. Hope Walker: hopewalker.lxd@gmail.com | Galveston, TX | Learning Experience Designer | “free agent” w/ experience in government, corporate, and K12
6. Jenna Mathews jenna.mathews.ctr@usuhs.edu | Learning Analytics Engineer (contractor) for Uniformed Services University
7. Vipin Verma vverma9@asu.edu
8. Simon Hsu
9. Yvette Hyde
10. Lisa Rich
11. Vinnie Villanueva
12. Christine Covas-Smith
13. To be added: Nicholas Armendariz (Nicholas.j.armendariz.mil@health.mil)

Apologies:

Jim Goodell

Discussions:

MIG Focus Areas

1. Establish terms of reference (TOR) for the MIG, look at US Army TRADOC 2030-2050 for examples. Focus for Government and Military focus with support from Industry and Academia Encourage people to take the lead should you have an interest to participate. How do we share LE practices and resources?

2. Exemplar application of LE as case study for Govt, central repository All Partners Access Network (APAN) site. Action Item: Eric and Len to look at implementation APAN for ICICLE Govt and Military MIG: <https://www.apan.org/>. “The All Partners Access Network (APAN) is the **Unclassified Information Sharing Service** (UISS) for the U.S. Department of Defense (DOD)”

3. LE assumes a level of technology integration, and lacks consideration of the baseline where orgs are at currently. Meet orgs where they are, consider implementing Capability Maturity Model.

There is a paper that is being developed for I/ITSEC to design/develop a LE Maturity model the rubric has six criterion:

- A. maturity of an organization in adopting learning engineering as a multidisciplinary practice
- B. maturity of an organization in adopting the learning engineering process
- C. maturity of an organization in adopting and applying the learning sciences
- D. maturity of an organization in adopting human-centered design practices
- E. maturity of an organization in adopting systems engineering
- F. maturity of an organization in adopting data-informed decision-making

Government & Military needs to develop learning strategies for insertion of new technologies and weapon systems, and communicate these to Force Planning, Industry, and Academia

Outlines the xAPI and cmi5 implementation

DoDI 1322.26 [1322.26 Distributed Learning \(DL\) Implementation References | ADL Initiative \(adlnet.gov\)](#)

4. Culture eats strategy for lunch, how do we expose our assumptions and constraints to refine our strategies and implementation across domains. Getting leadership, instructors and faculty onboard early: Look at <https://project-nomad.org/> for guidance how to implement. Project Nomad is a USAF Exemplar in mapping culture- they are creating a body of knowledge/understanding of the culture we have- intentionally & unintentionally- how can we imagine and act to create the culture we want. Help to identify stakeholder/user analysis to help determine 'what's in it for them' during change management planning.

5. How do we interoperate environmentally and internationally to enable joint ops efficiently using common strategy and policy? This dovetails nicely with the LEED Tracker being developed by Kessletr and Totino and being discussed in the Design SIG. Action Item: Get Design SIG to walk through with MIG on what it is and how it works. "Why did we do that?" A Systematic Approach to Tracking Decisions in the Design and Iteration of Learning Experiences

https://edtechbooks.org/jaid_13_2/why_did_we_do_that_a_systematic_approach_to_tracking_decisions_in_the_design_and_iteration_of_learning_experiences

Meeting Adjourned: Will pick up remaining topics at future meetings.

6. How does strategy and policy impact our outcomes to achieve and maintain mission readiness?

7. Implementation of lifelong learning continuum

8. Reconsider prioritizing Plugfest for ICICLE trades how's and to bring back Government and Industry players to ICICLE conference
9. Lack of joint partner participation, develop comm plan to bring in Allied Nation Government & Military participation
10. Being able to communicate and articulate what LE is as a thing and value in concrete terms for operators and decision makers to provide budget, resources and assess value
11. How can data from Govt can help LE based on relationship to learning and the job
12. Start with a single challenge, work through it, then show results (good and bad) to the MIG to enable collective learning of lessons learned and best practices within MIG community (ties back to exemplar recommendation on item 1)
13. How to get LE into military framework with step by step instructions for personnel to implement throughout their organizations
14. Consider ICICLE 2025 Panel Presentation on Applied LE: lessons learned and success stories from the Government & Military Practitioners

