

Winning the Race to Next Generation Wargaming - Education & Training

Connections UK 24

Matt Caffrey



Focus

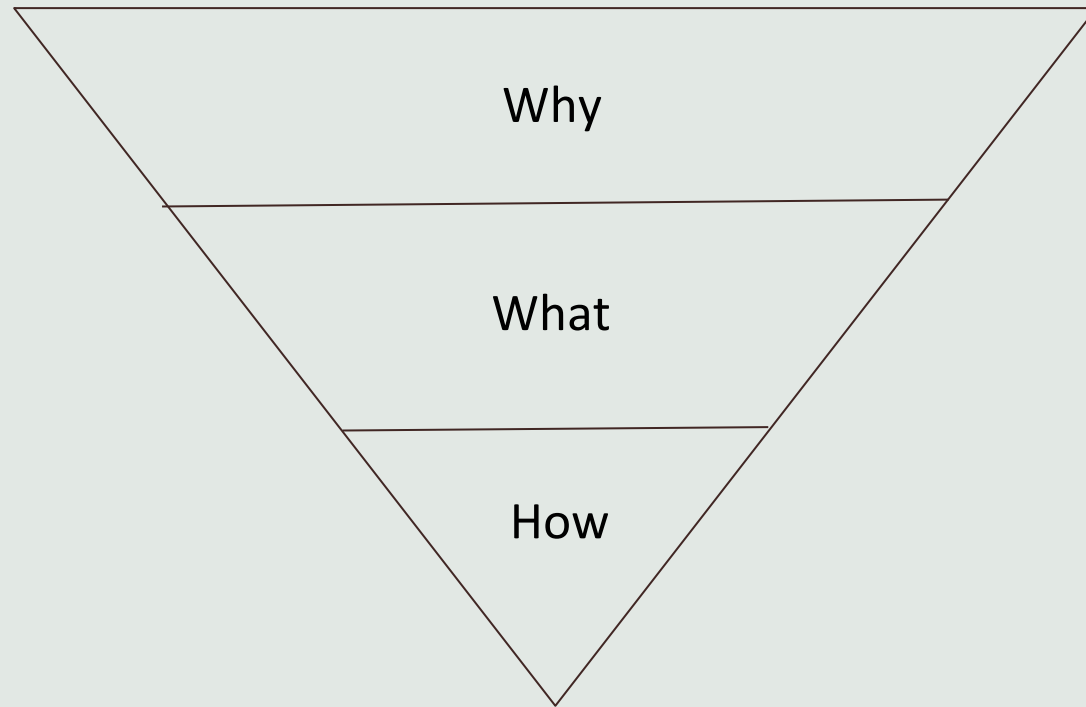
I will focus on the why, what, and how of advancing wargaming effectiveness, specifically through education and training.

Why: Why the world is becoming increasingly dangerous and why an advantage in wargaming can help directly and indirectly

What: What **attributes** are most important in increasing the impact of wargame education and training.

How: How to most cost effectively achieve those attributes.

Allocation of Time



Why We Need the Next Generation of Wargaming

Long recognized dangers are increasing

for example

- We face a multi-polar world
- Nuclear weapons are proliferating
- Effective cyber weapons are proliferating
- Proxy forces are acquiring state-like capabilities

Emerging dangers may be even greater for example

- World War IV may not end as well as WWIII
 - Democracy vs authoritarian kleptocracies
- “War like murder requires opportunity & motive.”
John Keagan
 - Our changing climate will give some nations motive and others opportunity

Direct Help

- Better strategies
- Better strategists

Indirect Help

- Accelerate effective innovation - enhancing existing “edges”
- Stimulate cross disciplin/alliance understanding

Why: Current Wargames are a Poor Fit For Our Strategy

Toward Minimally Invasive Warfare - smart employment of smart bombs

- Fewer, more precise weapons
- Many misses not just zero gain - harmful to cause
- Greatest impact of attack often effect - not attrition

Speed of technology change/technology prioritization as element of military strategy