Actions

8. Eric to send out minutes and agenda for next meeting on 6 September
9. All: Recruit more members including international government & militaries
10. All: Identify champions for TOR development
11. Eric and Len to look at implementation APAN for ICICLE Govt and Military MIG:
<https://www.apan.org/>
12. Eric and Len to look at getting a meeting of this group at IITSEC this year... that's a major military/government training conference that may facilitate a lot of these topics. @Kevin Owens, Wendy Walsh will be at I/ITSEC and can meeting. @Dr. JJ Walcutt might be able to navigate how we get a space on if we want to be on the agenda. I know things have already been approved for the formal agenda, but we can surely pull together and informal gathering. I am hosting an inter-service panel on implementing learning engineering.
13. Zarka to get Design SIG to walk through with MIG on what it is and how it works

ICICLE G&M MIG Agenda & Minutes 12 July 2024, Noon ET

Attending: Jim Salsman, Nolan Lovett, Jim Goodell, Rob Nyland

New People Introductions:

14. Col Shaun Humphrey, USAF
15. Mollie McCormick

Apologies:

ICICLE

1. ICICLE Trade Show Planning: **Buddy:** Sign up to be a [buddy](#). Here are [expectations for being a buddy](#)
2. ICICLE Conference T-Shirts!
 - a. https://www.zazzle.com/icicle_lrngeng_t_shirt-256952112897022809
3. ICICLE Fundraising
4. Progress on Current LE efforts

Discussions

1. Zarka finalizing Google sites and sending Google doc, Eric to add data section for Govt. and Military MIG
2. Discussed competency inventory status, Jodi showed work being done in group and requested Govt and Military MIG support. Dina asked whether this has been vetted to determine what the teams are so elements are categorized.
3. Discussed additional competencies required to accomplish Learning Engineering
4. Discussed the need for greater collaboration between Govt/Military, Industry, and Academia to achieve mission readiness. Focus on improving learning outcomes through modalities of learning versus product line
5. Discussed differentiation of education and training and transfer from knowledge to skill and applying the media most applicable and cost effective to achieve
6. Discussed data silos for innovation efforts (e.g. Industry IRAD, Military Squadron Innovation Funds, etc.) and lack of enterprise/institutional data collection on best practices and lesson learned

Actions

Action items from June Mtg

1. Work on joint LE competencies with other domains
2. Explore opportunities/limitations for group to make statements
3. Identify standards development efforts that could support technical implementation
4. Organize intro to learning engineering webinar
5. Send out minutes and agenda for next meeting on 7 June
6. Try to recruit DHS member to discuss procurement innovation lab
7. Recruit more members including international militaries
8. Collaborate on "LE is a team sport" scenario for icicle 2024 session

ICICLE G&M MIG Agenda & Minutes 7 June 2024, Noon ET

Attending: Jim Salsman, Nolan Lovett, Jim Goodell

New People Introductions:

16. Dr. Elizabeth Rich, elizabeth.rich.1@us.af.mil, Chief, Training Operations, Command Section/A3, 37th Training Wing JBSA-Lackland
17. Col Jason Turner, jason.turner.3@us.af.mil, Deputy Director for Force Development, Air Education and Training Command
18. Adam Welle, Carnegie Mellon University, Software Engineering Institute, arwelle@cert.org
19. Dr. Ioana Stefan, ioana.stefan@ats.com.ro, Scientific Director, Romania ADL Partnership Center
20. Nuria Pacheco, Carnegie Mellon University, Software Engineering Institute, npacheco@cert.org
21. Demetrius Roberts, demetrius.roberts.1@us.af.mil

Apologies: Wendy Walsh

ICICLE

1. Reminder to get early registration if planning to attend this year
7. Several ICICLE topics related to Government and Military
8. Reviewed ICICLE submissions aligned with Government and Military MIG interests
9. Discussion on collaboration areas with other MIGs and SIGs
10. Recommend Kevin Owens to share progress on STEEL-R effort with US Army. [Presentation](#) by Kevin to ICICLE Competency SIG
11. Distill compelling arguments for government/military MiG into bullet points
12. Discuss recruitment
13. Feel free to ask questions/pain points to this group that can help address needs
- 14.

Discussions

1. How to adapt training and data to higher level of interaction as flexibility to deal with the unexpected and increase readiness level, assess risk associated with technical side, and resilience of training systems when resources are not available
2. Jim Salsman was working with Soldier center (Ben Goldberg) to address support GIFT system, pronunciation assessment
3. Competency mapping and data collection and reporting
4. Sharing findings from applications of efforts to identify lessons learned and best practices
5. Discussed need to break down silos, particularly for competency mapping. Sharing of tool development to help community learn and grow, also bring in efforts underway by other MIGs and SIGs
6. How to break out tacit versus semantic knowledge/memory and learning from the experience of others

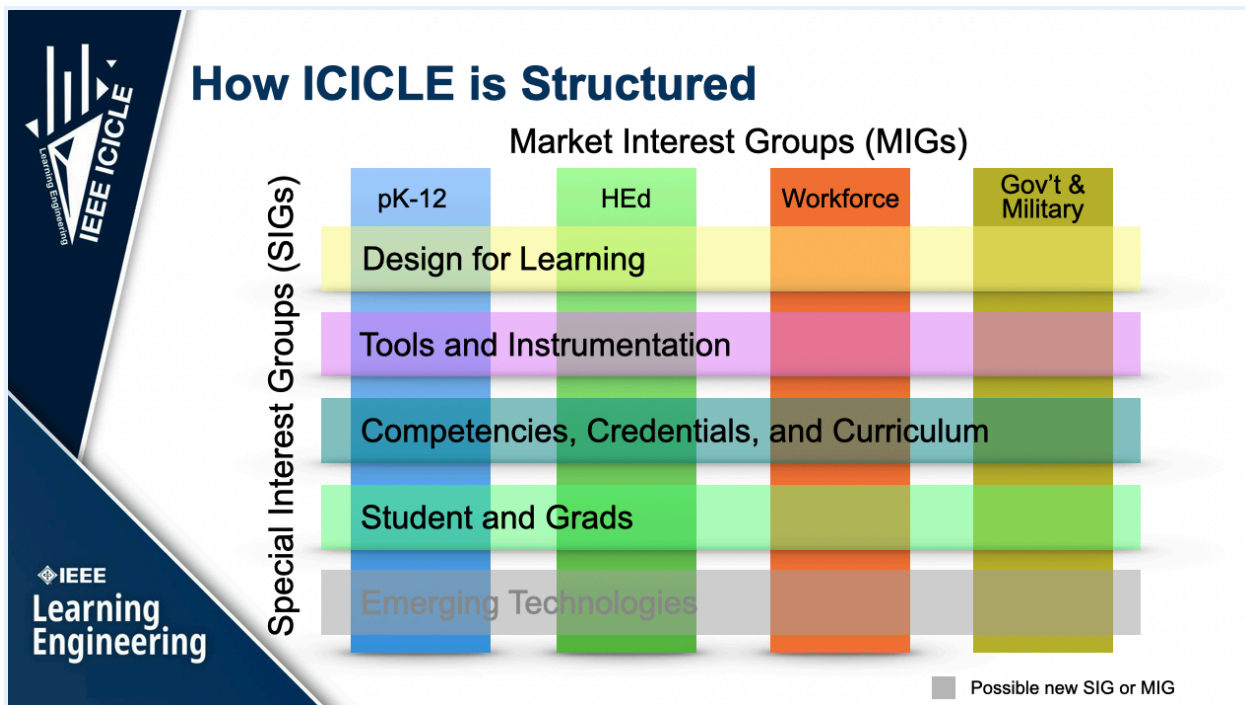
7. Given learning isn't static, need to account for implementing and assessing incrementally then scale once demonstrated actual value added