Greater Integration with Allies and Friends

Taking the long view on strategy and conflict

Increased role of sanctions, move/countermove

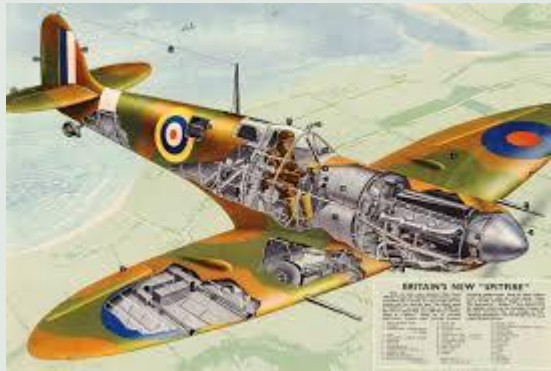
Why: Eroding Edge in Wargaming

Russia: WWII prompted a renaissance in wargaming, war on Ukraine doing the same

China: Recent initiative on “Blue Teaming,” fill a missing element

All: Increased cross-support among totalitarian regimes

What is needed for an enhanced capability? An example - The Battle of Britain



What is needed for an enhanced wargaming capability?

A Spectrum of Wargame Techniques

Wargame Practitioners

Wargame application and integration

What: Attributes of Next Generation of Wargames

Comprehensive:

- All decision cycles
- All education/training levels

Tailored:

- Level of each factors inclusion in each wargame match their magnitude of effect

Agile:

- Executable within decision cycle of each command level

Sustainable:

- Pipeline for users, providers and appliers with the right level of education and training

What: Attributes of Next Generation of Wargame Education

Comprehensive:

- All decision cycles
- All education/training levels

Tailored:

- Each recipient receives only education and training needed

Agile:

- Training available within decision cycle of each command level

Sustainable:

- Pipeline for users, providers and appliers with the right level of education and training

How

Establish which defense billits require what level of training in the creation, execution and application of wargaming.

Ensure education and training is scoped to account for both those currently untrained and future accessions.

Provide enough continuing education and training for those fully trained to maintain their proficiency, stay current and rapidly implement advancements.

Conclusion

The “Interwar Period” was from 1919 to 1937.

Will future historians decide the second Interwar Period lasted from 1990 to 2022?

We need to move fast to regain, maintain, and increase our edge in wargaming - both for direct benefits (better plans and planners) and to get maximum benefit from our traditional advantages.

Time is running out.

How: Achieving The Next Generation of Wargames

Cultural

- Increase uniformed wargame exposure - better players, more support, better communication
- Develop Sponsors and Senior Leaders who are willing to look further into the future than their next rotation
- Increase connections between organizations to Improve interdisciplinary learning
- Increase transparency between designers - bridge the top-secret gap for wargaming needs

Methodological

- Codify and improve 4th generation techniques
- Understand and institutionalize historical wargame generation development
- Research next generation warfare - conflict and competition below the level of armed warfare.
- Incorporate gaming from other PMESII domains (eg. peace gaming, economics, lawfare, etc)

Technical

- Exploit LLMs and other AI techniques
- Develop gaming techniques to look deeper into the future
- Develop advanced models of all PMESII to support wargaming

People

- Understand the expertise required for next generation warfare (the Ed McGrady technical expertise requirement)
- Develop and maintain a pipeline of wargaming experts to staff next generation wargaming

Technology May Help Enable Next Gen Wargaming - McGrady School, opportunity push

Comprehending the effects of changing technology ON wargames, for example

- AI roles:
 - *Speed development, adjudication, “deep” future analysis*
 - *Enabling wargaming of full events (battles, campaigns, wars)*
 - *Enable wargaming as mobile as decision maker (fewer wargame creators and executors needed)*
- How to do more (players, subject) with less (usually time)
 - Micro-games & other new techniques
 - AI

To Learn More

“Swarm Gaming: Regaining the Strategic Innovation Initiative”

<https://warroom.armywarcollege.edu/wargaming-room/swarm-gaming/>

“What strategic decisions on the horizon for the Department of Defense can best be shaped through wargaming?”

<https://warroom.armywarcollege.edu/special-series/whiteboard/wb16-dod-decisions/>