8. Interoperability of systems and data collection. Emphasis to work on standardization to address these issues, then hit the challenge of human resources capabilities (e.g. upskilling into LE domains) to address issues like efficacy and scaling of solutions and how does that impact the human resources

Actions

Need for a leaders' implementation guide tied to maturity model

See if Bem Goldberg can present during upcoming MIG on status of Soldier Center effort (Kevin to follow up)



Action items from May Mtg

9. Work on joint LE competencies with other domains
10. Explore opportunities/limitations for group to make statements
11. Identify standards development efforts that could support technical implementation
12. Organize intro to learning engineering webinar
13. Send out minutes and agenda for next meeting on 7 June
14. Try to recruit DHS member to discuss procurement innovation lab
15. Recruit more members including international militaries
16. Collaborate on "LE is a team sport" scenario for icicle 2024 session

ICICLE G&M MIG Agenda & Minutes

3 May 2024, Noon ET

Attending: Renee Johnson ,

New People Introductions: None

Apologies:

ICICLE

15. Of the 88 ICICLE Submissions this year, 87 submissions accepted
16. Reviewed ICICLE submissions aligned with Government and Military MIG interests
17. Let's continue collaboration areas within this MIG to allow opportunities to share.
18. Potential for procedural discussions in how ICICLE efforts are being applied, assess processes and governance
 - a. Wendy discussed this forum being a good format to collaborate between Government and Military
 - b. Shelly and Jim discussed whether and where Learning Engineering is being applied and whether processes are being applied
 - i. Less current capability on data instrumentation
 1. For xAPI profiles, either extremely generic or not actually a profile
 2. Tied back to mission readiness/execution & objectives as performing these activities
 3. Need for a leaders' implementation guide tied to maturity model
 - a. May need to be more reflective approach to account for the high variability of outcomes required
 - b. Account for how to gain buy-in by sharing effective strategies (e.g. connecting to efforts already underway)
 - c. How to normalize behaviors/shift culture that may have already been set early in careers (e.g. emphasize the importance)
 - ii. Account for when we will get empirical evidence of what is being measured and working or needs to be tweaked while operating today

Thoughts on what this ICICLE MIG does

Competencies

1. Jodi discussed workforce competency demo
 - a. Alignment to competencies structures discussed within IEEE
 - b. For CCC update, Dennis Green presented on competency framework development. Link to his presentation and recording (recording minus the first two slides :)
<https://drive.google.com/drive/u/1/folders/16Da7sj8eU30rvj1bmENauOYmeHqVIAHw?ths=true>
 - c. mock-up of how we are considering to organize based on Dennis's work:
[https://rise.articulate.com/share/uqGAddFsVXTz0tnB4iaH6HI71a0Gxz33#/#](https://rise.articulate.com/share/uqGAddFsVXTz0tnB4iaH6HI71a0Gxz33#/)
2. Follow up discussion on Government and Military competencies from April

Guest Speaker

1. Jodi volunteered someone from the SIG on competency at some point

Actions

Grow team to invite (Jwalcutt to coordinate with Eric to tag up offline to coordinate)
Need for a leaders' implementation guide tied to maturity model

Action items from April Mtg

17. Explore opportunities/limitations for group to make statements
18. Identify standards development efforts that could support technical implementation
19. Organize intro to learning engineering webinar
20. Send out minutes and agenda for next meeting on 3 May
21. Distill compelling arguments for government/military MiG into bullet points
22. Try to recruit DHS member to discuss procurement innovation lab
23. Recruit more members including international militaries
24. Collaborate on "LE is a team sport" scenario for icicle 2024 session

ICICLE G&M MIG Agenda & Minutes

5 April 2024, Noon ET

Attending: Nolan Lovett, Renee Johnson (Otter only), Shelly Blake-Plock, Eric Ultes, Wendy Walsh, Jim Salsman, DMarie Bartolf, Jodi Lis, JJ Walcutt

New People Introductions: Jim Salsman

Apologies:

ICICLE

19. 87 ICICLE Submissions this year
20. Let's find collaboration areas within this MIG to allow opportunities to share. May require some restructuring of meeting to facilitate this
21. Potential for procedural discussions in how ICICLE efforts are being applied, assess processes and governance

Thoughts on what this ICICLE MIG

Competencies

1. Wendy: USAF Competency Model handbook and implementation, LIB guide, discussion of attributes and how it fits into outcome based education, ADC standing up Learning Engineering Group
2. Importance of ICICLE and IEEE coordination with Military and Government to blaze this trail
3. Shelly: Development of competencies has been in work over the last decade. In terms of instrumenting to assert competencies is more recent as well as process (e.g. data instrumentation). A key value of this group (commercial, and Govt dual use) enables leveraging best practices in areas that may not yet apply to their given use case. Intersecting and sharing best practices
4. Jodi: Competency SIG at an inflection point that helps with each of the MIGs. How to structure based on multiple domains from two points of view: LE team and Learning Engineering how deep will we go in a given area. Would like to collaborate between SIG and MIG.
5. Jim: Europe has an official set of such descriptors for language learning in general: <https://www.coe.int/en/web/common-european-framework-reference-languages/cefr-descriptors>
6. Wendy: [RELEASE: OPM Releases New Federal Workforce Competency Initiative to Support Agencies with Skills-Based Hiring](#)
7. Wendy: [Federal Workforce Competency Initiative - General Competencies and Competency Models \(chcoc.gov\)](#)
8. JJ and Wendy: Allowing flexibility to adapt to how teams are measuring success of competencies
9. Michael: There is not 'one way', requires leaning into some level of ambiguity to get to the desired end result

10. Wendy: Discussed next actions for competencies and will engage Jodi and JJ
11. Jodi: Discussed how each MIG sectors would apply to each other
<https://chcoc.gov/content/federal-workforce-competency-initiative-general-competencies-and-competency-models>
12. JJ: <https://webcasts.td.org/webinar/5331>
13. JJ: Need to keep the collaboration within and between groups and leverage lessons learned and best practices

Wendy: HMT will be integral to LE success beyond just new tech and capabilities like AI

Guest Speaker

2. Jodi volunteered someone from the SIG on competency at some point

Data Analytics Pain Point Example

1. Eric:
https://www.rand.org/content/dam/rand/pubs/research_reports/RRA900/RRA992-1/RAND_RA992-1.pdf
- 2.

Action items from March Mtg

25. Submit session proposal for icicle 2024 conference
26. Explore opportunities/limitations for group to make statements
27. Identify standards development efforts that could support technical implementation
28. Organize intro to learning engineering webinar
29. Send out minutes and agenda for next meeting on March 1
30. Distill compelling arguments for government/military MiG into bullet points
31. Try to recruit DHS member to discuss procurement innovation lab
32. Recruit more members including international militaries
33. Collaborate on "LE is a team sport" scenario for icicle 2024 session

1. Review of the Agenda and any additions (MJay) (1 min)

2. **New participants** - Add your name, email address, and affiliation. Prepare to give a really short auditory intro
Review of key points from the last meeting
 - a. Kevin Owens, kowens@arlut.utexas.edu, DoD UARC for US Navy & US Army.
Focus is Learning Engineering with Modeling and Simulation

- b. Jim Salsman, jim@talknicer.com, Talknicer.com is a free English pronunciation intelligibility remediation web app for ESL learners of all ages.
<https://linkedin.com/in/jsalsman>

3.

4. Looking forward to the July 24 ICICLE Conference

- a. Proposal from Zarka for team building scenario around G&M
 - i. Recent challenge from DOD Instruction 1322.35 Vol I to incorporate Outcomes Based Military Education (OBME)... which has become a new buzzword here at Air University. Might that be a potential prompt for this project? (Doug)

5. Next steps for this MIG (Deliverable(s))

6. Next meeting and MIG advocacy.

3 May 2024

ICICLE G&M MIG Agenda & Minutes 1 March 2024, Noon ET

Attending: Rob Nyland, Doug McCarty, Nolan Lovett, JJ Walcutt, Chad Bates, Renee Johnson, Kevin Owens, Shelly Blake-Plock, Dawson Brumblow, Eric Ultes, Zarka Ali, Emmanuel Mayssat, Jim Goodell, Wendy Walsh, Andy Johnson, Dina Kurzweil,

Apologies:

Action items from February Mtg

1. Submit session proposal for icicle 2024 conference
2. Explore opportunities/limitations for group to make statements
3. Identify standards development efforts that could support technical implementation
4. Organize intro to learning engineering webinar
5. Send out minutes and agenda for next meeting on March 1
6. Distill compelling arguments for government/military MiG into bullet points
7. Try to recruit DHS member to discuss procurement innovation lab
8. Recruit more members including international militaries
9. Collaborate on "LE is a team sport" scenario for icicle 2024 session

1. **Review of the Agenda** and any additions (MJay) (1 min)

2. **New participants** - Add your name, email address, and affiliation. Prepare to give a really short auditory introReview of key points from the last meeting
 - a. Kevin Owens, kowens@arlut.utexas.edu, DoD UARC for US Navy & US Army. Focus is Learning Engineering with Modeling and Simulation

3. **Thoughts on what this ICICLE MIG** can do to accelerate awareness and integration of learning engineering in Government and Military programs/culture.
 - a. What is everyone doing? How do we share projects and tools across the group. (JJ)
 - b. Moving to competency-based training. How to make that scalable and sustainable. (Eric)
 - i. Case studies? Document what has been done already to educate others
 - ii. Enhancing with AI to generate measurable levels of specificity. (Jim)
 - c. Interconnections with the other SIGs and MIGs.
 - d. Analysis of course (pre and post) to be more agile. Biggest stumbling block may be changing from existing processes.
 - e. Issue: Buying technology without understanding the use case. (Eric)
 - i. Policy and process tied to use cases to guide implementation
 - ii. Are we in alignment with P&P?
 - iii. Evidence to make decisions (acquisitions) supported by LE (Wendy)
 - f. illustrate how LE helps to solve some of these wicked problems?
 - i. Who is using "it" and what are the planned outcomes? Data set, etc.
 - g. Obsolescence, Argh.
 - h. Use Case would be compelling for others to tell the LE story and change how people think. (Doug)
 - i. We have been documenting the Learning Engineering we have been doing for the past several years with the Army. Previous LE work for the Navy over the last 15 years was classified so couldn't be published but we are bringing the same capabilities to the Army now and have been publishing in various venues since. Wish to document our LE process with the next two new S&T projects so we have a tangible example of LE others can read about instead of trying to do bottom-up teaching of what LE is. Also finding that the different learning domains of LE have to be identified since IMO there it's too much to expect to have tools or processes that will work for all learning domains (e.g., classroom, simulation, technical vs. academic, etc...) (Kevin).

4. Looking forward to the July 24 ICICLE Conference

- a. Proposal from Zarka for team building scenario around G&M
 - i. Recent challenge from DOD Instruction 1322.35 Vol I to incorporate Outcomes Based Military Education (OBME)... which has become a new buzzword here at Air University. Might that be a potential prompt for this project? (Doug)

5. Next steps for this MIG (Deliverable(s))

6. Next meeting and MIG advocacy.

5 April 2024

ICICLE G&M MIG Agenda & Minutes 2 February 2024, Noon ET

Attending: Zarka Ali, Rob Nyland, Nolan Lovett, Andy Johnson, Jodi Lis, Jim Goodell, Shelly Blake-Plock

Apologies: Dina Kurzweil,

1. Review of the Agenda and any additions (MJay) (1 min)

2. New participants - Add your name, email address, and affiliation. Prepare to give a really short auditory intro

- a. JJ Walcutt,

3. Recap as to why an ICICLE Government and Military MIG

Specific requirements in Gov't and Military - Different flavor of what we can harvest from other MIGs and what is unique or different to this market segment.

Team learning and high stakes. Starting to use the terms Learning Engineering but with limited knowledge of all that entails - Evidence and competency based.

Enterprise is much bigger than that addressed by other MIGs. Running into division between talent management and force development efforts- essentially navigating bureaucracy stovepipes.

Having a place for those who have bought into LE has lots of value.

Rich history in instructional design... capacity building is necessary. Change management, etc. Grassroots coalition building.

Unlike pK-12, HEd, Corporate...military environments need to accommodate regular geographic movement -serving in a different role often in a different

physical location every 2 years. Example of changes in contact. Compounded by complexity of projects, technologies, etc. Civilian roles such as TPOCs (Tech Point of Contact)

ISDs (Inst Systems Designers) - can be rather wrote and comfortable resisting change as they may expect the next leader to go in a different direction- this can cause tension and an us vs them culture- we need to figure out how to facilitate shift into existing skills and strategies- General and ISD level of knowledge working together to implement learning in large systems.

Need to clarify the relationships between existing and emerging strategies.

Create bridges - something outside the Military org to investigate how to collaborate and find continuity and shared vision, etc.

4. Discussion around on what this ICICLE MIG can do to accelerate integration of learning engineering in Government and Military programs.

Nolan: So as one of those ISDs... one struggle to change is the level of risk and liability in Military training- to make a case to do something different I need well sourced evidence based practice

Rob: one of the challenges is building that body of evidence in a rigorous way.

Access to the efforts of complementary efforts to create shared learning

Make statements from IEEE.

Rigorous review of...

Alignment of efforts are often secondary due to limited personnel... we should still collect relevant data. Personnel shortage does not negate other strategies to support initiatives

Develop the people we do have... see as an ongoing process. Including the educator/instructional designer.

Look at processes of adoption of new innovation and make incremental change.

[Living the Second Derivative where change is a constant] is this possible?

Making smaller incremental changes is not part of the culture

Reinvent bureaucratic structures to reflect more distributed processes.

Shelly: Creative and iterative is not reflected in government acquisitions.

Processes of LE need to be woven into the acquisition process.

<https://www.dhs.gov/pil>

<https://www.dhs.gov/about-pil>

Wendy: Invite participation from DHS Procurement Innovation Lab (PIL) in the MIG to better understand procurement possibilities that are based in experimentation

5. ICICLE 2024 session proposals due on 29 February

a. <https://forms.gle/bLmjoF7ZojYDR3gbA>

6. Other Events

a. Army Learning Symposium

- i. Call for Abstracts ends on Feb 15,

<https://armyuniversity.edu/Organizations/LearningSymposium/CallForAbstracts>

b. pK-12 MIG Session Collaboration

- c. ATD webinar next week moderated by JJ, with Jim, Russ Shilling and Cydney Miller on “Leveraging AI for TD in Government”

<https://webcasts.td.org/webinar/5275>

- d. F.y.i. Jim and Megan Torrance also doing a session at ATDtk next week and Jim is doing a seminar at ASU Learning Engineering Institute in 2 weeks

7. Government and Military MIG Leadership

Interim Leads:

Wendy Walsh

ICICLE G&M MIG Agenda & Minutes

9 January 2024, 4pm ET

Attending: Andy Johnson, Dina Kurzweil, Bartlof, Rob Nyland, Shelly Blake-Plock, Wendy Walsh, Zarka Ali, Jodi Lis, Mollie McCormick

1. Introductions

2. Why a Government and Military MIG?

3. Opportunities around greater use of Learning Engineering as part of the work of Government and Military programs.

- 4. Barriers to use of Learning Engineering as part of the work of Government and Military programs.**
- 5. Initial thoughts on what this ICICLE MIG can do to accelerate integration of learning engineering in Government and Military programs.**
- 6. Next meeting and MIG advocacy.**

Minutes were not taken as Otter.ai did not record the call which was to be used as the basis of those minutes.